Peer Feedback and its impact on university students' writing performance

Retroalimentação entre pares e seu impacto no desempenho de escrita de estudantes universitários

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Abstract

Introduction: this study addresses issues in students' academic writing by proposing peer feedback as a strategy to improve university students' advanced (B1 - B2) academic writing skills. The intervention took place over a sixteen-week course at a private university in Guayaquil, Ecuador. Methods: an action research was conducted, integrating quantitative (pre- and post-tests) and qualitative (questionnaire) instruments to determine if sixty freshman university students would improve their writing skills in terms of structure, fluency, and accuracy. Results: students demonstrated improvement in their writing, with a Cohen's d = 0.39. Students' feedback reported both benefits and challenges in providing peer feedback. Conclusions: despite limitations for both students and the teacher, peer feedback can be considered a strategy to raise students' awareness of their own writing errors at advanced level. Other EFL teachers and coordinators can gain new insights from this study.

Keywords: EFL writing; Higher Education; Peer Feedback.

Resumo

Introdução: havia questões na escrita acadêmica dos alunos que precisavam ser abordadas. Este estudo propõe o feedback dos pares como uma estratégia para melhorar as habilidades de escrita acadêmica avançada (B1 - B2) de estudantes universitários. A intervenção durou um curso de dezesseis semanas oferecido em uma universidade privada em Guayaquil, Equador. Métodos: foi realizada uma pesquisa-ação. Ele integrou instrumentos quantitativos (pré e pós-testes) e qualitativos (questionário) para determinar se sessenta estudantes universitários calouros melhoraram sua habilidade de escrita em estrutura, fluência e precisão. Resultados: os alunos melhoraram sua própria escrita com um d de Cohen = 0,39. As opiniões dos alunos relataram benefícios e desafios ao fornecer feedback aos colegas. Conclusões: apesar das limitações para alunos e professores, o feedback dos pares pode ser considerado uma estratégia para sensibilizar os alunos para os seus próprios lapsos de escrita ao nível avançado. Outros professores e coordenadores de inglês como língua estrangeira podem ter novos insights a partir deste estudo.

Palavras-chave: Inglês como uma língua estrangeira; Ensino Superior; Opinião dos pares.

INTRODUCTION

The writing system allows learners to enhance cognition and code their communication with others upon undergoing a formal education. It enables them to analyze and construct real-life linguistic contexts from their worlds into socially powerful discourses for archiving information across time and captivating audiences worldwide (Verenikina, 2003). This is why, in the context of English as a Foreign Language (EFL), the role of writing holds great importance for acquiring or improving knowledge, especially for students seeking to excel in higher education. There tends to be less practical use of writing skill in the EFL classroom. Many students seldom write and fail to correct errors in grammar, vocabulary, punctuation, spelling, and organization of ideas, even at university level (Shokrpour & Fallahzadeh, 2007). These failures further affect the motivation to write proficiently, which undermines students' language use in professional contexts, revealing a lack of knowledge and organization in terms of structure, fluency, and accuracy (Belhabib, 2014).

In the local context, there are studies aimed at improving writing at secondary and higher education (Albán Defilippi, Miller, & Ramírez-Ávila, 2020; Tamayo Maggi & Cajas Quishpe, 2020; Vire & Santillán, 2021). These three studies were conducted in Ecuador with proficiency levels ranging from A1 to B1 and in two different contexts. Tamayo Maggi and Cajas Quishpe (2020) conducted an exploratory study. Their focus was to report teachers' issues when teaching writing in EFL. Conclusions stated the following problems: students' low proficiency level, lack of motivation, and mother tongue interference. The researchers interviewed public university teachers.

Albán Defilippi et al. (2020) also researched the writing problem in a higher education institution. They included "collaboration" in their teaching practices. Due to the intervention, the researchers reported improvement in

grammar and vocabulary. Requiring students to collaborate placed them at the center of the class. Thus, they constructed knowledge together, shared experiences, and provided feedback. The students' proficiency was A1.

Vire and Santillán (2021) carried out an action research study to help junior high students improve their writing. They found that an intervention with ePals upgrade students' vocabulary and grammar. From the perspective of the students, collaborating with ePals not only improved their writing but also raised their intercultural skills. These are two examples of studies that have been conducted in the local context because the researchers identified a problem in EFL writing. Students' proficiency ranged from low to upper-intermediate. They belonged to the International Baccalaureate program.

