
Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course Via Self, Peer, and Group Review Strategies

Prepared by

Dr. Ahmed Mohammed Mahmoud Abdelhafez

Assistant professor of curricula and methods of teaching English as
a foreign language, Dept. of Curriculum & Instruction, Faculty
of Education, Minia University

Abstract There has been a consensus that the teacher's reviewing of EFL students' written work is not workable in a class with a large number of students and a heavy workload. The present study aimed to investigate the effect of four reviewing strategies (peer, self, group, and teacher) on enhancing the writing performance of first-year college students who were studying English as part of their college degree program. The study sample consisted of 120 students who were divided into four groups. They included three experimental groups and a control group with 30 participants in each group. The study utilized the control group pre-post test design. Data was collected through an EFL writing performance test to assess five writing competencies (i.e., content and organization, vocabulary, grammar, mechanics, and style). Data analysis using t-test and one-way ANOVA revealed that the peer review group outperformed the control group and the other two experimental groups in the writing test as a whole and all its sub-scales. The findings were discussed considering the previous research evidence regarding the type of review that yields the best results. Based on the findings of the study, it was recommended that training in self and collaborative reviewing strategies should be incorporated in EFL writing assessment at higher education and pre-university education.

Keywords: college freshmen, writing performance, reviewing strategies, academic writing, peer review

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

تنمية الأداء الكتابي باللغة الإنجليزية في مقرر الكتابة الأكاديمية من خلال استراتيجيات

المراجعة الذاتية والنظيرة والجماعية لدى طلاب الفرقة الأولى بالجامعة

إعداد

د. أحمد محمد محمود عبدالحافظ

أستاذ مساعد المناهج وطرق تدريس اللغة الإنجليزية كلغة أجنبية - كلية التربية - جامعة المنيا
المستخلص. يوجد إجماع على أن مراجعة المعلم للأعمال المكتوبة للطلاب باللغة الإنجليزية
كلغة أجنبية غير قابلة للتطبيق في فصل به عدد كبير من الطلاب وعبء عمل ثقيل.
وهدفت الدراسة الحالية إلى التعرف على أثر أربع استراتيجيات للمراجعة (النظير، الذات،
المجموعة، والمعلم) على تحسين الأداء الكتابي لطلاب السنة الأولى الجامعيين الذين كانوا
يدرسون اللغة الإنجليزية كجزء من برنامج شهادتهم الجامعية. وتكونت عينة الدراسة من
١٢٠ طالباً وطالبة تم تقسيمهم بالتساوي إلى أربع مجموعات (ثلاث مجموعات تجريبية
ومجموعة ضابطة). واستخدمت الدراسة تصميم المجموعة الضابطة للاختبار القبلي
والبعدي. وتم جمع البيانات من خلال اختبار أداء الكتابة باللغة الإنجليزية كلغة أجنبية لتقييم
خمس كفاءات كتابية (وهي المحتوى والتنظيم، والمفردات، والقواعد، وآليات اللغة،
والأسلوب). أظهر تحليل البيانات باستخدام اختبار t واختبار التباين الأحادي ANOVA
تفوق مجموعة مراجعة النظراء على المجموعة الضابطة والمجموعتين التجريبيتين الآخرين
في اختبار الكتابة ككل وجميع مهاراته الفرعية. وقد تمت مناقشة النتائج مع الأخذ في
الاعتبار الأدلة البحثية السابقة فيما يتعلق بنوع المراجعة التي تحقق أفضل النتائج. وبناءً
على نتائج الدراسة، يوصى بدمج التدريب على استراتيجيات المراجعة الذاتية والتعاونية في
تقييم الكتابة باللغة الإنجليزية كلغة أجنبية في التعليم العالي والتعليم ما قبل الجامعي.
الكلمات المفتاحية: طلاب الفرقة الأولى بالجامعة، الأداء الكتابي، استراتيجيات المراجعة،
الكتابة الأكاديمية، مراجعة النظير

Introduction

Writing is one of the language skills that can help EFL students learn how to express their knowledge, way of thinking, and experience. It is a fundamental and successful way to enable EFL students to communicate in the target language. Learning how to write in English involves several processes, including planning, drafting, revising, and editing. In teaching writing, both the teacher and student can have their role in writing better via the use of reviews. Reviewing feedback is a continuous procedure during the writing process.

EFL students find it difficult to write in the target language (Alsehibany, 2021; Saeed et al., 2020; Purna, 2018; Tai et al., 2015; Suryanto, 2014; Defazio et al., 2010). For instance, Alsehibany (2021) stated that writing is a complex skill that requires many variables, including background knowledge about the topic and mastery of the sub-skills of writing. Therefore, writers should be keen on utilizing writing processes, including planning, drafting, redrafting, and editing, before submitting their written text. EFL learners often lament the difficulty of writing, and some of them still lag in their English language competence (Saeed et al., 2020). Purna (2018) points out that students feel apprehended when asked to write in EFL. Furthermore, Tai et al. (2015) found that among the four skills in the General English Proficiency Test, the participants had the lowest passing rate in writing (49%) compared to the other language skills.

Writing is a productive skill that EFL students find difficult to master (Abri, 2021; Chen, 2021; Elboshi, 2021). Most students find it difficult to attend to all the components of writing. A good writer should take into consideration several aspects, such as content, vocabulary, organization, and the mechanics of language use (Hentasmaka& Cahyono, 2021). Due to the complexity of writing, teachers should include a range of socially and cognitively adjusted

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

activities and a variety of feedback opportunities (Hyland, 2007). Furthermore, receiving feedback on writing performance was linked to improved writing quality and scores (Lopez-Pellisa et al., 2021; Pham et al., 2020; Simonsmeier et al., 2020; Yu,2021). Reviewing is an essential part of the writing process and can improve students' writing quality and performance (Liu, 2008). It helps students keep working hard on the language learning process to improve their writing skills. For EFL writers, reviews could work as reference points for deleting, adding, or rearranging ideas while writing. Cahyono and Amrina (2017) highlighted the role of reviewing to include not only correcting errors and giving feedback remarks but also reflecting on the written text to assess its quality.

Review Strategies in EFL Writing

Reviewing is useful for raising the learners' language awareness. When students share their comments with their peers, they develop their critical perspectives so that they become more aware of their mistakes in writing. Thus, reviewing plays an important role in enhancing the students' analytical, reflective, critical, and metacognitive abilities. Then, student writers are able to see any topic of their peers from multiple peers' perspectives.

Collaborative and individual efforts related to EFL writing could play a significant role in improving EFL students' written performance. The present study assumes that giving peer feedback is important when the class is big and it is difficult for the teacher to give personalized feedback to individual learners. Given that students learn well from their peers, they could be a source of information for them, learn from each other, and review ideas together (Berggren, 2015; Cho & Cho, 2011; Hansen & Liu, 2005). The study also assumes that some students prefer to work independently, utilizing cognitive processes that could result in the improvement of their writing ability.

There is a debate over which type of writing review is the best to improve EFL students' writing performance. The findings of previous studies varied with regard to four modes of correcting students' written performance. Self, peer, group, and teacher feedback are given to the students with the aim of enhancing their writing performance. According to Albelihi and Al-Ahdal (2021), one of the strategies that enhances students' writing is reviewing feedback not only from teachers but also from peers. Shokrpour et al. (2013) argued that the responsibility of review changed gradually from the teacher to the peer and finally to the students themselves.

Research evidence is inconsistent regarding the best approach to yield better results of improved writing performance. For instance, peer reviewing versus teacher reviewing represents a debate between innovative versus traditional modes and is worthy of comparison. Both types have positive effects on language learning. However, there is an insufficient understanding of which mode is more effective.

Rollinson (2004) argued that receiving feedback from teachers was the reason behind students' writing to their teachers, not for themselves or to improve their writing performance. The students thought that teachers were their only audience. Similarly, Srichanyachon (2012) found that students preferred teacher feedback rather than student feedback as a means of improving their writing performance. Tai et al. (2015) argued that teachers were perceived as the main provider of corrective feedback on students' written performance. They traditionally play a dominant role in providing feedback and comments throughout the writing process (Sheen, 2010a).

In EFL contexts, teachers are perceived as more competent and qualified to provide the necessary feedback. Although teacher reviewing is viewed as critical in the revision process (Sheen et al.,

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

2009), teachers do not have enough time to provide learners with individualized feedback on their written work. They are overwhelmed by tasks. However, compared with the plethora of research studies on teachers' written feedback strategies, fewer studies examined the effects of other feedback modes. Some research studies highlighted that some students preferred peer feedback to teacher feedback (Camarata & Slieman, 2020; Ho et al., 2020; Kusumaningrum, 2021; Maysyarah et al., 2020; Zhang, 2020).

The use of peer reviewing helped students self-evaluate their writing performance, improve their written expression, and reproduce their peers' performance. Additionally, peer feedback was essential because it is easier to ask peers rather than teachers. Peer review also facilitates students' revisions. Furthermore, Tai et al. (2015) argued that the use of peer review promotes a more inclusive approach to EFL writing instruction by engaging EFL students with lower language competence in the revision process.

It has been highlighted that the effectiveness of peer review has become a subject of debate and requires further investigation (Tai et al., 2015). For instance, Rollinson (2004) questioned the value of peer review and whether it seemed to be a waste of time for other learners or an important learning experience. Similarly, Hajimohammadi and Mukundan (2011) argued that peer feedback could not be given in the classroom due to the lack of time and individual differences in students' ability levels.

Peer-reviewing activities have also been criticized. For instance, it was argued that the quality of student comments was not sufficient and that interpersonal relationships affected learner intentions and the provision of reliable comments (Lin & Yang, 2011). Other researchers questioned the validity of peer feedback by student reviewers with lower language proficiency (Covill, 2010). The students may also be

hesitant to critique the work of other students (Lin & Yang, 2011). Tai et al. (2015) also highlighted some of the criticisms of peer reviewing, including emphasis on superficial errors and vague comments. They added that successful implementation of peer reviewing depends on the student's language abilities and their willingness to participate in the process.

Peer review has emerged as an innovative method that differed from traditional teachers' written corrective feedback (Sheen, 2010a). Peer reviewing gives writers more options while revising written work. The comments made by peer reviewers not only correct their mistakes but also give them the chance to reflect on their writing. This reflection is essential to facilitate growth as EFL writers. Tsui and Ng (2000, p.168) stated that some benefits gained from peer feedback include "enhancing a sense of audience, raising awareness of their strengths and weaknesses in writing, encouraging collaborative learning and fostering an ownership of text" in the L2 context. Tai et al. (2015) asserted that peer reviewing provides an alternative and supplementary strategy for teaching a large English writing class. According to Lundstrom and Baker (2009), peer reviewing provides the benefits of teaching and learning simultaneously. Thus, students are active reviewers rather than passive knowledge recipients.

Even though peer review is an essential strategy for giving feedback in EFL writing courses, there is a desperate need for additional investigations to ensure its effectiveness in EFL writing performance. Some researchers have cautioned against the lack of empirical evidence demonstrating its usefulness (Tai et al., 2025). Similarly, Cahyono and Amrina (2017) suggested that the two types of feedback, including peer and self, were endorsed for practical use in EFL classrooms and for further studies.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Gielen et al. (2010) point out that peer reviewing is related to "peer feedback." Both can be used as powerful learning tools in which students do more than write by editing and evaluating their peers' written work. According to Purna (2018), peer reviewing is a powerful teaching and learning tool that enhances students' motivation to write and helps them to accept all views on their writing and be critical readers, gain more confidence, and provide them with an authentic audience as well.

An alternative reviewing strategy is small group reviewing. Such a strategy gives rise to cooperative learning and, consequently, the role of social construction and negotiation of meaning. Through collaborative activities related to the writing process, EFL students learn by interacting with the other members of the group (Purna, 2018). Besides, collaboration facilitates the use of scaffolding strategies. Following the support of Vygotsky's (1978) conceptualization of "the zone of proximal development," the EFL writing pedagogy concentrated on cooperation and collaboration in learning with peers and groups. Some writing theorists have encouraged teacher-led instruction and collaborative peer and group interactions in high school and college to provoke students to write and revise (Wette, 2014; Lim & Jacobs, 2001).

Self-review is another mode of feedback that has a debatable role in EFL students' writing performance. Srichanyachon (2014) maintained that self-revision was one of the strategies EFL learners used to improve their writing performance, especially with advanced-level students. Self-reviewing is an integral step in the process of writing. Effective writing demands self-monitoring in all writing stages, including planning, drafting, revising, editing, and publishing (Cresswell, 2000). Self-reviewing is concerned with the stages of revising and editing one's own written work. It involves self-revision,

which is a process of raising students' awareness to revise their writing (Wakabayashi, 2013). Furthermore, self-correction is another component of the self-review process (Hajimohammadi & Mukundan, 2011).

Previous studies

Previous studies in the last decade suggest inconclusive evidence regarding the review strategy that yields the best result to improve EFL students' writing performance. For instance, Kurihara (2014) investigated whether peer and teacher feedback influenced student writing development in a senior high school in Japan. Pre- and post-essay tests were carried out both to the experimental group and the control group to measure the development of students' writing skills. The results indicated that the students improved significantly in their writing. Although the effect of teacher feedback was found to be stronger at the start of the project, the student focus altered from teacher feedback to peer feedback over the study period. The researcher concluded that the students developed interdependence among peers, increased self-correction, and undertook a sense of writer responsibility by the end of the project.

