Indonesian Journal of English Language Teaching and Applied Linguistics

Vol. 6(2), 2022
www.ijeltal.org
e-ISSN: 2527-8746; p-ISSN: 2527-6492

Students' Perceptions Towards Technology-supported Collaborative Peer Feedback

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ARTICLE INFO

Keywords:
Cloud-based technology, digital writing, e-feedback, Google Docs, online peer feedback

DOI:
http://dx.doi.org/10.21093/ijeltal.v6i2.978

ABSTRACT

The enhancement of English writing skills is essential for academic success, and as one form of alternative assessment, peer feedback implementations are utilized to enrich writing instruction process. The advent of Web 2.0 tools has helped writing practitioners utilize various Cloud-based technologies including Google Docs to encourage learners collaborate and exchange comments on their written products. Responding to the frequent calls to conduct further investigations utilizing diverse e-platforms to find out the most effective ones, thereby helping informed practitioner decisions, the current study examined the opinions of preparatory students enrolled in an English Language and Literature Department towards peer collaboration through Google Docs. Overall, computer-supported collaborative writing process created a sense of community and was found welcoming both for feedback provider and receivers who had diverse gains. Yet, the implementation is not without its limitations with personal and technical dimensions. The findings suggest that for a rewarding online peer editing experience, practitioners need to justify their attempts to extend writing instruction and assessment outside school borders, negotiate the e-platform with learners, and train them about how to comment on written products objectively.

How to cite:
Sağlamel, H. & Çetinkaya, Ş. E. (2022). Students' Perceptions Towards Technology-supported Collaborative Peer Feedback. *Indonesian Journal of English Language Teaching and Applied Linguistics, 6*(2), 189-206

1. Introduction

The assessment of writing is a great concern. As a support for contributing to writing instruction and assessment, starting in the 1990s, peer feedback has been introduced as one form of instructional methods and alternative formative type of assessment, i.e., "one arm of a plethora of tasks and procedures within the domain of learner-centered and collaborative education" (Brown, 2004, p. 270). Concepts such as peer response, peer review, peer assessment, peer editing, peer interaction, and peer collaboration have been synonymously used to refer to interactive activities between peers to comment on each other's written products to improve its text quality (Yu & Lee, 2016). This form of alternative assessment is

in line with social, interactive, and collaborative language teaching view. Specifically, Socio-cultural Theory of Vygotsky (1978), i.e., Zone of Proximal Development, argues that social interaction is vital for human cognitive development covering learning and making meaning supports peer review as one form of collaborative learning activity to enhance writing instruction. Among other forms of alternative assessment, peer feedback is regarded moderately practical and valid and highly authentic. It is valued as it enhances higher-order thinking skills such as reflection and problem solution (Kaya & Yaprak, 2020). However, the conventional view of language assessment questions its reliability and objectivity in that language learners still trying to master the language are regarded incapable of evaluate others' work accurately and subjectivity could hamper the process (Brown, 2004).

The existing literature documents related studies in which such interactions have been found to encourage students to revise each other's written products to increase their text quality, help them identify their writing strengths and weaknesses, decrease their writing anxiety, take the responsibility of their writing decisions and learning, i.e., autonomy, and develop a sense of audience (see, for instance, Min, 2006; Sivaci, 2020; Tsui & Ng, 2000; Yu & Lee, 2016), to list but a few. There are basically two modes of peer written commentary: face-to-face and e-feedback. While in traditional peer feedback learners come together and give oral or written feedback to each other's written products, peer e-feedback requires the use of various computer technologies that allow both parties remote to each other to exchange ideas to increase the text quality. Particularly Web 2.0 technologies that include blogs, wikis, e-mails, chat, podcasts as well as Google Docs help collaboration among peers. They transfer the passive role of learner, i.e., customer, into an active one, i.e., social producer (Ciftci & Kocoglu, 2012). These synchronous and asynchronous technologies help not only learners who exchange comments but also teachers who manage to observe the interaction between peers and intervene, if needed (Chen, 2016). To illustrate, social media-supported peer feedback activities such as Facebook could encourage language learners to revise various dimensions of their texts, create socially supportive environment where peers help each other, and go on reviewing each other's products going beyond the classroom, thereby creating learning and development opportunities outside the school (Saeed et al., 2018). Similarly, blog-based computer-mediated communication (CMC) could enhance student engagement and motivation and could be used as a collaborative language learning activity (Xu & Yu, 2018). There are studies that show that peer e-comments can affect writing quality, contribute to both short and long-term memory and develop positive attitudes towards peer feedback more than the traditional mode of exchanging comments (see, for instance, Arslan & Şahin-Kızıl, 2010; Ebadi & Rahimi, 2017).