Another perspective of writing is the process it takes prior to the final product. Laksmi (2006) pointed out that writing integrates five stages: pre-writing, drafting, revising, editing, and publishing. These stages are recursive, which means writers can go back and forth between them during the process prior to the final product. If these stages are incorporated into the classroom, students can produce better written tasks. Özdemir and Aydin (2015) concluded that if the writing process is observed and collaboration facilitated by technology is added, the quality of the work increases due to the motivation these elements bring to the classroom.

One of the strategies that can support students' writing is the use of peer feedback, in which capable peers, beyond teachers and parents, provide assistance for better understanding and reinforcement of a given skill. In the case of writing, Lundstrom and Baker (2009) determined that giving or receiving peer feedback helps develop students' ability to critically examine their own writing.

Authors describe peer feedback, in the context of the classroom, as students taking turns being reviewers and reviewees (Golparian, Chan, & Cassidy, 2015)). Other authors focus on the social skills developed through peer feedback. According to Golparian et al. (2015), this strategy fosters a relationship among students because of the interchange that occurs during peer revision. In this process, participants also appreciate their peers' contribution. In this regard, Ferris and Hedgcock (2014) concluded that even if students are not initially knowledgeable enough to provide feedback, they benefit from reading their peers' writing. To provide feedback in writing, Liu and Edwards (2002) pointed out that the practice has to be consistent and serious, and students should have knowledge about writing.

In addition, Albán Defilippi et al. (2020), Moreira Olives (2019), and Yu and Lee (2016) mentioned that a classroom environment is strengthened when collaboration is incorporated and students take responsibility for developing their own skills. Another benefit is that students' confidence becomes stronger (Moneypenny, Evans, & Kraha, 2018; Yan, 2019). This is explained by Kim (2010); according to the author, students are more willing to express their thoughts when they work with their peers.

International and local authors favor collaboration in the classroom (Albán Defilippi et al., 2020; Khatib & Meihami, 2015; Moreira Olives, 2019; Vire & Santillán, 2021; Yan, 2019). Albán Defilippi et al. (2020) and Vire and Santillán (2021), for example, concluded that collaboration in writing positively affects components such as grammar and vocabulary. According to Khatib and Meihami (2015), it also improves content, organization, and mechanics.

Other studies support the previous idea by reporting that collaboration in the classroom helps students academically, socially, and psychologically (Chen, 2017; Khatib & Meihami, 2015; Yan, 2019). For example, Brown (2000) highlighted that interdependence stimulates an atmosphere of cooperative responsibility, mutual respect, and a sense of group identity that should be replicated in academic environments. According to Chen (2017), collaborative activities promote social skills. The author indicates that students learn to solve their own issues, have more opportunities to practice for communication and, in the long run, this increases students' motivation. Lastly, Castillo, Heredia, and Gallardo (2017) agreed that collaborative activities within online learning environments can yield similar results. These authors studied a group of postgraduate students in a distance program.

On the other hand, authors have also reported drawbacks in the application of peer feedback. Nicol, Thomson, and Breslin (2014) stated that students may provide and receive unsatisfactory feedback. Tsui and Ng (2000) highlighted students' preference for receiving teachers' feedback. To avoid these limitations, Wiggins (2012) emphasized that feedback should be goal-referenced, tangible, transparent, actionable, user-friendly, timely, ongoing, and consistent. According to Nicol et al. (2014), feedback is effective when it is descriptive, objective, and when students use it to improve.

This action research was conducted in a private university in Guayaquil, Ecuador, during an eighteen-week semester-long course. Sixty students participated in the research, all of whom were enrolled in an academic writing course. A prerequisite for enrollment was that students needed to have at least a B1 level of proficiency. The main objectives of this research were to determine the impact of peer feedback on students' writing production and to describe students' perspectives on the application of this strategy.

RESEARCH METHODOLOGY

Burns (2009) described action research as a tool available for teachers to improve their professional practices by finding answers to their questions. According to Johnson (2012), action research includes the following steps:

- 1 Identification of the problem and focus: The problem was that students at a higher institution needed to improve their academic writing skills.
- 2 Clarify theories: A revision of previous studies related to peer feedback was conducted.
- 3 Determine the research questions: The researcher posed these questions: To what extent does peer feedback affect students' academic writing? What do students think of the application of peer feedback in their writing practices?
- 4 Collect and organize data: Data was collected through pre- and post-test as well as from a questionnaire.
- 5 Analyze and present data: Descriptive and inferential statistics were used to analyze the results of the preand post-test. Answers to the questionnaire were organized into categories for analysis.
- 6 Take informed action: The information from the previous studies was used to develop a teaching plan which took place during one semester. The plan included training students to use the rubric to provide feedback. Five different practices were planned during the semester.
- 7 Evaluate the results: The results are presented in the following section. They are also discussed, and conclusions are stated.