Ruegg (2015) investigated the effects of peer and teacher feedback on students' writing performance. The study sample consisted of two groups. The first group received teacher feedback, whereas the second group gave and received peer feedback. Improvement was measured by gains in the writing pre-and post-test scores for the two groups. No significant differences were found for organization, vocabulary, content, or total essay scores. The teacher feedback group gained significantly more in grammar scores than the peer feedback group. Investigation of the peer feedback and the teacher feedback showed that the teacher's feedback related more to meaning-level issues and content. The findings of the study suggest

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

that students benefitted more from teachers' feedback on grammar and content, whereas they benefitted more from peer feedback on organization and academic style.

Kurihara (2017) investigated the effects of peer review on the improvement of Japanese high school EFL students' writing abilities. The participants were involved in peer reviewing over 12 weeks. Pre- and post-essay tests were administered to assess whether it had a positive impact on their writing performance. The findings showed that students' attitudes toward peer review affected their review process and, therefore, had a significant impact on the development of their writing. It was also found that students who trusted the validity of peer comments demonstrated development in their writing performance. However, those with little trust showed no significant improvement.

Cahyono and Amrina (2017) investigated the effectiveness of peer feedback and self-correction using guideline sheets on the writing performance of Indonesian EFL students. The study sample consisted of 71 Indonesian EFL students in an essay writing course at an Indonesian university. The students were from three intact classes. They were given different types of treatment. The first group was given peer feedback using a guideline sheet. The second group was assigned to self-correction through a guideline sheet. The third group was involved in a teacher-centered conventional editing process of writing. The results of the study showed that the peer feedback and self-correction groups had better ability in writing than the conventional group. Both peer feedback and self-correction based on a guideline sheet significantly improved the students' writing ability.

Purna (2018) investigated the effect of peer reviewing versus self-reviewing on 40 EFL students at an Indonesian university. It also aimed to find out aspects of writing that were improved by using peer

review. The study sample consisted of 40 students who were divided into two equal groups. Peer reviewing was used with the experimental group, while the control group applied self-reviewing. The data were collected through written pre-tests and post-tests for both classes. The findings disclosed that there was an improvement in students' writing ability after the treatment in favor of the peer-reviewing group. The findings also revealed that organization had the highest level of improvement, whereas vocabulary had the lowest level.

Kusumaningrum et al. (2019) investigated the effect of two types of group review on EFL students' writing performance: in-class group review and small group peer feedback. The study sample consisted of 55 students from the English Department of a state university in Indonesia. The participants were divided into two classes. In the first class, five students were chosen randomly to work as a group, and they were asked to give comments on their peers' writing. They carried out this activity in front of the class as a public model. In the second class, they were put in 9 different groups consisting of three students within the group. The findings of the study revealed that both in-class group review and small-group peer feedback led to the students' better writing performance. Nonetheless, neither of these two group arrangements was more effective than the other. The author concluded that the group review strategy was effective in improving EFL university students' writing performance.

Albelihi and Al-Ahdal (2021) examined the effect of two kinds of peer feedback on EFL university students' writing in the Kingdom of Saudi Arabia. The sample consisted of 65 EFL students from Qassim University. Results indicated that providing students with online-class peer feedback and small-group peer feedback enhanced their writing skills. However, neither of these strategies proved to be more successful than the other. Based on the findings of their study,

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

the researchers recommended that Saudi universities should adopt a collaborative, engaging, practical, and non-threatening approach to EFL writing pedagogy. Such an approach would help students improve their writing skills and, ultimately, their global communicative competence.

Gonzalez-Torres and Sarango (2023) aimed to compare the effectiveness of three kinds of EFL writing feedback: teacher-direct feedback, teacher-indirect feedback, and peer feedback. The study sample consisted of eighty-two EFL learners (aged 17-18 years old). The participants were divided into four groups. Three experimental groups received feedback: teacher direct, teacher indirect, or peer feedback. The students from the control group did not receive any teacher or peer feedback. However, learners from the four groups participated in short whole-class weekly sessions to address common writing errors. The results of pre-and post-tests revealed an improvement in EFL writing skills in all three treatment groups. Additionally, there was a statistically significant difference in the results of the post-test between the three groups who received feedback and the control group. However, when comparing the three forms of feedback, there were no significant differences among the experimental groups. Their study indicates that both teacher and peer review strategies were effective in improving students' writing performance.

Context of the study

There is a gap between the expectations of universities and students' actual level of English, especially in writing. The situation was particularly problematic for the participants in the present study. While in secondary schools in 2021/2022, the year before administering the present study, the Ministry of Education did not include EFL writing tests as part of the English language proficiency

tests in the general certificate of secondary education. Therefore, EFL writing instruction was negatively influenced, and the students' levels of writing deteriorated. As confirmed by the EFL writing pre-test in the present study, the students' average level of writing was below A2 according to CEFR (Common European Framework of Reference).

Statement of the problem

Based on the experience of the researcher as an EFL teacher, educator, and instructor, it was observed that EFL students in the present study had many problems related to their EFL writing performance. They could not generate appropriate ideas and had difficulties using suitable vocabulary. Moreover, they had problems composing correct sentences into a paragraph using appropriate discourse markers and avoiding pitfalls in language mechanics, including punctuation, capitalization, and spelling. Moreover, they usually find it difficult to stick to an academically appropriate style as they write. Additionally, students, especially low-level ones, lack sound judgment regarding their writing performance. They are usually unaware of the range of sub-skills involved in assessing the quality of writing. The problem of the present study is that EFL students in their first year of college at Sadat Academy for Managerial Sciences lack the essential writing skills that are necessary for academic study. The present study attempts to tackle this problem by using reviewing strategies to develop their EFL writing performance.

Purpose of the study

The present study investigated the role of reviewing strategies in enhancing EFL college learners' academic writing performance. It pursues to contribute to the ongoing debate around the effectiveness of different strategies for reviewing EFL writing skills. It contributes to the understanding of the effectiveness of reviewing strategies for EFL

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

teaching and learning. Ultimately, the study aimed at raising the students' awareness about the writing process.

Questions of the Study

The present study aimed to answer the following four questions:

- 1- What are the EFL writing performance skills that EFL college freshmen need?
- 2- What is the effect of peer reviewing in developing EFL college freshmen's writing performance?
- 3- What is the effect of group reviewing in developing EFL college freshmen's writing performance?
- 4- What is the effect of self-reviewing in developing EFL college freshmen's writing performance?
- 5- Which reviewing strategy (peer, group, or self) is more effective in developing EFL college freshmen's writing performance?

Hypotheses

Based on the review of the literature, the following null hypotheses were formulated.

- 1- There would be no statistically significant difference at the level of (0.05) between the mean scores obtained by the students in the first experimental group (peer reviewing) and those of the control group in the writing post-test as a whole and its five sub-skills.
 - 2- There would be no statistically significant difference at the level of (0.05) between the mean scores obtained by the students in the second experimental group (group reviewing) and those of the control group in the writing post-test as a whole and its five sub-skills.
 - 3- There would be no statistically significant difference at the level of (0.05) between the mean scores obtained by the students in
-

the third experimental group (self-reviewing) and those of the control group in the writing post-test as a whole and its five sub-skills.

- 4- There would be no statistically significant differences at the level of (0.05) between the mean scores obtained by the students in the study's four groups in the writing post-test as a whole and its five sub-skills.

Significance of the study

The significance of the present study can be highlighted in the following points.

- 1- EFL teacher education programs and in-service professional development activities could incorporate induction in the use of various self, peer, and group review strategies in teaching EFL writing. The writing guidelines and review sheets could be used as useful strategies to enhance the reviewing process.
 - 2- The EFL writing teachers could make use of the most common students' errors related to the various sub-skills of writing, including content and organization, vocabulary, grammar, mechanics, and style, and adapt their feedback accordingly.
 - 3- EFL curriculum designers could incorporate learning and teaching activities related to reviewing strategies as an integral component in the EFL writing curriculum at all levels.
 - 4- EFL writing instructors could utilize reviewing strategies to provide students with training for the successful implementation of collaborative reviewing. The findings of the present study could inform the design of scaffolding tutorials by teachers to guide students to a level of ability necessary to construct peer reviewing.
-

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Delimitations of the Study

The present study was delimited to five paragraph writing skills (i.e., content and organization, vocabulary, grammar, mechanics, and style). The choice of these skills was based on a review of related literature regarding EFL writing performance. It was informed by the course description outlining the writing skills to be focused on through the academic writing course. The training was given to first-year college students at Sadat Academy for Managerial Sciences, Minia branch, who were taking the English language course in Academic Writing (English 101) as one of eight courses that constitute the language component of their four-year degree program. The training was carried out during the first term of the academic year 2022/2023, and it lasted for 14 weeks, 2 hours for each session, including two sessions for administering the pre/post-test of EFL writing performance. The training was given throughout the academic writing course taught by the researcher.

Definitions of terms

Reviewing strategies and EFL writing performance are the two main constructs in the present study. These two terms are defined below, followed by the operational definitions.

Reviewing strategies

Srichanyachon (2014) defines reviewing as revising and editing feedback that helps students in the process of writing. Self-reviewing is one of the strategies EFL learners use to improve their writing performance. As defined by Purwanto (2008), peer reviewing is a technique to help students in writing and making corrections for their peers. In the present study, reviewing is defined as revising and editing written work by suggesting changes and adding comments that provide

customized feedback to college freshmen to improve EFL writing performance. The use of review sheets and indirect teacher feedback facilitates self, peer, and group reviewing strategies.

EFL writing performance

Reviewing can address any of the several writing components, including content and organization, grammar, vocabulary, and mechanics (Weigle,2002; Brown, 2007). According to Fellag (2010), dimensions of assessing EFL paragraph writing include content and organization (dealing with how the topic is presented in the introductory topic sentence, supporting sentences, and a concluding sentence), vocabulary (requiring the use of relevant words and transitional markers), language use (grammatical structures), and mechanics (including punctuation, capitalization, and spelling). In the present study, EFL writing performance is conceptualized as the college freshmen's ability to produce a well-written paragraph on a generic topic and meet five assessment criteria. These criteria are content and organization, vocabulary, grammar, mechanics, and style.

Participants

The study sample consisted of 120 first-year college students at Sadat Academy for Managerial Sciences (Minia Branch). They were in their first year, with their ages ranging between 18 and 20. The participants were divided into four equal groups (30 in each group). These groups constituted three experimental groups (peer review, group review, and self-review) and a control group (teacher review). Most of the students had never learned EFL writing skills. Therefore, they are novice writers based on their scores on the EFL writing test that was administered before the start of the course (with a mean score of 7.25 out of 25). Their English proficiency levels were categorized as lower than A2 (with an average score of 20.35 on the Cambridge

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Proficiency Test) according to the Common European Framework of Reference for Languages (CEFR).

Method

Design

The research design used in this study was the pre-test post-test control group design. The participants were randomly assigned to three experimental groups and a control group. The experimental and control groups were exposed to the pre-post means of collecting data. The three experimental groups were trained using self, peer, and group review strategies facilitated by the use of review sheets and indirect teacher feedback during an Academic Writing course for first-year college students. The control group took the course and followed the regular EFL writing with direct teacher feedback. Quantitative data was obtained through the EFL writing pre-post test. The responses were assessed guided by an assessment rubric consisting of the five sub-skills of EFL writing performance adopted in the present study. The data was analyzed using SPSS to compare means between and within the groups through t-test and one-way ANOVA. In addition to quantitative data, qualitative data was obtained through analysis of the participants' post-test papers.

Instruments

A pre/post-test EFL writing test and an assessment rubric were used to measure the participants' EFL writing performance. In addition, a Cambridge language proficiency test was used. These instruments are described below.

The EFL Writing Pre/Post-Test

The EFL writing pre/post-test aimed to assess the participants' writing performance (See Appendix 1). The researcher designed the

test. The participants were asked to write a paragraph of at least eight sentences on the selected topic. The choice of the topic was informed by the student's interest in giving them the opportunity to display their writing skills. They were asked to argue for the type of learning that they prefer (online versus face-to-face learning) and to give reasons for their choice. At the time of the experiment in 2022, the students were still affected by the COVID-19 pandemic, and the topic was of interest to them. The duration of the test was 30 minutes. The total was 25 marks.

To check the validity of the EFL writing, it was submitted to a jury of five TEFL experts to verify the validity of the test question and its relevance to the course content and the sub-skills. Based on the feedback obtained from the jury members, the final wording of the test question was achieved. As for reliability, and based on the participant's responses, the test was found to have a moderately acceptable level of internal consistency reliability, with Cronbach's Alpha value reaching (.705).