Research Questions

Since this study examines the opinions of students towards peer collaboration through feedback practices, the following research questions guided this study.

1. What are ELL students' perceptions towards technology-supported peer feedback?

1a. What do ELL students think about technology-supported peer feedback?

1b. What are the advantages of technology-supported peer feedback according to ELL learners?

1c. What challenges do ELL students face when providing technology-supported peer feedback?

1d. What could be done to make technology-supported peer feedback more effective?

1.1 Google Docs as a Cloud-based Peer Editing Platform

One popular cloud-based technology used for collaborative editing is Google Docs. Google Docs is "a free, web-based word processor, spreadsheet, form, and data storage service that allows users to collaborate online by creating and editing shared documents" (Chu & Kennedy, 2011, p. 588). Google introduced it as a free browser in 2009 (Ishtaiwa & Aburezeq, 2015). This free Internet-based version of Microsoft Word only needs service registration via a Gmail account. Besides, its simple writing interface is another reason for its popularity (Zheng et al., 2015).

Moreover, it supports process-based writing perspective that requires writing, editing, revising, and sharing (Zheng et al., 2015). Past research has shown that cloud-based classroom environments created with Google Docs could facilitate collaborative writing, enhance higher-order thinking skills such as evaluation and commenting, turn writing into a meaningful and authentic attempt, and save time and energy, enhance student-student interaction, develop positive student attitudes towards collaborative writing tasks, offer a more effective and efficient writing instructional procedure than the face to face ones, offer a user-friendly interface that makes things simpler, encourage learners to take peer editing more seriously, and motivate them to go on collaborating, to list but a few (Chu & Kennedy, 2011; Goold et al., 2010; Ebadi & Rahimi, 2017; Ishtaiwa & Aburezeq, 2015; Yang, 2010; Zheng et al., 2015).

Despite its numerous benefits and much potential to increase the efficiency of writing instruction, Google Docs is criticized for several shortcomings. Summarising the existing technical reports on such technologies, Ishtaiwa and Aburezeq (2015) present four shortcomings of Google Doc: limited formatting ability, text-based nature, and possibility of update conflicts that may emerge in simultaneous editing as well as off-line services. When documents are converted into Google Docs, they might lose some of their formatted elements. The simultaneous editing may also result in update conflicts due to speed and accessibility. Also, this solely text-based tool only allows collaboration on graphics or some other type of content. Lastly, it does not offer off-line support, which makes Internet connection a requirement (the then shortcoming). Apart from these technical issues, some other human-related factors may limit students' use of Google Doc effectively, covering lack of collaborative skills, lack of technological knowledge and skills, negative attitudes towards the system and preference for other applications that offer faster and more accessible interaction, and requirement of extra work and time (Ishtaiwa & Aburezeq, 2015).