Description of Participants

The sample consisted of 60 participants (26 males and 34 females) whose ages ranged from 18 to 28. They all come from Hispanic backgrounds and most of them (n = 57) where of Ecuadorian nationality. They studied at a private university in Guayaquil, Ecuador. According to international certifications, they had B1 - B2 level of English, which allowed them to take this course in the career's curriculum to improve their university writing. Thus, the exclusion factor was that all participants were enrolled in this institutionalized paid course and had to prove this level before participating.

Measures

Pretest and Posttest

Both tests had the same format and type of knowledge, which were used to determine an increase in English writing proficiency in higher education. Pretests and posttests were submitted by each student participant via an online platform. They included two sections: first, students had to improve four paragraphs, which had specific errors concerning each of the criteria featured in the rubric.

For the first paragraph, students had to analyze its problems with structure; for the second paragraph, problems concerning fluency; for the third paragraph, analyze what was wrong with accuracy; in the fourth paragraph, students had to look for problems related to all three criteria.

The second section required writing a piece (700 - 1000 words) about a specific question. For the pretest, the question was: "What socio environmental topic is relevant nowadays and why?" Whereas for the posttest, the question was: "How can young entrepreneurs contribute to building a better socio-environmental reality nowadays?" Participants had to include at least two cited sources to objectively support their answers and had two hours to finish.

The rubric that was used to grade the pre- and post-test included the following components: structure, fluency, and accuracy. Within the EFL context, structure refers to a sentence that can stand on its own and follows this sequence: Subject-Verb-Object. Harris (1976) asserted that this order provides meaning as it is conceived in the Anglo-Saxon tradition. He added the order is concise and straightforward.

Regarding fluency, this term is usually intertwined with punctuation and linkers. These two features of language draw from Vygotsky's Sociocultural Theory to better understand how humans connect ideas and relate to each other without much confusion or lack of continuity (Melatiadou, 2021). Lastly, the component of accuracy refers to the appropriate use of the language system. This includes the use of grammar and vocabulary (Melatiadou, 2021).

To raise the validity of the rubric, it was sent for review to three experts in the field. There were no major observations. Thus, the researchers proceeded to implement it.

Questionnaire

The questionnaire was sent to seven participants chosen randomly and helped compile qualitative data to answer and discuss students' opinion on the application of peer feedback to improve their writing skills. There were four open-ended questions related to the advantages and disadvantages of using peer feedback. Google forms were used to create the questionnaire.

Teacher's Field Notes

The teacher took notes during the intervention: prior to providing feedback and during the feedback sessions. Observations focused on difficulties and how they were overcome. This data was used to complement both research questions.

RESULTS

This research study intends to answer two questions. For the first question (to what extent does peer feedback affect students' academic writing?), the pre- and post-test results were uploaded to SPSS to run statistics. Descriptive statistics are shown in Table 1. Results indicate that there was an improvement in all indicators (minimum, maximum, and mean). The standard deviation was lower in the post-test, suggesting that students' scores were more consistent and closer to the mean.

	Minimum	Maximum	Mean	Standard Deviation
Pretest	5.00	18.00	13.17	2.96
Posttest	8.00	19.00	14.18	2.14

Table 1. Pre and posttest descriptive statistics.

To run inferential statistics, the first step was to determine if the data was normally or non-normally distributed. A Kolmogorov-Smirnov test indicated that the data was non-normally distributed (Degrees of freedom: 60; p < .000). Therefore, a non-parametric test was run and the results indicated that the application of peer feedback has an impact on students' writing (p < .005). To determine the magnitude of the impact, the information (sample size, mean, and standard deviation of the pre- and post-test) was uploaded to an online calculator. Cohen's d = .39 shows a low improvement, according to the scale provided by Plonsky and Oswald (2014). These descriptive and inferential statistics suggest that the use of peer feedback has a positive impact on students' writing.