The Assessment Rubric

The EFL writing test was assessed using a rubric that consisted of 5 sub-skills (see Appendix 2). These sub-skills were content and organization, vocabulary, grammar, mechanics, and style. Each skill was given a score from 1 to 5. The five categories represented poor, average, good, very good, and excellent performance. The score was given based on the number of errors made per each skill. The student lost a point for each error made until reaching the minimum mark (i.e., 1). To avoid bias and to achieve interrater reliability, another researcher was invited to mark the test. Then, the mean score between the two raters was calculated.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Cambridge Language Proficiency Test

The aim of the Cambridge language proficiency test (Cambridge English Qualifications, 2020) was to control the language variables of the study groups at the start of the course and to assess the average level of the students (See Appendix 3). The test consisted of the reading section, which was to be completed in 40 minutes. The students needed to be able to understand simple written information. It consisted of 30 questions, and there was one mark for each question. To obtain an A2 level according to the Common European Framework of Reference (CEFR), the students needed to answer from 20 to 27 questions correctly. This condition was met by the participants in the present study, as their average score was 20.35. The exam is for pre-intermediate level students who can deal with everyday English to understand simple written information such as signs and notes. It can be taken by students studying general English or those students in higher education, which made it suitable for the study participants as a measurement of language proficiency.

Material

All the students learned the same content. The course coordinator predetermined the syllabus. The course material was selected mainly from Oshima & Hogue (2008) (See Appendix 4 for course outline). The course focused on paragraph writing and provided the students with useful training in a variety of topics. These topics included paragraph structure, unity and coherence, logical division of ideas, narrative writing, comparison and contrast, argumentative writing, and essay writing. Given that the student's average level was A2, it was difficult to practice essay writing, and most of the course teaching and writing practice focused on paragraph writing. In addition to writing skills related to organization, content, and style, the chapters included sections about grammar, vocabulary, and mechanics as

essential components of writing performance. The students had plenty of opportunities to complete related activities to all these sections. However, the main activities were paragraph writing and reviewing.

Reviewing Procedures and Strategies

All reviewing treatments implemented in the present study did not exclude teacher feedback, but the teacher's feedback was meant to supplement them. Furthermore, it was important to ensure that, while giving reviews, the students know well what to do with the feedback they got. The following section illustrates the reviewing procedures implemented with the three experimental groups. It also highlights coding and review sheets as two strategies of indirect feedback utilized by participants of the experimental groups.

Self, Peer and Group Reviewing

The training procedures in the present study were based on similar investigations that employed teacher, self, peer, and group reviewing strategies (e.g., Tai et al., 2015; Elola, 2010; Ellis et al., 2008). In each training session, the participants of the three experimental groups were engaged in a process of three stages. These stages included writing, reviewing, and receiving feedback. In the first stage, the students were asked to write a paragraph on selected topics relevant to the focus of the session topic. During this stage, the students worked independently to produce their written work. In the second stage, the students in the experimental groups were asked to review their work using either self-review sheets or peer-review sheets that the instructor provided.

In the peer and group reviewing classes, the participants were asked to collaborate in the process of reviewing. In contrast, in the self-reviewing class, the students were asked to work independently.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

The participants of the group review were asked to form groups of three. The seating arrangement in rows made it difficult for the students to be more than three in each group. They were encouraged to collaborate with their peers instead of writing independently when drafting and revising. For the teacher review class, the students were not provided with a reviewing sheet. Instead, they showed their work to the instructor in class and were provided with direct feedback. The process of peer and group reviewing was carried out by different means, including reading samples of students' written work and reviewing them guided by a review checklist. At first, the students were reluctant to participate in peer and group reviewing activities and tasks. Shokrpour et al. (2013) argued that in conventional writing classrooms, EFL students were passive because they felt uncomfortable with cooperative interactive methods. After training, practicing, and guidance, students become more helpful and specific in their responses to peers and group members.

To enhance the reviewing competence of the students at the beginning of the term, the researcher provided them with training tutorials that continued throughout the course. Peer reviewer training sessions were suggested as necessary before learners could participate in peer reviewing (Min, 2005). Furthermore, the participants were provided with supplementary reading materials to carry out relevant activities. The reviewing sheet integrated five EFL writing dimensions: content and organization, vocabulary, grammar, mechanics, and style, with some items in a checklist format (e.g., topic sentence, concluding sentence, and punctuation). These items were presented as a guideline for the participants of the experimental groups to check the target composition. Meanings and examples of each item were explained during the training sessions. The reviewers were asked to choose either "yes" or "no" for each item and to provide the reason for mistakes or inappropriateness that they marked by choosing "no" (see Appendix 5

for self-reviewing sheet and Appendix 6 for peer and group reviewing sheets).

The Coding System

The coding system for indirect teacher feedback and the review sheets were the two main reviewing strategies that were implemented during the training. The teacher's feedback was given to the students in the three experimental groups indirectly through the error correction coding system. The coding system provided the participants with the opportunity to classify errors and, consequently, to develop metalinguistic awareness (e.g., how language works). The coding system advocates indirect learning. It helped students to be inquisitive and attempt to discover and inquire. All these learning processes (i.e., inquiry and discovery) are in alignment with a student-centered approach and active learning strategies.

Review Sheets

The review sheets provided the students with reviewing guidelines that helped the students carry out the review process individually or collaboratively. Review sheets were used with the three experimental groups. Previous research studies recommend the use of reviewing guideline sheets outlining the various components constituting a written work (Liu, 2008; Fellag, 2010). The review sheet can be used to guide the review provider in assessing the quality of EFL writing. It is a tool to focus the reviewer's attention on the essential elements of what makes a good written work. It is also essential for students to guide and assist them in their efforts to carry out a review, a task that is inherently linked to the teacher's job. Training was essential to familiarize the students with the EFL writing assessment criteria used in the review sheets. Such training enables the students to give efficient reviews so that student reviews could be

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

an alternative to teacher feedback (Rahimi, 2013; Ghani & Ashger,2012; Kamberi, 2013).

Instructor

The three experimental groups were taught by the researcher whereas the control group were taught by another instructor through the regular method with the reviewing strategies. All groups were taught using the same teaching schedule, which consisted of two-hour class sessions per week for 12 weeks.

Pre-Testing

To ensure the homogeneity and equivalence of the four study groups in their levels of writing performance at the start of the experiment, the researcher ran Levene's test of homogeneity. Table (1) shows the homogeneity of the study groups as there was not a significant difference within groups in the writing pre-test at the $p < .05$ level for the four groups ($p = 0.227$).

Table (1) Homogeneity of the writing performance pre-test

<i>Homogeneity</i>	<i>Levene Statistic</i>	<i>df1</i>	<i>df2</i>	<i>Sig.</i>
Based on Mean	1.469	3	116	0.227
Writing Based on Median	1.569	3	116	0.201
pre-test Based on Median and with adjusted df	1.569	3	104.323	0.201
Based on trimmed mean	1.524	3	116	0.212

The analysis of variance (ANOVA) revealed that there were no significant differences within the groups in the writing performance pre-test. Table (2) shows that there was not a significant effect of reviewing strategies on writing performance at the $p < .05$ level for the four groups $F(3,116) = 0.211$, $p = 0.889$.

Table (2) ANOVA of the writing performance pre-test

Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.292	3	2.097	0.211	0.889
Within Groups	1152.700	116	9.937		
Total	1158.992	119			

Table (3) shows the descriptive statistics of the four groups in the writing pre-test.

Table (3) Descriptive statistics of the writing performance pre-test

Descriptives	N	Mean	Std. Deviation	Std. Error
Peer Review	30	7.4333	3.31853	0.60588
Teacher Review	30	7.0667	3.51287	0.64136
Group Review	30	7.5333	3.13746	0.57282
Self-Review	30	7.0000	2.55963	0.46732
Total	120	7.2583	3.12081	0.28489

To ensure the homogeneity and equivalence of the four study groups in their language proficiency levels at the start of the experiment, the researcher ran Levene's test of homogeneity. Table (4) shows the homogeneity of the study groups as there was not a significant difference within groups in the writing pre-test at the $p < .05$ level for the four groups ($p = 0.431$).

**Enhancing College Freshmen's EFL Writing Performance
in an Academic Writing Course ...**

Table (4) Homogeneity of the language proficiency test

<i>Homogeneity</i>		<i>Levene Statistic</i>	<i>df1</i>	<i>df2</i>	<i>Sig.</i>
Proficiency test	Based on Mean	0.926	3	116	0.431
	Based on Median	0.652	3	116	0.583
	Based on Median and with adjusted df	0.652	3	109.594	0.583
	Based on trimmed mean	0.862	3	116	0.463

The analysis of variance (ANOVA) revealed that there were no significant differences within the groups in the writing performance pre-test. Table (5) shows that there was not a significant effect of reviewing strategies on writing performance at the $p < .05$ level for the four groups $F(3,116) = 0.812, p = 0.490$.

Table (5) ANOVA of the language proficiency test

Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	57.958	3	19.319	0.812	0.490
Within Groups	2759.633	116	23.790		
Total	2817.592	119			

Table (6) shows the descriptive statistics of the four groups in the language proficiency test.

Table (6) Descriptive statistics of the language proficiency test

Descriptives	N	Mean	Std. Deviation	Std. Error
Peer Review	30	19.7000	4.37193	0.79820
Teacher Review	30	20.8000	5.59187	1.02093
Group Review	30	21.2667	4.70461	0.85894
Self-Review	30	19.6667	4.75854	0.86879
Total	120	20.3583	4.86593	0.44420

Results

Hypothesis 1

Hypothesis 1 stated that ‘there would be no statistically significant difference at the level of (0.05) between the mean scores obtained by the students in the first experimental group (peer reviewing) and those of the control group in the writing post-test as a whole and its five sub-skills.’ Data analysis of the results using *t-test*, as shown in Table (7), revealed that *Hypothesis 1* was rejected as the results from the peer review group writing post-test ($M = 16.50$, $SD = 3.14$) and the control group post-test ($M = 9.50$, $SD = 3.11$) indicated that peer reviewing resulted in an improvement in writing performance, $t(58) = 8.65$, $p = .000$ in favor of the first experimental group (peer reviewing). The effect size, as calculated by Eta squared, was large (*Cohen’s d* = 2.23).

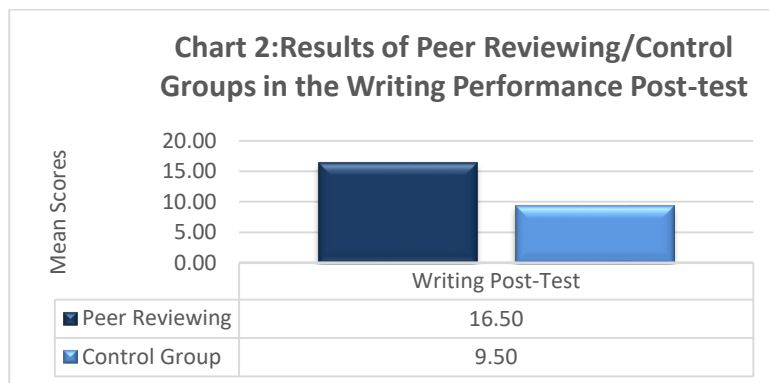
**Table (7) Results of Peer Reviewing/Control Groups
in the Writing Performance Post-test**

Groups	N	Mean	SD	t-value	DF	p-value	Cohen’s d*
Peer Review	30	16.50	3.14	8.65	58	.000	2.23
Control	30	9.50	3.11				

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

*Cohen's *d* effect size benchmark value points: small ($d = 0.2$), medium ($d = 0.5$), and large ($d = 0.8$)

Chart (2) illustrates the participants' improvement level in the writing performance post-test in favor of the first experimental group (peer reviewing).



Data analysis of the writing performance sub-skills also revealed that five sub-skills (content and organization, vocabulary, grammar, mechanics, and style) contributed to the overall statistically significant difference in the post-test in favor of the first experimental group (peer reviewing). These sub-skills, as shown in Table (8), were found to be statistically significant as reported below:

- (1) The results from the first experimental group (peer reviewing) post-test ($M = 4.16$, $SD = 0.91$) and control group post-test ($M = 2.43$, $SD = 1.07$) indicate an improvement in content and organization, $t(58) = 6.74$, $p = .000$, with a large effect size (Cohen's $d = 1.74$).
- (2) The results from the first experimental group (peer reviewing) post-test ($M = 3.76$, $SD = 0.97$) and control group post-test ($M = 2.16$, $SD = 1.01$) indicate an improvement in vocabulary, $t(58) = 6.22$, $p = .000$, with a large effect size (Cohen's $d = 1.71$).
- (3) The results from the first experimental group (peer reviewing) post-test ($M = 2.86$, $SD = 1.52$) and control group post-test ($M =$

1.56, $SD = .81$) indicate an improvement in grammar, $t(58) = 4.11, p = .000$, with a large effect size (Cohen's $d = 1.06$).

(4) The results from the first experimental group (peer reviewing) post-test ($M = 2.26, SD = 1.25$) and control group post-test ($M = 1.33, SD = .66$) indicate an improvement in mechanics, $t(58) = 3.59, p = .000$, with a large effect size (Cohen's $d = .93$).

(5) The results from the first experimental group (peer reviewing) post-test ($M = 3.43, SD = 1.04$) and control group post-test ($M = 2.00, SD = .98$) indicate an improvement in style, $t(58) = 5.48, p = .000$, with a large effect size (Cohen's $d = 1.41$).