1.2 The Study Context: A Few Glimpses of Earlier Turkish Investigations

Peer e-feedback has not gone unnoticed among Turkish scholars who have utilized various technologies to help learners exchange comments on each other's not only written products but also instructional materials projects (see, for instance, Demirbilek, 2015 for the use of wiki and Facebook). To illustrate, in their study to compare the effects of peer feedback through blogs and traditional one, Ciftci and Kocoglu (2012) found that blogs helped their participants learn whenever and wherever they wanted, encouraged them to feel like a writer and develop

the sense of audience, enriched their products, helped them create better revised drafts, created an authentic environment where they interacted, and offered them a real aim to produce written texts. With a similar orientation, Arslan (2014) investigated the effects of blogs and portfolios on writing skill of prospective teachers and found that both helped participants spend time on language and practice it outside school borders and create products with better organization, content, and language. Similar results were reached in another earlier study on blog use by Arslan and Şahin-Kızıl (2010). In a recent study investigating a blog-enhanced environment, Gurer (2020) found that the participants learned better, developed a sense of community, i.e., saw themselves as members of a community, and closely engaged with the writing class. Although technology-enhanced peer reviewing has been utilized in Turkish education context, most attempts are limited to the use of blogs, wikis, or social media.

1.3 The Need for Further Investigations

In EFL teaching contexts, lecturers are still regarded as the sole and most trusted source of feedback, which is passively accepted by learners (Saeed et al., 2018; Zhao, 2010). Learners have negative attitudes towards peer feedback as they tend not to trust their peers with almost the same proficiency level with them, which does not allow teachers to utilize interaction to improve writing, save their time, and create a fun environment. Thus, the current case study is a response to the calls to compare traditional and technology-supported feedback implementations or those utilizing diverse technologies to find out the most effective ones (see, for example, Chen, 2016) and integrate Google Docs into writing instruction (see, for instance, Ebadi & Rahimi, 2017). Among Web 2.0 technologies, we chose Google Docs which is a popular Cloud-based online text editing tool as it is multidimensional in that it covers the functions of both blog and wiki, and it covers not only synchronous but also asynchronous communication, which wikis and e-mails lack. It allows users to create, share, and edit their written documents simultaneously and automatically save all changes. Besides, it is user-friendly, and learners can exchange comments whenever and wherever they want (Chu & Kennedy, 2011; Yang, 2010). Also, the simple interface of Google Docs, lack of any charge for its service, and its popularity all encouraged us to use it in the present study. In addition to these technical advantages over other Web 2.0 tools, the documented empirical studies with quite positive outcomes encouraged us to utilize it as our platform for e-feedback. An in-depth analysis of the existing literature shows that the studies with the focus of technology-supported peer feedback mostly utilize wikis and blog to enhance student writing, and those using Google Docs are few (Chu & Kennedy, 2011). Therefore, such further studies could offer new insights to enhance particularly non-native English learners' writing skills efficiently (Ebadi & Rahimi, 2017). Above all, due to common school closures at global level for the COVID-19 pandemic, Turkey as well as other educational contexts around the world has been using Emergency Remote Teaching to continue education activities and compensate education losses. As we could not meet our students in face-to-face writing classes, observe them, and offer both academic and personal guidance, we were anxious because home comfort could increase their tendency to procrastinate, and they may lose motivation and engagement due to the emergency situation and the demanding nature of writing. Thus, we wanted to utilize Google Docs-supported peer e-feedback, for earlier research shows how it helps students become more organized and how they like it (see, for example, Zheng et al., 2015). The current case study investigating the attitudes and

perceptions of English majors towards using Google Doc as a popular online peer editing tool, thus, attempts to fill that research gap and provides new insights for both practitioners and researchers.

2. Research Methodology

This is a qualitative study which relies on data elicited from the participants through open-ended questions on a self-devised questionnaire. As Fraenkel et al. (2011, p. 426) pointed out, qualitative studies place "a greater emphasis on holistic description—that is, on describing in detail all of what goes on in a particular activity or situation rather than on comparing the effects of a particular treatment." In this way, the students' experiment with feedback provision and feedback were explored. It is thought that qualitative data from the participants could provide a better grasp of the reality in an unobtrusive manner. Such an attempt was deemed appropriate to provide a better representation of the context in which feedback is provided. A great deal of research into L2 feedback is criticized for lacking ecological validity (Liu & Brown, 2015), namely feedback practices devoid of context. However, developing an understanding of the context might give a nuanced view of what is going on in the feedback process. It is also thought that capturing the "peers' feedback" could give a different dimension to written feedback practices of which teachers are associated to be the more effective agents (Yu & Lee, 2016).