To answer the second question (What do students think of the application of peer feedback in their writing practices?), a questionnaire was sent to seven randomly chosen students. Their answers were grouped according to their responses. Three categories emerged: advantages, disadvantages, and the role of the peer in this task. Five students favored its use while two did not. Among the advantages, participants indicated it helped them with fluency (use of better connectors, deletion of unnecessary words), accuracy (word choice, better ideas), structure (highlighting grammar errors), awareness of mistakes, and expanding their knowledge in a collaborative way. Other benefits stated by Student 3 and Student 5 were "having an external opinion is better for objective improvement" (Student 3); and "provided more time for English interaction" (Student 5).

On the other hand, disadvantages were described as: peers did not check the work but praised it without providing constructive feedback, the different contents in writing sometimes cannot be peer assessed, feedback is not received on time, and it can be incomplete, inaccurate, or not reliable. This can be interpreted as students not knowing how to provide feedback, possibly because they did not feel confident, were not acquainted with the topic, or did not take it seriously.

Regarding the role of the peer, comments were classified into two categories: attitude and knowledge. In terms of attitude, students mentioned that peers must be responsible and committed to the task. In terms of knowledge, they added that peers can be mistaken because they are at the same level; therefore, the person who should provide feedback is the teacher.

Findings from the Teacher's Field Notes

Implementing this pedagogical innovation had several difficulties that demanded extra work in planning and motivation sessions from the teacher. The first difficulty was having students from different writing levels and backgrounds (students come from different areas of study: business, engineering, law, education, and architecture, to mention a few). Even though the sixty students were able to read, listen, and speak proficiently at a B1 - B2 level of English, the same was not true for their writing skill. Therefore, it was challenging to prepare all students for the peer feedback sessions throughout the sixteen-week course. The instructor had to dedicate a lot of the initial hours of the semester to getting students accustomed to the items included in the rubric and the writing criteria.

Another difficulty was students' attitude towards providing peer feedback. It was challenging to ignite the same motivation in all of them when it came to improving their academic writing at the university level, as those from the fields of business, engineering, and architecture were not as enthusiastic about peer reviewing the university writing of others. Additionally, many experienced apprehension or outright apathy when it came to completing the feedback sessions with their assigned peers. For this reason, the instructor had to create many collaborative tasks prior to the sessions so that students could become more confident in discussing the writing criteria and getting to know each other.

This intervention was conducted during confinement due to Covid-19, and the biggest challenge was supervising the pre- and post-test performance. Even though students were given strict dates and times to complete these, it was extremely challenging to determine if they had done the tests (pre- and post-test) by themselves. This was the case with some students who confessed to texting other more well-trained students during these tests. Given the strict online modality of the semester, students were sometimes able to text or call each other during these tests, which may have affected the validity of the scores. To counteract the copying, both tests demanded paragraph improvement and writing samples, which are less likely to incite copying than multiple-choice or short-answers questions.

DISCUSSION

Findings in this study have shown consistency with the concepts exposed by other authors (e.g. (Albán Defilippi et al., 2020; Moreira Olives, 2019; Vire & Santillán, 2021)). The quantitative results have demonstrated a positive effect on students' improvement of their writing skills after the intervention implemented throughout the semester (Cohen's d=0.39). In the case of this action research, the use of peer feedback with a rubric helped participants gain a better understanding of the structure, fluency, and accuracy of their written ideas, as highlighted by Moneypenny et al. (2018). Ferris and Hedgcock (2014) as well as Lundstrom and Baker (2009), agreed that students examine their own writing when they are asked to read other's work.

This improvement may only be viable if feedback is provided according to Wiggins (2012) recommendations: goal-referenced, tangible and transparent, actionable, user-friendly, timely, ongoing, and aligned with tasks set up by the course. In this case, the rubric served as a goal-referenced, tangible, and transparent instrument. It was actionable, timely, consistent, and ongoing because there were five practices, and students had to use the feedback to improve their next assignment. The researcher considers that due to this practice, students raised their awareness of mistakes. This constant practice also made it user-friendly.

Regarding the characteristics of the feedback, students contributed some insights worth mentioning. According to Wiggins (2012), feedback must be goal-referenced. In this aspect, students indicated that their peer's comments were limited to praising their work, suggesting they were not confident in the topic of the writing. Students reported that feedback was not delivered on time and, because they received primarily praising comments, they considered the feedback unreliable. Despite the teacher dedicating significant time to training students in the use of the rubric and the writing criteria, it seems they needed more practice understanding the elements of the rubric. This could also be due to the diversity of students in the class, as they come from different majors.