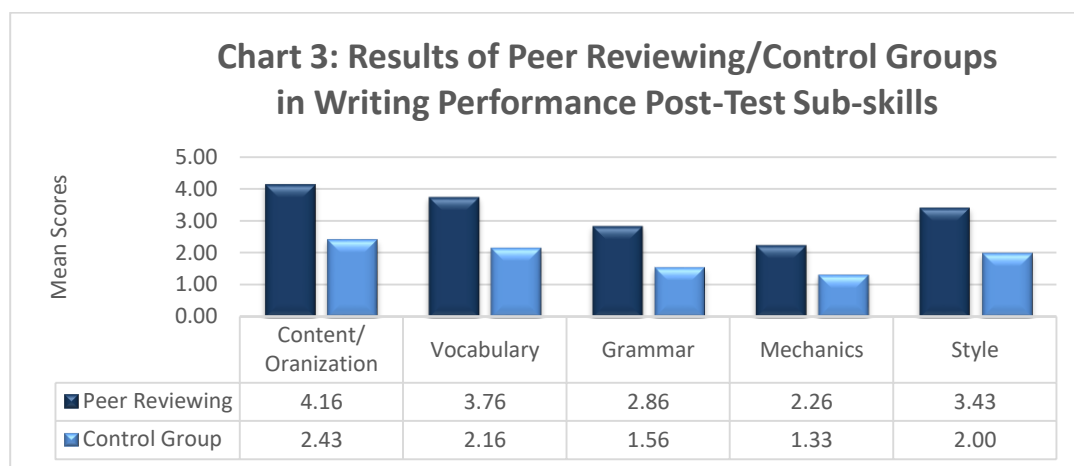
**Table (8) Results of Peer Reviewing/Control Groups
in the Writing Performance Post-test Sub-skills**

Writing Sub-skills	Groups	N	Mean	SD	t-value	D F	p-value	Cohen's d*																																															
Content and Organization	Peer review	30	4.16	.91	6.74	58	.000	1.74																																															
	Control	30	2.43	1.07					Vocabulary	Peer review	30	3.76	.97	6.22	58	.000	1.71	Control	30	2.16	1.01	Grammar	Peer review	30	2.86	1.52	4.11	58	.000	1.06	Control	30	1.56	.81	Mechanics	Peer review	30	2.26	1.25	3.59	58	.001	.93	Control	30	1.33	.66	Style	Peer review	30	3.43	1.04	5.48	58	.000
Vocabulary	Peer review	30	3.76	.97	6.22	58	.000	1.71																																															
	Control	30	2.16	1.01					Grammar	Peer review	30	2.86	1.52	4.11	58	.000	1.06	Control	30	1.56	.81	Mechanics	Peer review	30	2.26	1.25	3.59	58	.001	.93	Control	30	1.33	.66	Style	Peer review	30	3.43	1.04	5.48	58	.000	1.41	Control	30	2.00	.98								
Grammar	Peer review	30	2.86	1.52	4.11	58	.000	1.06																																															
	Control	30	1.56	.81					Mechanics	Peer review	30	2.26	1.25	3.59	58	.001	.93	Control	30	1.33	.66	Style	Peer review	30	3.43	1.04	5.48	58	.000	1.41	Control	30	2.00	.98																					
Mechanics	Peer review	30	2.26	1.25	3.59	58	.001	.93																																															
	Control	30	1.33	.66					Style	Peer review	30	3.43	1.04	5.48	58	.000	1.41	Control	30	2.00	.98																																		
Style	Peer review	30	3.43	1.04	5.48	58	.000	1.41																																															
	Control	30	2.00	.98																																																			

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

*Cohen's *d* effect size benchmark value points: small ($d = 0.2$), medium ($d = 0.5$), and large ($d = 0.8$)

Chart (3) illustrates the participants' improvement level in the post-test of writing performance sub-skills in favor of the first experimental group (peer reviewing).



Hypothesis 2

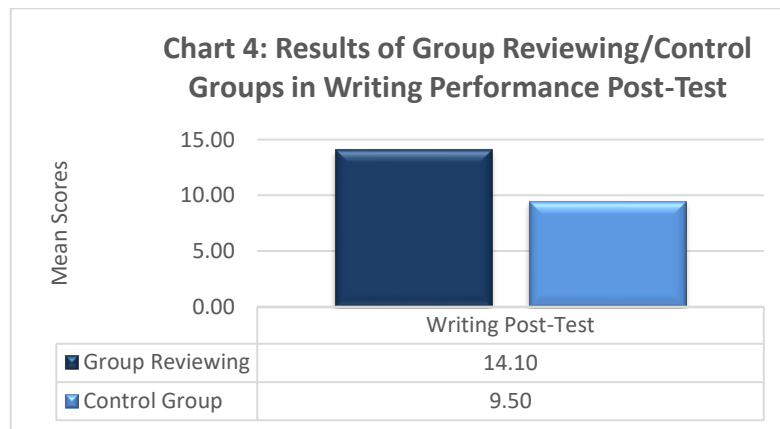
Hypothesis 2 stated that 'there would be no statistically significant difference at the level of (0.05) between the mean scores obtained by the students in the second experimental group (group reviewing) and those of the control group in the writing post-test as a whole and its five sub-skills.' Data analysis of the results using *t-test*, as shown in Table (9), revealed that *Hypothesis 2* was rejected as the results from the group review group writing post-test ($M = 14.10$, $SD = 2.55$) and the control group post-test ($M = 9.50$, $SD = 3.11$) indicated that group reviewing resulted in an improvement in writing performance, $t(58) = 6.45$, $p = .000$ in favor of the second experimental group (group reviewing). The effect size, as calculated by Eta squared, was large (Cohen's $d = 1.61$).

**Table (9) Results of Group Reviewing/Control Groups
in the Writing Performance Post-test**

Groups	N	Mean	SD	t-value	DF	p-value	Cohen's d*
Group Review	30	14.10	2.55	6.25	58	.000	1.61
Control	30	9.50	3.11				

*Cohen's d effect size benchmark value points: small ($d = 0.2$), medium ($d = 0.5$), and large ($d = 0.8$)

Chart (4) illustrates the participants' improvement level in the writing performance post-test in favor of the second experimental group (group reviewing).



Data analysis of the writing performance sub-skills also revealed that five sub-skills (content and organization, vocabulary, grammar, mechanics, and style) contributed to the overall statistically significant difference in the post-test in favor of the second experimental group (group reviewing). These sub-skills, as shown in Table (11), were found to be statistically significant as reported below:

- (1) The results from the second experimental group (group reviewing) post-test ($M = 3.90$, $SD = 0.84$) and control group post-test ($M = 2.43$, $SD = 1.07$) indicate an improvement in

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

content and organization, $t(58) = 5.88, p = .000$, with a large effect size (Cohen's $d = 1.52$).

- (2) The results from the second experimental group (group reviewing) post-test ($M = 2.73, SD = 0.94$) and control group post-test ($M = 2.16, SD = 1.01$) indicate an improvement in vocabulary, $t(58) = 2.23, p = .029$, with a medium effect size (Cohen's $d = 0.58$).
- (3) The results from the second experimental group (group reviewing) post-test ($M = 2.26, SD = 1.20$) and control group post-test ($M = 1.56, SD = .81$) indicate an improvement in grammar, $t(58) = 2.63, p = .011$, with a medium effect size (Cohen's $d = 0.68$).
- (4) The results from the second experimental group (group reviewing) post-test ($M = 1.83, SD = 1.01$) and control group post-test ($M = 1.33, SD = .66$) indicate an improvement in mechanics, $t(58) = 2.25, p = .028$, with a medium effect size (Cohen's $d = 0.58$).
- (5) The results from the second experimental group (group reviewing) post-test ($M = 3.36, SD = .61$) and control group post-test ($M = 2.00, SD = .98$) indicate an improvement in style, $t(58) = 6.45, p = .000$, with a large effect size (Cohen's $d = 1.66$).

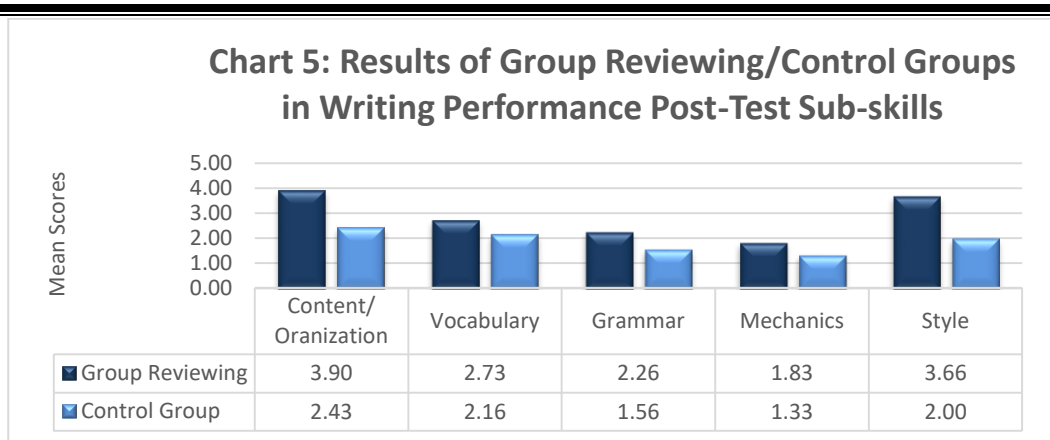
**Table (11) Results of Group Reviewing/Control Groups
in the Writing Performance Post-test Sub-skills**

Writing Sub-skills	Groups	N	Mean	SD	t-value	D F	p-value	Cohen's d*																																															
<i>Content and Organization</i>	Group review	30	3.90	.84	5.88	58	.000	1.52																																															
	Control	30	2.43	1.07					<i>Vocabulary</i>	Group review	30	2.73	.94	2.23	58	.029	0.58	Control	30	2.16	1.01	<i>Grammar</i>	Group review	30	2.26	1.20	2.63	58	.011	0.68	Control	30	1.56	.81	<i>Mechanics</i>	Group review	30	1.83	1.01	2.25	58	.028	0.58	Control	30	1.33	.66	<i>Style</i>	Group review	30	3.36	.61	6.45	58	.000
<i>Vocabulary</i>	Group review	30	2.73	.94	2.23	58	.029	0.58																																															
	Control	30	2.16	1.01					<i>Grammar</i>	Group review	30	2.26	1.20	2.63	58	.011	0.68	Control	30	1.56	.81	<i>Mechanics</i>	Group review	30	1.83	1.01	2.25	58	.028	0.58	Control	30	1.33	.66	<i>Style</i>	Group review	30	3.36	.61	6.45	58	.000	1.66	Control	30	2.00	.98								
<i>Grammar</i>	Group review	30	2.26	1.20	2.63	58	.011	0.68																																															
	Control	30	1.56	.81					<i>Mechanics</i>	Group review	30	1.83	1.01	2.25	58	.028	0.58	Control	30	1.33	.66	<i>Style</i>	Group review	30	3.36	.61	6.45	58	.000	1.66	Control	30	2.00	.98																					
<i>Mechanics</i>	Group review	30	1.83	1.01	2.25	58	.028	0.58																																															
	Control	30	1.33	.66					<i>Style</i>	Group review	30	3.36	.61	6.45	58	.000	1.66	Control	30	2.00	.98																																		
<i>Style</i>	Group review	30	3.36	.61	6.45	58	.000	1.66																																															
	Control	30	2.00	.98																																																			

*Cohen's *d* effect size benchmark value points: small ($d = 0.2$), medium ($d = 0.5$), and large ($d = 0.8$)

Chart (5) illustrates the participants' improvement level in the post-test of writing performance sub-skills in favor of the first experimental group (peer reviewing).

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...



Hypothesis 3

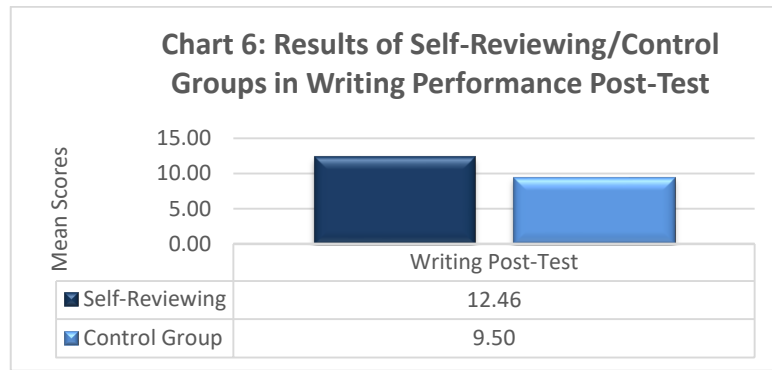
Hypothesis 3 stated that ‘there would be no statistically significant difference at the level of (0.05) between the mean scores obtained by the students in the third experimental group (self-reviewing) and those of the control group in the writing post-test as a whole and its five sub-skills.’ Data analysis of the results using *t-test*, as shown in Table (12), revealed that *Hypothesis 1* was rejected as the results from the self-review group writing post-test ($M = 12.46$, $SD = 2.35$) and the control group post-test ($M = 9.50$, $SD = 3.11$) indicated that self-reviewing resulted in an improvement in writing performance, $t(58) = 4.15$, $p = .000$ in favor of the third experimental group (self-reviewing). The effect size, as calculated by Eta squared, was large (*Cohen’s d* = 1.07).