2.1 Setting and Participants

The study was conducted at a state university in north-eastern Turkey. A total of 20 participants whose ages ranged from 18 to 20 with a mean of 19 filled in the open-ended questionnaire developed by the researchers. Out of 20 participants, 13 were female and 7 were male. The study was carried out in 2020-2021 fall semester. Due to the COVID-19 situation, education was offered online, and access to the participants in the data collection period was achieved through Google Forms, a tool widely used to gather data. The participants had neither experience of online peer editing through using Google Docs nor training in it. Yet, they were familiar with how to edit others' works and comment on them regarding content, organisation, language accuracy, lexicon and mechanics as the instructors regularly offer teacher feedback to their written products. To elicit the participants' responses, an online questionnaire was prepared by the researchers, and the survey link was shared through a google classroom account. The items in the questionnaire were prepared in English, and the participants were asked to respond to the questionnaire in the language they desired, namely Turkish or English. The open-ended questionnaire included 11 items which attempted to capture their reactions to the technology-enhanced peer feedback. Considering the ethical issues, the participants were ensured that participation was on a voluntary basis, and their answers were to be kept anonymous used only for research purposes (Creswell & Creswell, 2018).

This study focuses on the effectiveness of peer collaboration in written feedback provision. The participants were English-majoring students who were enrolled in a preparatory program of an English language and literature department at a state university in Turkey. Both researchers are recruited at the same department for almost 10 years. The university admits students from diverse settings. There are students from different cities, and there are international students from different linguistic backgrounds as well. Unless exempted for special circumstances such as a schooling experience in a native speaking country or proof a

passing grade in widely recognized tests, all students are required to sit for a proficiency exam to have a passing grade, which is 70. Those who fail to meet 70 or above are required to study in the prep program which runs for 32 weeks. Productive skills such as speaking and writing are significant challenges for the students as these components are not included in high-stakes tests. Upon successful completion of the preparatory program, the students take linguistics, literature, translation, education, culture-related courses which require them to demonstrate a proper degree of writing proficiency. Therefore, the participants were required to develop their writing proficiency to catch up with the departmental needs.

A convenient sampling procedure was employed to gather data. This sampling procedure was opted as the participants were available (Fraenkel et al., 2011). Such availability was considered a reasonable choice amidst the emergency remote teaching practices because it was thought that access to learners through other data gathering procedures would be more difficult. A total of 56 participants were admitted in the program, and 53 among them submitted a portfolio which consists of 7 tasks. These tasks include a "getting to know you" activity, a description paragraph, a process paragraph, an opinion paragraph, a narrative paragraph, a cause-effect paragraph, and a creative paragraph in which the participants were less bounded. The participants were told that they were required to share their work with 3 people through Google Docs. After sharing the documents, they received feedback from their peers and the teacher, one of the researchers in this study. Upon these feedbacks, the students revised their paragraphs. Figure 1 illustrates how students collaborated to share their feedback. To achieve anonymity, the feedback providers' names were changed.