Findings from the questionnaire suggest that peer feedback has both advantages and disadvantages. According to Liu and Edwards (2002), the practice has to be consistent, serious, and students should be knowledgeable about the topic. Students' perspectives aligned with the authors, as they noted that their peer's attitudes which were not serious, responsible, or committed to the task, thus their feedback did not help much. This is consistent with Ferris and Hedgcock (2014), who concluded that initially, students may not be ready to provide feedback. This issue may also be due to students' lack of writing practices (Shokrpour & Fallahzadeh, 2007), which in turn may lead to inaccurate feedback, as noted by Nicol et al. (2014), leading students to prefer feedback from the teacher (Tsui & Ng., 2000).

In contrast to the collaborative advantages highlighted by Kim (2010) and Yu and Lee (2016), results from this study indicate this was not the case for the participants. The researcher-teacher had to motivate students to interact. In the end, students recognized the benefits of the intervention in terms of interaction and having an external opinion. According to Brown (2000), the attributes of collaboration that work in the real world should be replicated in academic environments.

Despite the limitations of the rubric in terms of feedback, its use for peer assessment reinforced the writing process. Students revised each other's work, and both the writer and the reviewer used the information to improve their drafts before the final product. According to Laskmi (2006), students produce better pieces of writing if the writing process is incorporated into the classroom. This was confirmed by the results of the posttest.

Additionally, Özdemir and Aydin (2015) highlighted that if the writing process and technology are integrated, students' motivation is increased. This was true for certain participants in this study. Thus, technology can raise students' level of motivation if the activity is appealing to their interests.

CONCLUSION

This action research inquired whether university students could improve their English writing skills through peer feedback sessions. Given the problems in structural organization, fluency, and accuracy that students endure in the EFL classroom, many do not feel motivated to write and improve their skills, even when reaching higher education levels. This study concludes that pedagogical innovations based on peer feedback can guarantee improvement in writing among students with B1 - B2 level of English, as long as instructors have time and are willing to train students in the use of the rubric and writing criteria. After the training, they should guide consistent exposure to the writing criteria.

Peer feedback helps improve university writing and should be implemented in academic programs to increase the number of proficient English writers for academic and professional participation and development in various fields of study. This was the case for the sixty participants, who were able to provide assistance for better understanding and reinforcement of writing skills. Whether some students considered peer feedback pointless or useful for improving their writing throughout this university writing course, the results prove that the pedagogical innovation proposed by the instructor helped students become more aware of their writing problems, leading them to write better in a higher education context.

Teachers should consider students' voice. This means their opinion should be taken into account to make adjustment in planning. Participants in this study come from several schools and programs, with different majors, and demonstrated attitudes common to their field of study.

Another interesting finding is the use of the rubric as an instrument to provide feedback. From the students' point of view, it did not work as expected. However, the use of the rubric reinforced the writing process.

All in all, the real emphasis should always be on how well an instructor can guide students towards providing feedback confidently. Motivation and confidence arise when students are gradually trained on the intricacies of a written text, as well as the improvements it can receive through adequate and enriching collaborative writing processes, including peer feedback.

Future Research Directions

If this action research is to be replicated, it is recommended to first divide the participants into a control and an experimental group. Although this separation was not made possible due to strict institutional orders, it would be interesting to compare results between participants who do not undergo the five peer feedback sessions and those who do. Moreover, it is recommended for students to take an assessment test prior to entering the study, rather than just participanting because it is required for the curriculum. This could help to maintain a higher level of enthusiasm and commitment among peers.

It is also recommended to install better monitoring programs for the pretest and the posttest. To avoid undermining the validity of the results, these tests could be conducted inside a physical classroom or through software program that does not permit communication between devices at home. Perhaps the innovation could be better implemented once pandemic conditions have subsided and students can engage in feedback and writing within a regular classroom. Nevertheless, it is recommended to explore digital means to research the impact of peer feedback on improving writing.

Further directions could include correlating students' scores and their major. This can provide more relevant information for other types of studies. Similarly, other researchers can adapt the writing instructions according to the genres needed in specific disciplines. Lastly, a similar intervention could make use of checklists, which may be easier to handle for students to handle.

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Escrita do manuscrito	X	X
Metodologia	X	X
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