Table (12) Results of Self-Reviewing/Control Groups in the Writing Performance Post-test

Groups	N	Mean	SD	t-value	DF	p-value	<i>Cohen’s d</i> *
<i>Self-Review</i>	30	12.46	2.35	4.15	58	.000	1.07
<i>Control</i>	30	9.50	3.11				

**Cohen’s d* effect size benchmark value points: small ($d = 0.2$), medium ($d = 0.5$), and large ($d = 0.8$)

Chart (6) illustrates the participants' improvement level in the writing performance post-test in favor of the third experimental group (self-reviewing).



Data analysis of the writing performance sub-skills also revealed that four out of five sub-skills (content and organization, vocabulary, grammar, and style), except for *mechanics*, contributed to the overall statistically significant difference in the post-test in favor of the third experimental group (self-reviewing). These sub-skills, as shown in Table (13), are reported below:

- (1) The results from the third experimental group (self-reviewing) post-test ($M = 3.43$, $SD = 1.04$) and control group post-test ($M = 2.43$, $SD = 1.07$) indicate an improvement in content and organization, $t(58) = 3.66$, $p = .001$, with a large effect size (Cohen's $d = 0.94$).
- (2) The results from the third experimental group (self-reviewing) post-test ($M = 2.80$, $SD = .76$) and control group post-test ($M = 2.16$, $SD = 1.01$) indicate an improvement in vocabulary, $t(58) = 2.72$, $p = .008$, with a medium effect size (Cohen's $d = 0.71$).
- (3) The results from the third experimental group (self-reviewing) post-test ($M = 2.06$, $SD = .98$) and control group post-test ($M = 1.56$, $SD = .81$) indicate an improvement in

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

grammar, $t(58) = 2.14, p = .036$, with a medium effect size (Cohen's $d = 0.55$).

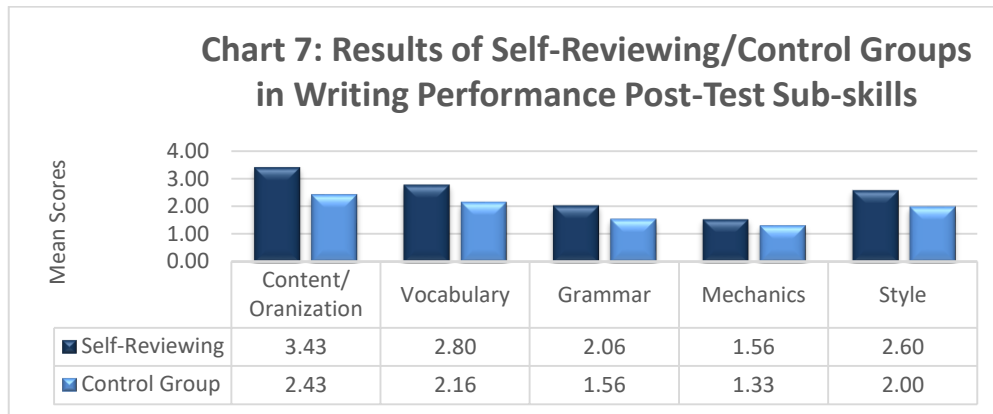
- (4) The results from the third experimental group (self-reviewing) post-test ($M = 1.56, SD = .77$) and control group post-test ($M = 1.33, SD = .66$) indicate no statistically significant improvement in mechanics, $t(58) = 1.25, p = .214$, with a medium effect size (Cohen's $d = 0.32$).
- (5) The results from the third experimental group (self-reviewing) post-test ($M = 2.60, SD = .89$) and control group post-test ($M = 2.00, SD = .98$) indicate an improvement in style, $t(58) = 2.47, p = .016$, with a medium effect size (Cohen's $d = 0.64$).

Table (13) Results of Self-Reviewing/Control Groups in the Writing Performance Post-test Sub-skills

Writing Sub-skills	Groups	N	Mean	SD	t-value	D F	p-value	Cohen's d^*																																															
<i>Content and Organization</i>	Self-review	30	3.43	1.04	3.66	58	.001	0.94																																															
	Control	30	2.43	1.07					<i>Vocabulary</i>	Self-review	30	2.80	.76	2.72	58	.008	0.71	Control	30	2.16	1.01	<i>Grammar</i>	Self-review	30	2.06	.98	2.14	58	.036	0.55	Control	30	1.56	.81	<i>Mechanics</i>	Self-review	30	1.56	.77	1.25	58	.214	0.32	Control	30	1.33	.66	<i>Style</i>	Self-review	30	2.60	.89	2.47	58	.016
<i>Vocabulary</i>	Self-review	30	2.80	.76	2.72	58	.008	0.71																																															
	Control	30	2.16	1.01					<i>Grammar</i>	Self-review	30	2.06	.98	2.14	58	.036	0.55	Control	30	1.56	.81	<i>Mechanics</i>	Self-review	30	1.56	.77	1.25	58	.214	0.32	Control	30	1.33	.66	<i>Style</i>	Self-review	30	2.60	.89	2.47	58	.016	0.64	Control	30	2.00	.98								
<i>Grammar</i>	Self-review	30	2.06	.98	2.14	58	.036	0.55																																															
	Control	30	1.56	.81					<i>Mechanics</i>	Self-review	30	1.56	.77	1.25	58	.214	0.32	Control	30	1.33	.66	<i>Style</i>	Self-review	30	2.60	.89	2.47	58	.016	0.64	Control	30	2.00	.98																					
<i>Mechanics</i>	Self-review	30	1.56	.77	1.25	58	.214	0.32																																															
	Control	30	1.33	.66					<i>Style</i>	Self-review	30	2.60	.89	2.47	58	.016	0.64	Control	30	2.00	.98																																		
<i>Style</i>	Self-review	30	2.60	.89	2.47	58	.016	0.64																																															
	Control	30	2.00	.98																																																			

**Cohen’s d effect size benchmark value points: small (d = 0.2), medium (d = 0.5), and large (d = 0.8)*

Chart (7) illustrates the participants’ improvement level in the post-test of writing performance sub-skills in favor of the third experimental group (self-reviewing).



Hypothesis 4

Hypothesis 4 stated that ‘there would be no statistically significant differences at the level of (0.05) between the mean scores obtained by the students in the study’s four groups in the writing post-test as a whole and its five sub-skills.’ According to the ANOVA test results, there were significant differences within the groups in the writing performance post-test. Therefore, hypothesis 4 was rejected. Table (14) shows that there was a significant effect of reviewing strategies on writing performance at the $p < .05$ level for the four groups $F(3,116) = 32.704, p = 0.000$. in favor of the peer review group.

Table (14) The ANOVA results of the writing post-test

Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	777.425	3	259.142	32.704	0.000
Within Groups	919.167	116	7.924		
Total	1696.592	119			

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Table (15) shows the descriptive statistics of the four groups in the writing post-test.

Table (15) Descriptive statistics of the four groups in the writing post-test

Descriptives	N	Mean	Std. Deviation	Std. Error
Peer Review	30	16.5000	3.14862	0.57486
Teacher Review	30	9.5000	3.11559	0.56883
Group Review	30	14.1000	2.55086	0.46572
Self-Review	30	12.4667	2.35962	0.43081
Total	120	13.1417	3.77585	0.34469

Post hoc comparisons using the Scheffe test, as shown in Table (16), indicated the following.

- 1- The mean score in the writing test for the peer review group ($M = 16.5$, $SD = 3.14$) was significantly different from the other three groups in favor of the peer review group.
- 2- The mean score in the writing test for the teacher review group ($M = 9.5$, $SD = 3.11$) was significantly different from the other three groups in favor of peer review.
- 3- The mean score in the writing test for the group review group ($M = 14.1$, $SD = 2.55$) was significantly different from the peer and teacher review groups in favor of the peer review. No statistically significant difference was found between group review and self-review.
- 4- The mean score in the writing test for the self-review group ($M = 12.46$, $SD = 2.35$) was significantly different from the peer and teacher review groups in favor of the peer review. No statistically significant difference was found between self-review and group review.

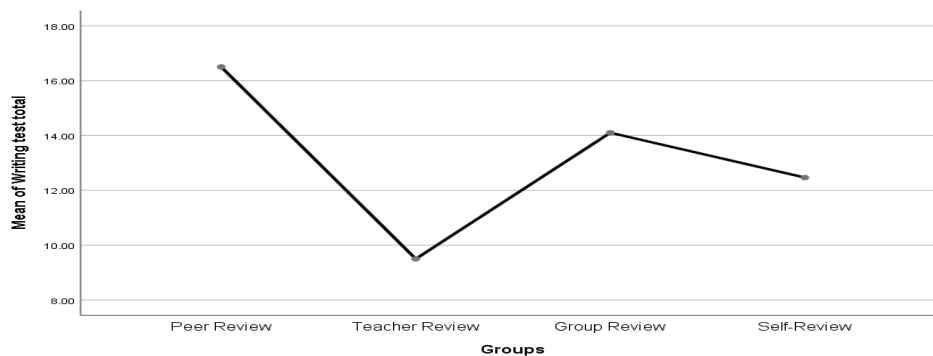
Table (16) Pos-hoc comparisons of the four groups in the writing post-test

Groups		Mean Difference	Std. Error	Sig.
Peer Review	Teacher Review	7.00000*	0.72681	0.000
	Group Review	2.40000*	0.72681	0.015
	Self-Review	4.03333*	0.72681	0.000
Teacher Review	Peer Review	-7.00000*	0.72681	0.000
	Group Review	-4.60000*	0.72681	0.000
	Self-Review	-2.96667*	0.72681	0.001
Group Review	Peer Review	-2.40000*	0.72681	0.015
	Teacher Review	4.60000*	0.72681	0.000
	Self-Review	1.63333	0.72681	0.174
Self-Review	Peer Review	-4.03333*	0.72681	0.000
	Teacher Review	2.96667*	0.72681	0.001
	Group Review	-1.63333	0.72681	0.174

* The mean difference is significant at the 0.05 level.

Figure (1) shows the comparison points within the four groups in the EFL writing performance post-test.

Figure (1) The groups' comparisons in the writing post-test



The EFL writing post-test sub-skills were also compared within the four groups. Below are the findings related to the writing sub-skills.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Content and Organization

According to the ANOVA test results, there were significant differences in content and organization within the groups. Table (17) shows that there was not a significant effect of reviewing strategies on writing performance at the $p < .05$ level for the four groups $F(3,116) = 18.475$, $p = 0.000$ in favor of the peer review group.

Table (17) The ANOVA results of content and organization

Varianc e	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	52.367	3	17.456	18.475	0.000
Within Groups	109.600	116	0.945		
Total	161.967	119			

Table (18) shows the descriptive statistics of the four groups in content and organization.

Table (18) Descriptive statistics of the four groups in content and organization

Descriptive s	N	Mean	Std. Deviation	Std. Error
Peer Review	30	4.1667	0.91287	0.16667
Teacher Review	30	2.4333	1.07265	0.19584
Group Review	30	3.9000	0.84486	0.15425
Self-Review	30	3.4333	1.04000	0.18988
Total	120	3.4833	1.16665	0.10650

Post hoc comparisons using the Scheffe test, as shown in Table (19), indicated the following.

- 1- The mean score in content and organization for the peer review group ($M = 4.16$, $SD = 0.91$) was significantly different from the teacher and self-review groups in favor of the peer review

group. No statistically significant difference was found between peer review and group review.

- 2- The mean score in content and organization for the teacher review group (M = 2.43, SD = 1.07) was significantly different from the other three groups in favor of peer review.
- 3- The mean score in content and organization for the group review group (M = 3.9, SD = 0.84) was significantly different from the teacher review group in favor of peer review. No statistically significant difference was found between group review and self-review or peer review.
- 4- The mean score in content and organization for the self-review group (M = 3.43, SD = 1.04) was significantly different from the peer and teacher review groups in favor of the peer review. No statistically significant difference was found between self-review and group review.