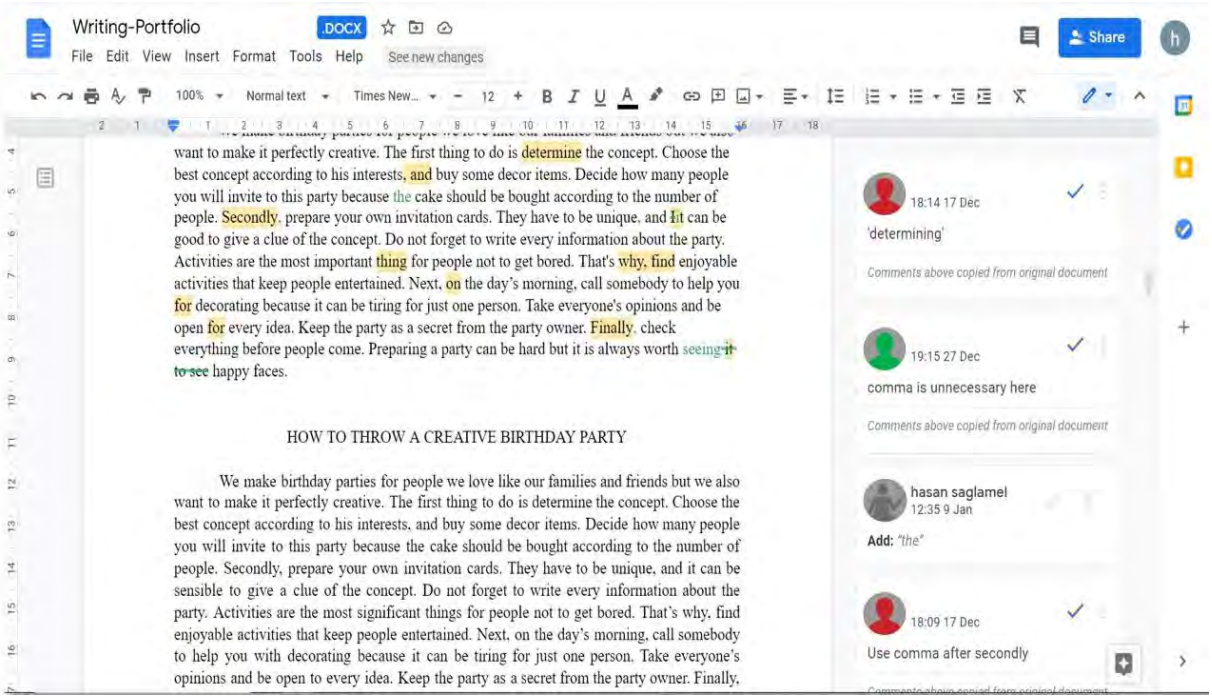
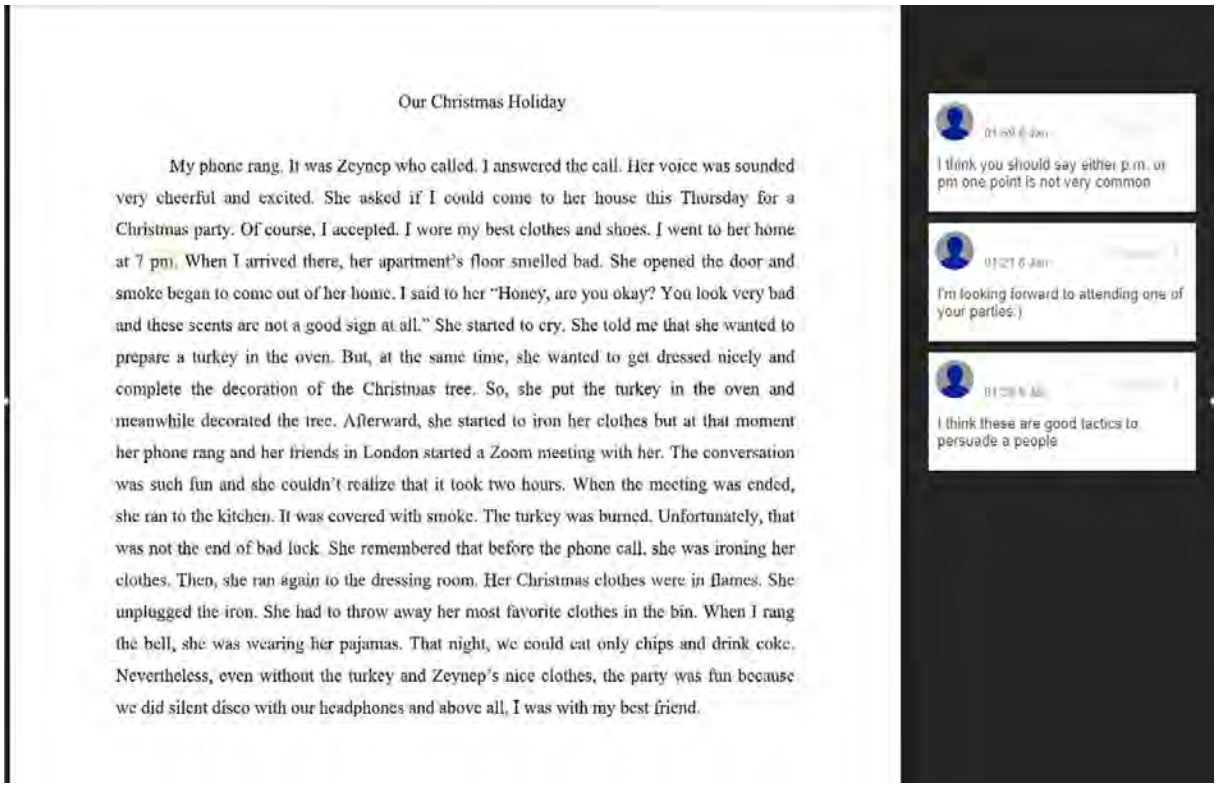