Table (19) Pos-hoc comparisons of the four groups in content and organization

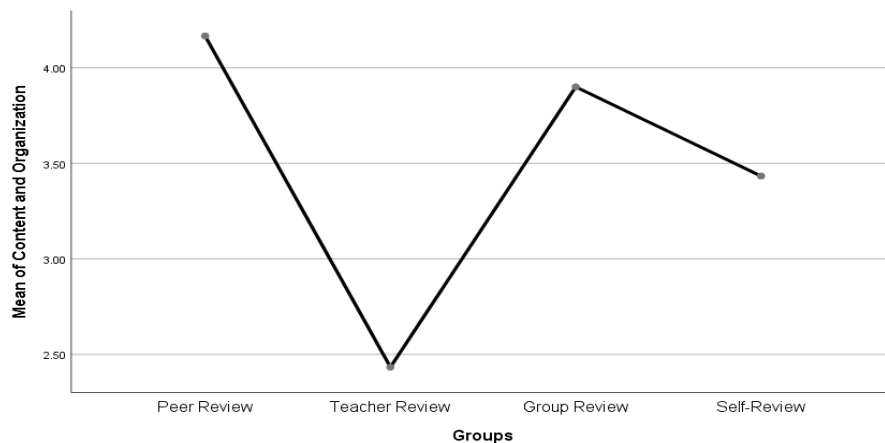
Groups		Mean Difference	Std. Error	Sig.
Peer Review	Teacher Review	1.73333*	0.25098	0.000
	Group Review	0.26667	0.25098	0.770
	Self-Review	.73333*	0.25098	0.041
Teacher Review	Peer Review	-1.73333*	0.25098	0.000
	Group Review	-1.46667*	0.25098	0.000
	Self-Review	-1.00000*	0.25098	0.002
Group Review	Peer Review	-0.26667	0.25098	0.770
	Teacher Review	1.46667*	0.25098	0.000
	Self-Review	0.46667	0.25098	0.331
Self-Review	Peer Review	-.73333*	0.25098	0.041
	Teacher Review	1.00000*	0.25098	0.002
	Group Review	-0.46667	0.25098	0.331

* The mean difference is significant at the 0.05 level.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Figure (2) shows the comparison points in content and organization within the four groups.

Figure (2) The groups' comparisons in content and organization



Vocabulary

According to the ANOVA test results, there were significant differences within the groups in the writing performance pre-test. Table (20) shows that there was a significant effect of reviewing strategies on vocabulary at the $p < .05$ level for the four groups $F(3,116) = 15.30$, $p = 0.000$ in favor of the peer review group.

Table (20) The ANOVA results of vocabulary

Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39.667	3	13.222	15.307	0.000
Within Groups	100.200	116	0.864		
Total	139.867	119			

Table (21) shows the descriptive statistics of the four groups in vocabulary.

Table (21) Descriptive statistics of the four groups in vocabulary

Descriptive	N	Mean	Std. Deviation	Std. Error
Peer Review	30	3.7667	0.97143	0.17736
Teacher Review	30	2.1667	1.01992	0.18621
Group Review	30	2.7333	0.94443	0.17243
Self-Review	30	2.8000	0.76112	0.13896
Total	120	2.8667	1.08414	0.09897

Post hoc comparisons using the Scheffe test, as shown in Table (22), indicated the following.

- 1- The mean score in vocabulary for the peer review group ($M = 3.76$, $SD = 0.97$) was significantly different from the other three groups in favor of the peer review group.
- 2- The mean score in vocabulary for the teacher review group ($M = 2.16$, $SD = 1.01$) was significantly different from the peer review group in favor of the peer review. No statistically significant difference was found between group review and group review or self-review.
- 3- The mean score in vocabulary for the group review group ($M = 3.8$, $SD = 0.76$) was significantly different from the peer and teacher review groups in favor of the peer review. No statistically significant difference was found between group review and self-review or teacher review.
- 4- The mean score in vocabulary for the self-review group ($M = 2.86$, $SD = 1.08$) was significantly different from the peer and teacher review groups in favor of the peer review. No statistically significant difference was found between self-review and group review or teacher review.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

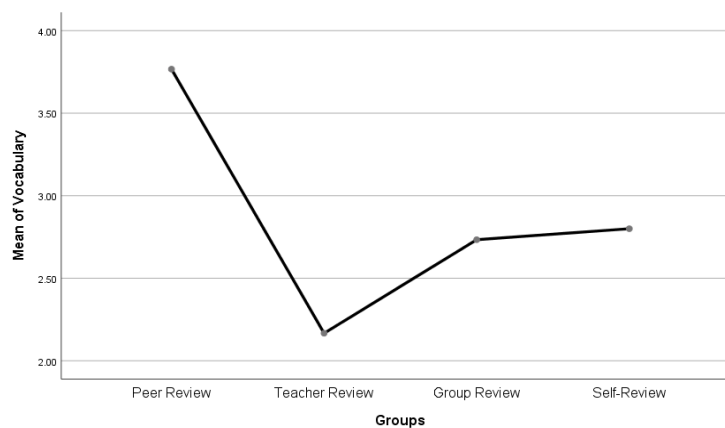
Table (22) Pos-hoc comparisons of the four groups in vocabulary

Groups		Mean Difference	Std. Error	Sig.
Peer Review	Teacher Review	1.60000*	0.23997	0.000
	Group Review	1.03333*	0.23997	0.001
	Self-Review	.96667*	0.23997	0.002
Teacher Review	Peer Review	-1.60000*	0.23997	0.000
	Group Review	-0.56667	0.23997	0.140
	Self-Review	-0.63333	0.23997	0.079
Group Review	Peer Review	-1.03333*	0.23997	0.001
	Teacher Review	0.56667	0.23997	0.140
	Self-Review	-0.06667	0.23997	0.994
Self-Review	Peer Review	-.96667*	0.23997	0.002
	Teacher Review	0.63333	0.23997	0.079
	Group Review	0.06667	0.23997	0.994

* The mean difference is significant at the 0.05 level.

Figure (3) shows the comparison points in vocabulary within the four groups.

Figure (3) The groups' comparisons in vocabulary



Grammar

According to the ANOVA test results, there were significant differences within the groups in the writing performance pre-test. Table (23) shows that there was a significant effect of reviewing strategies on grammar at the $p < .05$ level for the four groups $F(3,116) = 6.427, p = 0.000$ in favor of the peer review group.

Table (23) The ANOVA results of grammar

Varianc e	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.025	3	8.675	6.427	0.000
Within Groups	156.567	116	1.350		
Total	182.592	119			

Table (24) shows the descriptive statistics of the four groups in grammar.

Table (24) Descriptive statistics of the four groups in grammar

Descriptive s	N	Mean	Std. Deviation	Std. Error
Peer Review	30	2.8667	1.52527	0.27847
Teacher Review	30	1.5667	0.81720	0.14920
Group Review	30	2.2667	1.20153	0.21937
Self-Review	30	2.0667	0.98027	0.17897
Total	120	2.1917	1.23870	0.11308

Post hoc comparisons using the Scheffe test, as shown in Table (25), indicated the following.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

- 1- The mean score in grammar for the peer review group ($M = 2.86$, $SD = 1.52$) was significantly different from the teacher review group in favor of the peer review group.
- 2- The mean score in grammar for the teacher review group ($M = 1.56$, $SD = 0.81$) was significantly different from the other three groups in favor of peer review. No statistically significant difference was found between teacher review and group review or self-review.
- 3- The mean score in grammar for the group review group ($M = 2.26$, $SD = 1.20$) was not significantly different from the other groups.
- 4- The mean score in grammar for the self-review group ($M = 2.06$, $SD = 0.98$) was not significantly different than the other groups.

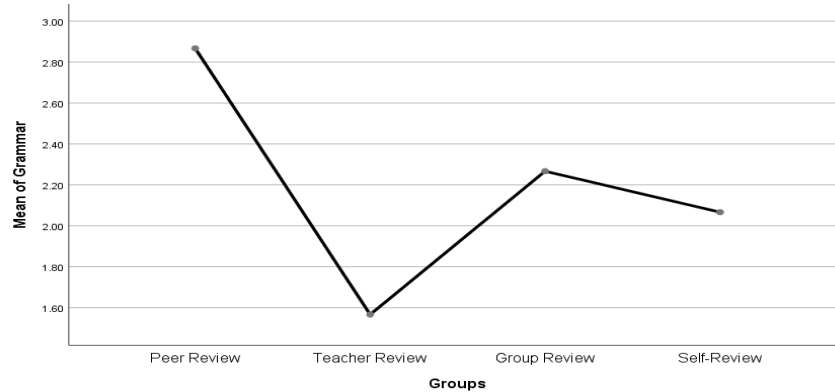
Table (25) Pos-hoc comparisons of the four groups in the writing post-test

Groups		Mean Difference	Std. Error	Sig.
Peer Review	Teacher Review	1.30000*	0.29997	0.001
	Group Review	0.60000	0.29997	0.267
	Self-Review	0.80000	0.29997	0.074
Teacher Review	Peer Review	-1.30000*	0.29997	0.001
	Group Review	-0.70000	0.29997	0.148
	Self-Review	-0.50000	0.29997	0.431
Group Review	Peer Review	-0.60000	0.29997	0.267
	Teacher Review	0.70000	0.29997	0.148
	Self-Review	0.20000	0.29997	0.931
Self-Review	Peer Review	-0.80000	0.29997	0.074
	Teacher Review	0.50000	0.29997	0.431
	Group Review	-0.20000	0.29997	0.931

* The mean difference is significant at the 0.05 level.

Figure (4) shows the comparison points in grammar within the four groups.

Figure (4) The groups' comparisons in grammar



Mechanics

According to the ANOVA test results, there were significant differences in mechanics within the groups. Table (26) shows that there was a significant effect of reviewing strategies on mechanics at the $p < .05$ level for the four groups $F(3,116) = 5.262$, $p = 0.000$ in favor of the peer review group.

Table (26) The ANOVA results of the writing post-test

Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.433	3	4.811	5.262	0.002
Within Groups	106.067	116	0.914		
Total	120.500	119			

Table (27) shows the descriptive statistics of the four groups in mechanics.

**Enhancing College Freshmen's EFL Writing Performance
in an Academic Writing Course ...**

**Table (27) Descriptive statistics of the four groups in the writing
post-test**

Descriptive s	N	Mean	Std. Deviation	Std. Error
Peer Review	30	2.2667	1.25762	0.22961
Teacher Review	30	1.3333	0.66089	0.12066
Group Review	30	1.8333	1.01992	0.18621
Self-Review	30	1.5667	0.77385	0.14129
Total	120	1.7500	1.00628	0.09186

Post hoc comparisons using the Scheffe test, as shown in Table (28), indicated the following.

- 1- The mean score in mechanics for the peer review group ($M = 2.26$, $SD = 1.25$) was significantly different from the teacher review group in favor of the peer review group. No statistically significant difference was found between the peer review and group review or self-review.
- 2- The mean score in mechanics for the teacher review group ($M = 1.33$, $SD = 0.66$) was significantly different from the peer review group in favor of the peer review. No statistically significant difference was found between the teacher review group and group review or self-review.
- 3- The mean score in mechanics for the group review group ($M = 1.83$, $SD = 0.01$) was not significantly different than the other groups.
- 4- The mean score in mechanics for the self-review group ($M = 1.56$, $SD = 0.77$) was not significantly different than the other groups.

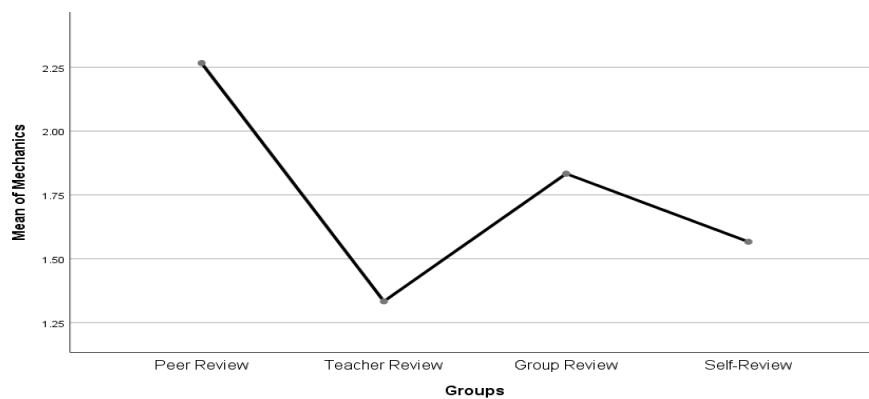
Table (28) Pos-hoc comparisons of the four groups in mechanics

Groups		Mean Difference	Std. Error	Sig.
Peer Review	Teacher Review	.93333*	0.24690	0.004
	Group Review	0.43333	0.24690	0.383
	Self-Review	0.70000	0.24690	0.050
Teacher Review	Peer Review	-.93333*	0.24690	0.004
	Group Review	-0.50000	0.24690	0.256
	Self-Review	-0.23333	0.24690	0.827
Group Review	Peer Review	-0.43333	0.24690	0.383
	Teacher Review	0.50000	0.24690	0.256
	Self-Review	0.26667	0.24690	0.761
Self-Review	Peer Review	-0.70000	0.24690	0.050
	Teacher Review	0.23333	0.24690	0.827
	Group Review	-0.26667	0.24690	0.761

* The mean difference is significant at the 0.05 level.

Figure (5) shows the comparison points within the four groups in mechanics.

Figure (5) The groups' comparisons in mechanics



Style

According to the ANOVA test results, there were significant differences in style within the groups. Table (29) shows that there was

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

a significant effect of reviewing strategies on writing performance at the $p < .05$ level for the four groups $F(3,116) = 17.266$, $p = 0.000$ in favor of the peer review group.

Table (29) The ANOVA results of style

Varianc e	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	41.767	3	13.922	17.266	0.000
Within Groups	93.533	116	0.806		
Total	135.300	119			

Table (30) shows the descriptive statistics of the four groups in the writing post-test.