Figure 1: A Snapshot of Participants' Peer Editing

After the exchange of feedbacks for seven tasks, the participants were asked to fill in an open-ended questionnaire which elicited their reactions and feelings towards technology-enhanced peer feedback. Google Docs was used to share collaborative feedback. Google Docs is part of Google drive, and it offers opportunities to co-construct documents in common word processing formats. The participants were asked to make their final product "editable", and they were able to track the changes or suggestions. Moreover, people could share these documents with others, and the content shared could be shaped through collaborative simultaneous editing (Hedin, 2012; Li et al., 2017). Even though a special training was not given, the participants were informed about the ways to address their peers' texts. Such training was useful for novice feedback providers as many of them looked for ways how to respond (Rollinson, 2005). The participants were told that they could express their reaction towards the paragraph and find the mistakes they found in the texts. Therefore, they were encouraged to attend to both the form and content at the same time. Figure 2 shows an incident in which one participant attends to another one's content:



Our Christmas Holiday

My phone rang. It was Zeynep who called. I answered the call. Her voice was sounded very cheerful and excited. She asked if I could come to her house this Thursday for a Christmas party. Of course, I accepted. I wore my best clothes and shoes. I went to her home at 7 pm. When I arrived there, her apartment's floor smelled bad. She opened the door and smoke began to come out of her home. I said to her "Honey, are you okay? You look very bad and these scents are not a good sign at all." She started to cry. She told me that she wanted to prepare a turkey in the oven. But, at the same time, she wanted to get dressed nicely and complete the decoration of the Christmas tree. So, she put the turkey in the oven and meanwhile decorated the tree. Afterward, she started to iron her clothes but at that moment her phone rang and her friends in London started a Zoom meeting with her. The conversation was such fun and she couldn't realize that it took two hours. When the meeting was ended, she ran to the kitchen. It was covered with smoke. The turkey was burned. Unfortunately, that was not the end of bad luck. She remembered that before the phone call, she was ironing her clothes. Then, she ran again to the dressing room. Her Christmas clothes were in flames. She unplugged the iron. She had to throw away her most favorite clothes in the bin. When I rang the bell, she was wearing her pajamas. That night, we could eat only chips and drink coke. Nevertheless, even without the turkey and Zeynep's nice clothes, the party was fun because we did silent disco with our headphones and above all, I was with my best friend.