Table (30) Descriptive statistics of the four groups in style

Descriptive s	N	Mean	Std. Deviation	Std. Error
Peer Review	30	3.4333	1.04000	0.18988
Teacher Review	30	2.0000	0.98261	0.17940
Group Review	30	3.3667	0.61495	0.11227
Self-Review	30	2.6000	0.89443	0.16330
Total	120	2.8500	1.06629	0.09734

Post hoc comparisons using the Scheffe test, as shown in Table (31), indicated the following.

- 1- The mean score in style for the peer review group ($M = 3.43$, $SD = 1.04$) was significantly different from the teacher review and self-review groups in favor of the peer review group. No statistically significant difference was found between peer review and group review.

- 2- The mean score in style for the teacher review group (M = 2.0, SD = 0.98) was significantly different than the peer review and group review in favor of the peer review. No statistically significant difference was found between teacher review and self-review.
- 3- The mean score in style for the group review group (M = 3.36, SD = 0.61) was significantly different from the teacher and self-review groups in favor of the group review. No statistically significant difference was found between group review and peer review.
- 4- The mean score in style for the self-review group (M = 2.6, SD = 1.06) was significantly different from the peer and group review scores, which were in favor of the peer review. No statistically significant difference was found between self-review and teacher review.

Table (31) Pos-hoc comparisons of the four groups in style

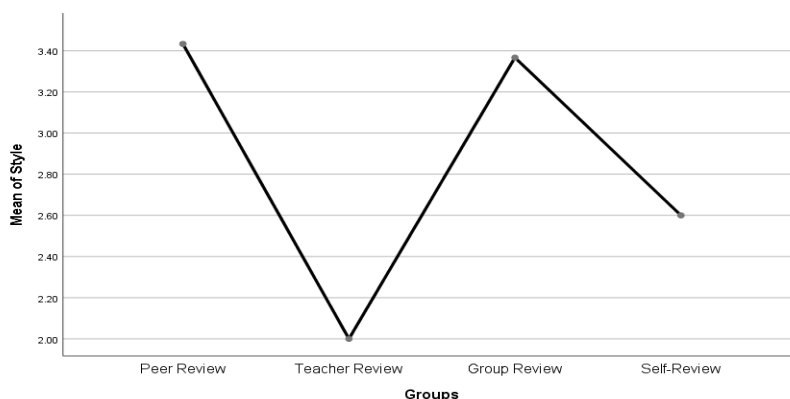
Groups		Mean Difference	Std. Error	Sig.
Peer Review	Teacher Review	1.43333*	0.23185	0.000
	Group Review	0.06667	0.23185	0.994
	Self-Review	.83333*	0.23185	0.006
Teacher Review	Peer Review	-1.43333*	0.23185	0.000
	Group Review	-1.36667*	0.23185	0.000
	Self-Review	-0.60000	0.23185	0.088
Group Review	Peer Review	-0.06667	0.23185	0.994
	Teacher Review	1.36667*	0.23185	0.000
	Self-Review	.76667*	0.23185	0.015
Self-Review	Peer Review	-.83333*	0.23185	0.006
	Teacher Review	0.60000	0.23185	0.088
	Group Review	-.76667*	0.23185	0.015

* The mean difference is significant at the 0.05 level.

Figure (6) shows the comparison points in style within the four groups.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Figure (6) The groups' comparisons in style.



Qualitative findings

This section presents the qualitative findings based on an analysis of the participants' errors in writing post-test papers in the EFL. It aims to shed light on the most common errors the students in the present study made in their writing performance. The errors were classified according to the five dimensions of the writing performance.

Content and organization

- *missing a topic sentence*
 - *missing a concluding sentence*
 - *lack of enough supporting sentences*
 - *not abiding by the required word limit*
 - *using numbers instead of linking words*
 - *using a topic sentence that is too general, too specific, or an incomplete sentence.*
 - *lack of use of appropriate transition signals*
 - *lack of coherence of ideas*
 - *lack of enough details to make a point*
 - *inappropriate word choice (e.g., using 'when' instead of 'while')*
 - *use of unclear or ambiguous ideas.*
-

Vocabulary

- *inappropriate use of the word 'thing' because of lack of knowledge of vocabulary to replace it with the right word*
- *inappropriate use of linking words, e.g., 'also'*
- *lack of semantic variety as evident in repeating words and transition signals*
- *misuse of prepositions and phrasal verbs*
- *inappropriate word choice due to the interference of L1, translating ideas, and not thinking in the English language*
- *misuse of the words 'other' and 'another.'*

Grammar

- *incorrect use of conjunctions in complex sentences*
 - *inappropriate use of tenses*
 - *inappropriate subject-verb agreement*
 - *misuse of prepositions*
 - *inappropriate use of plural forms (e.g., informations)*
 - *lack of syntactic variety as evident in over-dependence on simple sentences instead of compound or complex sentences*
 - *mixing the use of 'present participle' and 'past participle' (e.g., 'exciting' instead of 'excited')*
 - *misuse of object pronouns*
 - *misuse of relative pronouns*
 - *misuse of auxiliary verbs (e.g., inappropriate adding or omitting auxiliary verbs)*
 - *inappropriate use of comparative adjectives (e.g., more easier)*
 - *missing the appropriate pronoun while writing*
 - *inappropriate use of nouns, adjectives, and adverbs*
 - *inappropriate use of comparative and superlative adjectives*
 - *inappropriate use of demonstrative pronouns*
 - *lack of grammatical knowledge of modal verbs (e.g., using a noun instead of the base form after a modal verb)*
 - *inappropriate verb form after 'to'*
-

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

- *inappropriate use of articles (e.g., not using a definite or indefinite article with a singular noun*
- *misuse of subject pronoun to refer to singular and plural*

Mechanics

- *use of run-on sentences*
- *inappropriate use of the semi-colon*
- *unnecessary use of a 'comma' before because*
- *starting the line with a comma or full stop*
- *inappropriately capitalizing words in the middle of a sentence*
- *using vocabulary with incorrect spelling*
 - *making comma splices*
- *inappropriate use of the 'comma,' e.g., not using a comma after transition signals*

Style

- *informal or conversational style of writing*
- *inappropriate use of certainty*
- *inappropriate use of formulaic phrases and sentences to start and conclude the paragraph*
- *the use of the first person singular or plural while discussing the topic*
 - *repeating the subject instead of using a pronoun*
 - *using short forms that are not appropriate for academic writing*
 - *using biased language, e.g., the pronoun 'he' or 'she' instead of 'they'*
- *not following appropriate paragraph format, e.g., writing without indentation and using bullet and numbered lists*

Discussion

The findings of the present study revealed that the peer review group outperformed the other three groups in the EFL writing post-test and all its five sub-scales. These findings agree with those of previous

studies that have proven that peer feedback significantly improves students' writing skills (Cui et al., 2021; Yatifi et al., 2021; Yu, 2021; Alvarez et al., 2020; Burgess et al., 2021; Lumabi & Tabjen, 2021; Salinas, 2020; Han & Xu, 2020; Tai et al., 2015; Kurihara, 2014).

Kurihara (2014) pointed out that students who received peer review incorporated more feedback from peers than teacher review. Such a process resulted in high development in both writing quality and quantity. Besides, it was suggested that peer reviewing helped students imitate their peers' writing and avoid the same mistakes (Lundstorm & Baker, 2009). Collaborative reviewing gives rise to the implementation of learning strategies. It is highlighted that student cognitive, metacognitive, and social strategies are used to facilitate the interaction among peers in the writing process as well as the improvement of students' writing level and quality (Villamil & de Guerrero, 2006; Kamimura, 2006).

Albelihi and Al-Ahdal (2021) found that when students were trained in giving review feedback, whether in pair work or small groups, their writing skills improved. They added that students became more effective writers when they provided feedback to their classmates. Collaborative learning narrows the gaps between students' levels and helps them generate more ideas in group work than other modes of interaction.

Tai et al. (2015) found that peer reviewing was an effective strategy for improving EFL learners' writing performance and that both the writers and the reviewers benefitted from the process. They pointed out that the students who participated in peer reviewing benefitted from it cognitively, affectively, socially, and linguistically. In terms of cognitive development, the learners devoted more time to feedback from their peers. Then, they reflected on their work. In terms of affective development, interactions with peers enhanced mutual understanding and exchange of ideas in a positive, safe, and supportive milieu. Socially speaking, interactions with their intergroup peers

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

increased the students' social awareness, communication skills, and negotiation of meaning. Linguistically, the review form-filling tasks repetitively reinforced the students' familiarity with the criteria that were essential for assessing the quality of writing performance.

Peer reviewing is congruent with the most used methodology in EFL contexts, i.e., the communicative language teaching approach. Peer reviewing has been conducted in writing skills since the use of the communicative approach (Cobrin, 2012; Farrah (2012). It has proven to be an effective approach to enhancing writing skills and students' motivation towards writing and to help learners adopt a dual identity as both writer and reviewer. In other words, the student is both a provider and receiver of feedback based on the review process.

The findings of the present study also revealed that both the peer and group review groups outperformed the teacher group in the EFL writing post-test and all its sub-scales. This finding agrees with previous studies (e.g., Albelihi and Al-Ahdal, 2021; Kusumaning et al., 2019). Peer and group reviewing as two forms of collaborative learning are grounded in the social constructivist theory (Albelihi & Al-Ahdal, 2021). When students collaborate with their peers, they enhance their writing performance as well as their way of learning.

In terms of within-group comparisons, the findings of the study revealed that there were differences within the groups in the sub-skills of writing performance in favor of the peer review group. This result is consistent with previous studies. For example, Purna (2018) revealed that with the use of peer reviewing, the organization had the highest level of improvement. Purna's finding is consistent with a similar finding in the present study, where the content and organization sub-skill had the highest level of improvement in peer reviewing compared to the control group. It also agreed with the findings of Ruegg's study (2015) that students benefitted more from peer feedback on organization.

The findings of the present study are not completely consistent with those of previous studies. For instance, the results by Albelihi and Al-Ahdal (2021) indicated that providing students with online-class peer feedback and small-group peer feedback enhanced their writing skills. However, neither of these strategies proved to be more successful than the other. The findings by Albelihi and Al-Ahdal (2021) are inconsistent with the findings in the present study, as the peer-reviewing strategy outperformed the group-reviewing strategy. This contradiction could be due to the mode of interaction.

Unlike online interaction in the study by Albelihi and Al-Ahdal (2021), the participants in the present study interacted face to face with higher quantity and quality for the peer review participants who had more time and space to collaborate, and review compared to the group review participants. The peer reviewers benefited more due to maximum time on task and high level of student-student interaction. Besides, in pair work, students who are embarrassed to participate in a group found the peer writing environment a safe shelter to share ideas. Thus, they avoided feeling vulnerable to discuss their ideas, get and give feedback, and ultimately improve their writing.

Recommendations

Based on the findings of the present study, the following recommendations are made.

- 1- Training in self and collaborative reviewing strategies should be incorporated in EFL writing assessment at higher education and pre-university education.
 - 2- EFL teachers should plan, monitor, and evaluate the various reviewing strategies to raise students' awareness of the writing process.
 - 3- EFL pre-service teacher education programs and in-service teachers' professional development activities should incorporate artificial intelligence applications while teaching and learning
-

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

- writing to save teachers' and learners time and effort by providing the students with personalized feedback.
- 4- EFL writing assessment should be a continuous process with specific grading criteria that are taught to the students.
 - 5- The EFL writing assessment process should support the provision of feedback from multiple sources, including self, peer, and group reviews.
 - 6- Peer reviewing activities should be an integral component of the EFL writing pedagogy at the university level.
 - 7- Teachers should encourage the students to participate in collaborative writing activities. Even if students' level is not advanced, participating in peer reviewing is a worthwhile experience. Participation is itself an indication of the students' positive efforts toward learning.
 - 8- Methods of implementing peer review training programs should allow reviewers to gain the experience of providing higher-quality revisions to ensure that the review process benefits both writers and reviewers.
 - 9- The present study calls for a balanced approach to feedback provision based on combining various review strategies. Multiple forms of feedback could provoke social comparisons to encourage learners to observe and imitate models while reflecting upon themselves.

Suggestions for further research

Based on the findings of the present study, the following suggestions for further research are made.

- 1- Using digital peer reviewing strategies to enhance EFL secondary stage students' writing performance and to reduce writing apprehension.
- 2- The effectiveness of a training program in EFL writing assessment in developing EFL majors' assessment literacy and writing performance.

- 3- The effect of collaborative reviewing strategies on developing EFL students' writing skills and attitudes.
- 4- Enhancing EFL majors' writing skills and communicative competence via collaborative digital writing activities.
- 5- Using artificial intelligence applications in EFL writing to enhance university students' grammatical competence and language awareness.
- 6- Using automated writing feedback in EFL writing assessment to enhance EFL students' writing performance and linguistic competence.