I think you should say either p.m. or pm one point is not very common

I'm looking forward to attending one of your parties :)

I think these are good tactics to persuade a people

Figure 2: A snapshot Participants' Content-Focused Feedback

The feedback was not a one-way street. The feedback receivers had a chance to respond to the feedback providers. In figure 3, we see how the participants communicate:

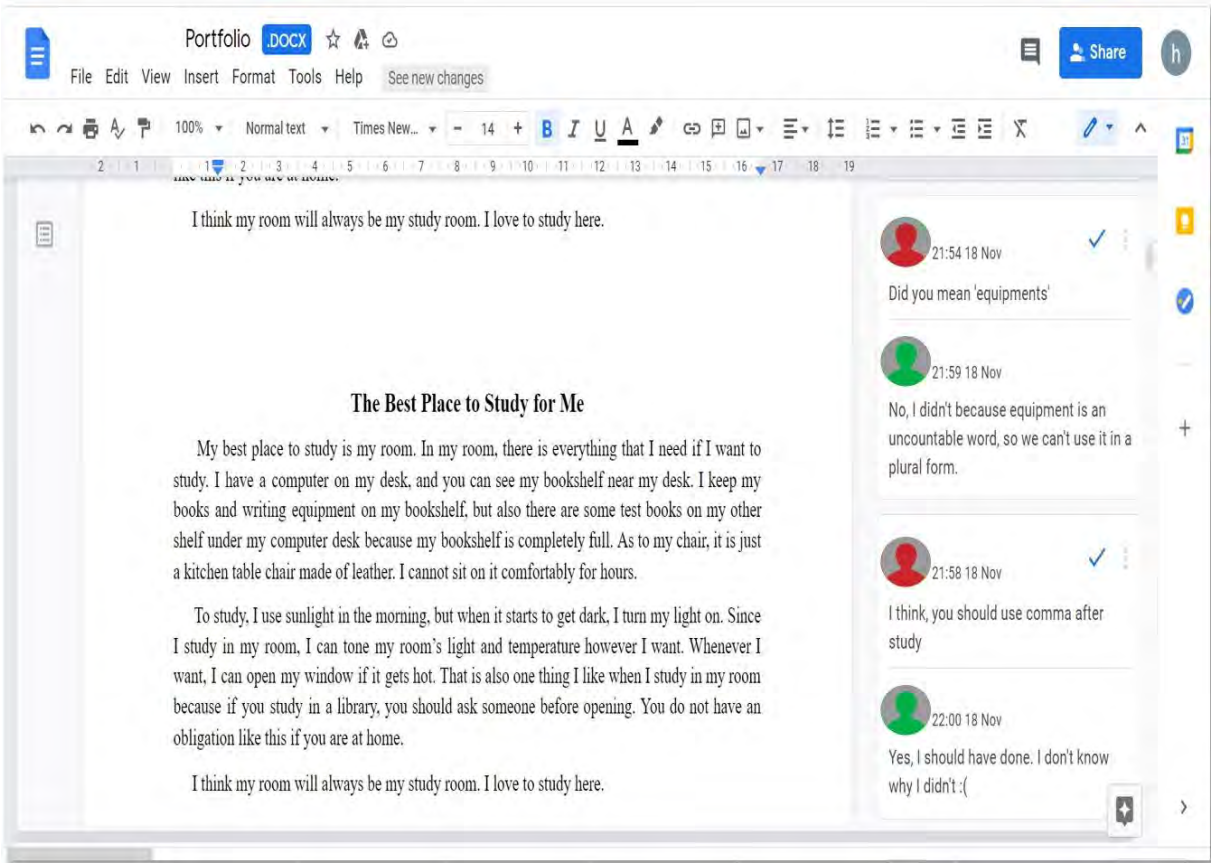


Figure 3: A Snapshot of How the Participants Communicate

A total of 20 participants filled in the open-ended questionnaire. The questionnaire was developed by the researchers to understand the participants' feelings, thoughts and reactions towards peer feedback offered through Google Docs.