Conclusion

The present study is not without limitations. One of these limitations was the class arrangement in rows. It was difficult with this kind of arrangement to make the most out of group work as it was necessary to limit the size of the group to only three to allow them to interact with one another. Another challenge was the difficulty of grouping learners who preferred to work with their friends. This preference was not effective given that some pairs and groups were homogeneous and had low level of English language. Therefore, it was difficult to provide effective feedback. A third challenge was the overall low level of the participants at the start of the course. The researcher took a long time to teach them about how to write given that they did not have enough EFL writing instruction or practice in the previous stage at the secondary school.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

References

- Abri, A. A. (2021). Exploring EFL learners' comments on web-based peer feedback: Local and global Revisions. *English Language Teaching, 14*(6), 114-124.
- Albelihi, H. & Al-Ahdal, A. (2021). EFL students' writing performance: A study of the role of peer and small-group feedback, *Journal of Language and Linguistic Studies, 17*(4), 2224-2234.
- Alsehibany, R. A. (2021). EFL Saudi student's attitudes toward peer feedback activities in a writing class. *PSU Research Review, 14*(1). <https://www.emerald.com/insight/2399-1747.htm>
- Alvarez, G., Colombo, L. M., & Difabio, H. (2020). Peer feedback in an online dissertation writing workshop. *Signum: Estudos da Linguagem, 24*(1), 80-96.
- Berggren, J. (2015). Learning from Giving Feedback: A study of Secondary-Level Students. *ELT Journal, 69*(1), 58-70.
- Brown, H.D. (2007). *Teaching by principles: An interactive approach to language pedagogy*. White Plains, NY: Pearson Education.
- Burgess, A., Roberts, C., Lane, A. S., Haq, I., Clark, T., Kalman, E., & Bleasel, J. (2021). Peer review in team-based learning: influencing feedback literacy. *BMC medical education, 21*(1), 1-11.
- Cahyono, B. Y., & Amrina, R. (2017). Peer Feedback, Self-correction, and Writing Proficiency of Indonesian EFL Students. *Arab World English Journal, 8*(1). DOI: <https://dx.doi.org/10.24093/awej/vol7no1.12>
- Camarata, T., & Slieman, T. A. (2020). Improving student feedback quality: A simple model using peer review and feedback rubrics.
-

Journal of Medical Education and Curricular Development, 7, 2382120520936604.

Cambridge English Qualifications (2020). *A2 Key 8 practice tests*. Glasgow: HarperCollins.

Chen, J. (2021). Research on the effect of peer feedback training in English writing teaching- A case study of students in Business English major. *English Language Teaching*, 14(6), 12-24.

Cho, Y. H., & Cho, K. (2011). Peer Reviewers Learn from Giving Comments. *Inst Sci*, 39, 629-643.

Corbin, B. (2012). Improving L2 Peer Feedback. Retrieved from <https://www.Bryancorbin.Net/2012/Improving-L2-P>

Covill, A. E. (2010). Comparing peer review and self-review as ways to improve college students' writing. *Journal of Literacy Research*, 42(2), 199–226.

Cresswell, A. (2000). Self-Monitoring in Student Writing: Developing Learner Responsibility. *ELT Journal*, 54(3), 235-244.

Cui, Y., Schunn, C. D., & Gai, X. (2021). Peer feedback and teacher feedback: a comparative study of revision effectiveness in writing instruction for EFL learners. *Higher Education Research & Development*, 1-17.

<https://doi.org/10.1080/07294360.2021.1969541>

Defazio, J., Jones, J., Tennant, F., & Hook, S. A. (2010). Academic Literacy: The Importance and Impact of Writing across the Curriculum. *Journal of the Scholarship of Teaching and Learning*, 10(2), 34-47.

Elboshi, A. (2021). Web-enhanced peer feedback in ESL writing classrooms a literature review. *English Language Teaching*, 14(4), 66-76.

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

- Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System*, 36, 353–371.
- Elola, I. (2010). Collaborative writing: Fostering foreign language and writing conventions development. *Language Learning & Technology*, 14(3), 51–71.
- Farrah, M. 2012. The impact of peer feedback on improving the writing skills among Hebron university students. *An-Najah Uni. J. Res. (Humanities)*, 26(1), 180- 210.
- Fellag, L.R. (2010). *From Reading to Writing*. White Plains, NY: Pearson Longman.
- Gao, J., (2007). Teaching Writing in Chinese Universities: Finding an Eclectic Approach. *Asian EFL Journal*, 20(2), 285-297
- Ghani, M., & Asgher, T. (2012). Effects of Teacher and Peer Feedback on Students' Writing at Secondary Level. *Journal of Education Research*, 15 (2).
- Gielen, S., Peeters, E., Dochy, F., Onghena, P., Struyven, K. (2010). Improving the effectiveness of peer feedback for learning. *Learning and Instruction*, 20, 304-315
- Gonzalez-Torres, P., Sarango, C. (2023). Effectiveness of Teacher and Peer Feedback in EFL Writing: A Case of High School Students. *International Journal of Learning, Teaching and Educational Research*, 22(4), 73-86.
- Hajimohammadi, R. & Mukundan, J. (2011). Impact of Self-correction on Extrovert and Introvert Student in EFL Writing Progress. *English Language Teaching*, 4(2), 161- 168.
-

- Han, Y., & Xu, Y. (2020). The development of student feedback literacy: the influences of teacher feedback on peer feedback. *Assessment & Evaluation in Higher Education*, 45(5), 680-696.
- Hansen, J. G., & Liu, J. (2005). Guiding Principles of Effective Peer Response. *ELT Journal*, 59(1), 31-38.
- Hentasmaka, D., & Cahyono, B. Y. (2021). Peer feedback uptakes and outcomes across EFL students' proficiency levels: A study at tertiary education in Indonesia. *International Journal of Instruction*, 14(3), 271-286.
- Ho, P. V. P., Phung, L. T. K., Oanh, T. T. T., & Giao, N. Q. (2020). Should peer e-comments replace traditional peer comments? *International Journal of Instruction*, 13(1), 295-314.
- Hogue, A., & Oshima, A. (2008). *Introduction to academic writing*. White Plains, NY: Pearson/Longman.
- Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*, 16, 148–164.
- Kaçar, I. G. (2021). The impact of online and face-to-face peer feedback on pre-service teachers in EFL academic writing. In *Design Solutions for Adaptive Hypermedia Listening Software* (pp. 124- 163). IGI Global
- Kamberi, L. (2013). The Significance of Teacher Feedback in EFL Writing for Tertiary Level Foreign Language Learners. *Procedia – Social and Behavioral Sciences*, 70, 1686-1690
- Kamimura, T. (2006). Effects of peer feedback on ESL student writers at different levels of English proficiency: A Japanese context. *TESL Canada Journal*, 23(2), 12-39.
-

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

- Kurihara, N. (2014). The adoption of the process-oriented writing approach in a Japanese high school classroom. *The Language Teacher*, 38(5), 31–36.
- Kurihara, N. (2017). Peer review in an EFL classroom: Impact on the improvement of student writing abilities. *The Asian Journal of Applied Linguistics*, 4 (1), 58-72.
- Kusumaningrum, S. R. (2021). The effect of teacher and peer feedback provided through Edmodo on students' writing performance. SKRIPSI Mahasiswa UM.
- Kusumaningrum, S. R., Cahyono, B. Y., Prayogo, J. A. (2019). The Effect of Different Types of Peer Feedback Provision on EFL Students' Writing Performance. *International Journal of Instruction*, 12(1), 213-224.
- Lim, L., & Jacobs, H. (2001). *Feedback in Second Language Writing*. Cambridge University Press; Retrieved from: cambridge.org/us/catalogue/catalogue.asp? isbn=9780521672580&ss=exc - 39k - Cached.
- Lin, W. C., & Yang, S. C. (2011). Exploring students' perceptions of integrating wiki technology and peer feedback into English writing courses. *English Teaching: Practice and Critique*, 10(2), 88–103.
- Liu, Y. (2008). The Effects of Error Feedback in Second Language Writing. *Arizona Working Papers in SLA & Teaching*, 15(1), 65-79.
- López-Pellisa, T., Rotger, N., & Rodríguez-Gallego, F. (2021). Collaborative writing at work: Peer feedback in a blended learning environment. *Education and Information Technologies*, 26(1), 1293-1310.
-

- Lumabi, B. M., & Tabajen, R. (2021). College Students' experience in online asynchronous peer feedback in writing. *TESOL and Technology Studies*, 2(2), 41-54.
- Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. *Journal of Second Language Writing*, 18(1), 30-43.
- Maysyaroh, S., Nainggolan, F., & Suka, R. G. (2020). The implementation of peer-feedback in enhancing students' writing achievement at SMA Negeri 1 Ketapang. *U-JET*, 9(2).
<http://jurnal.fkip.unila.ac.id/index.php/123/article/view/20827>
- Min, H. T. (2005). Training students to become successful peer reviewers. *System*, 33, 293–308.
- Pham, T. N., Lin, M., Trinh, V. Q., & Bui, L. T. P. (2020). Electronic peer feedback, EFL academic writing and reflective thinking: Evidence from a Confucian context. *Sage Open*, 10(1), 158244020914554
- Purna, D. (2018). The impacts of peer reviewing on EFL writing skills. S1 thesis, Universitas Negeri Makassar. Available at:
<http://eprints.unm.ac.id/id/eprint/10113>
- Rahimi, M. (2013). Is Training Students Reviewers Worth Its While? A study of How Training Influences the Quality of Students' Feedback and Writing. *Language Teaching Research*, 17(1), 67-89
- Richard, J. C. & Renandya, W. A. (2002). *Methodology in Language Teaching*. United Kingdom: The Press Syndicate of the University of Cambridge.
- Rollinson, P. (2004). *Thinking about Peer Review*. Oxford: Oxford University Press.
-

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

Ruegg, R. (2015). The relative effects of peer and teacher feedback on improvement in EFL students' writing ability. *Linguistics and Education, 29*, 73–82.

Saeed, M.A., Al-Ahdal, A. A., & Al-Qunayeer, H.S. (2020). Integrating research proposal writing into a postgraduate research method course: What does it tell us? *International Journal of Research & Method in Education, 43*(4), 303-318.
<https://doi.org/10.1080/1743727X.2020.1777963>

Salinas, A. M. (2020). Writing development through materials that focus on peer feedback in an EFL context. *Enletawa Journal, 13*(1), 20-56.

Sheen, Y. (2010a). Differential effects of oral and written corrective feedback in the ESL classroom. *Studies in Second Language Acquisition, 32*(02), 203–234.

Sheen, Y. (2010b). Introduction: The role of oral and written corrective feedback in SLA. *Studies in Second Language Acquisition, 32*(2), 169–179.

Sheen, Y., Wright, D., & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System, 37*(4), 556–569.

Shokrpour, Nasrin & Keshavarz, Nikta & Jafari, Seyed Mohamad. (2013). The Effect of Peer Review on Writing Skill of EFL Students. *Khazar Journal of Humanities and Social Sciences, 16*. 24-35. 10.5782/2223-2621.2013.16.3.24.

Simonsmeier, B. A., Peiffer, H., Flaig, M., & Schneider, M. (2020). Peer feedback improves students' academic self-concept in higher education. *Research in Higher Education, 61*(6).
<https://www.unitrier.de/fileadmin/fb1/prof/PSY/PAE/Team/Schneider/SimonsmeierEtAl2020.pdf>

- Srichanyachon, N. (2012). An investigation of university EFL students' attitudes toward teacher and peer feedback. *Educational Research & Review*, 7(26), 558-562.
- Srichanyachon, N. (2014). Self-revision Method of EFL Writers. *International Proceeding of Economics Development Research*, 77(13), 58-62.
- Suryanto. (2014). Issues in Teaching English in a Cultural Context: A Case of Indonesia. *The Journal of English Literacy Education*, 1(2), 1-11
- Tai, H., Lin, W., Yang, S. (2015). Exploring the Effects of Peer Review and Teachers' Corrective Feedback on EFL Students' Online Writing Performance. *Journal of Educational Computing Research*, 53(2) 284–309.
- Tsui, A. B., & Ng, M. (2000). Do secondary L2 writers benefit from peer comments? *Journal of Second Language Writing*, 9(2), 147-170. doi: 10.1016/S1060-3743(00)00022-9
- Villamil, O. S., & de Guerrero, M. C. M. (2006). Sociocultural theory: A framework for understanding the social-cognitive dimensions of peer feedback. In K. Hyland & F. Hyland (Eds.), *feedback in second language writing: Contexts and issues* (pp. 23-41). Cambridge: Cambridge University Press.
- Vygotsky, L. (1978). *Mind and society: The development of higher psychological Processes*. Cambridge, MA: Harvard University Press.
- Wakabayashi, R. (2013). The Effects of the Peer Feedback Process on Reviewers' Own Writing. *English Language Teaching*, 6(9), 117-192.
- Weigle, S.C. (2002). *Assessing Writing*. Cambridge: Cambridge University Press.
-

Enhancing College Freshmen's EFL Writing Performance in an Academic Writing Course ...

- Wette, R. (2014). Teachers' practices in EAP writing instruction: Use of models and modeling. *System*, 42, 60–69.
- Yatifi, 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*
Liu, F.,
<https://www.tandfonline.com/doi/abs/10.1080/14703297.2019.1687005>
- 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.
- Zhang, Z. V. (2020). Engaging with automated writing evaluation (AWE) feedback on L2 writing: Student perceptions and revisions. *Assessing Writing*, 43, 100439.