2.2 Data Gathering and Analysis

Content analysis was used to analyse the data gathered through Google Forms. Content analysis is "a technique that enables researchers to study human behavior in an indirect way, through an analysis of their communications" (Fraenkel et al., 2011, p. 478). Bogdan and Biklen (1992) reported that content analysis helps with "working with data, organizing them, breaking them into manageable units, synthesizing them, searching for patterns, discovering what is important and what is to be learnt and deciding what you will tell others" (p. 153). During the analysis, first some demographic questions (gender, age) were used to elicit the participants' background. Then the participants were asked to elaborate on their experiment with peer feedback offered through Google Docs. The answers were first read to understand the participants' responses in general. Then the preliminary categories and the draft codes were formed. After the formulation of the draft codes, the actual codes were created by the researchers. To achieve inter-coder reliability, the codes developed by the researchers were compared, and a proper degree of consensus was established (Stock, 1994).

3. Findings

An analysis of the participants' responses revealed the following categories to consider: perceived improvement in L2 writing, techniques that contributed to L2 writing improvement, challenges on the way to peer feedback, and Google Docs as a peer feedback tool.

3.1 Perceived Improvement in L2 Writing

Based on the researchers' observation as well as the participants' reported accounts, at the very beginning, most of the participants' English writing background was not satisfactory. This is shown in the following words of a participant: "*Yes … I always write something in Turkish … These paragraphs were new for me. This was the first time I wrote somethings in English* (S9, female)." However, at the end of the semester when the participants were asked to comment their improvement, they unanimously agreed that they have made significant improvements. The improvements in grammar and vocabulary development, organization, coherence, and punctuation were highlighted. The improvement for S2 was manifested though his "more professional" output: "*I think I have improved compared to the first paragraphs I wrote. Because when I wrote considering the new techniques I learned, I saw that a more professional job came out* (S2, male)". For S3, the improvement was felt more in vocabulary: "*Yes, I can see. For example, I am not doing the mistakes I did before. I think, I improved my vocabulary* (S3, female)." For S7, however, the highlighted form of improvement had to do with grammar and rules: "*Yes, at first, I was writing really bad. I mean I did not know the rules; I did not know anything. But now I know a bit and even that effects a lot* (S7, male)." The increased awareness of accuracy in computer-assisted collaborative learning contexts is an advantage which was cited in previous studies (see McDonough et al., 2018). McDonough and García (2015)'s study demonstrated that collaborative texts showed greater accuracy compared to individual ones.

Apart from vocabulary and grammar, organization was a highlighted gain: "*Of course I saw. At first, I used to use "i" not "I" if I give a simple example. I learned punctuation. My topic sentence was not in my paragraph but now I try to make beautiful as much as I can (S10, female).*" All these improvements seem to have contributed to the participants' writing self-efficacy. S14 points to his developing fluency and increased awareness of the writing conventions: "*Yes, I think there is an improvement in my writing. Now I think that my paragraphs are more complete and that I can reflect my thoughts I want to convey better, and at the same time, I think my sentences have progressed formally (S14, female)*."

For some, however, further improvement is expected. "*Compared to the first paragraphs I wrote; I think my last paragraphs are a bit more creative. I know I'm improving, but there isn't a huge difference. I believe the more I write, the more I will improve*" said S1 (female) to point to the increasing creativity of his writing. Another participant (S19, male) told that "*Practise makes perfect. As I write, I feel that I have improved myself in writing and now I am more meticulous about word choice. I follow the rules of writing as best I can, but I still have a long way to go*." When the participants were talking about the things that contributed to their improvement, they noted the significant role of practice, their increased awareness and feedback. To address the effectiveness of feedback, S6 (female) stated: "*Yes, of course. I can see. Especially after the feedbacks I realized that I could make sentences with less mistakes*." Considering the techniques, it appears that the participants benefitted from the process-

based and genre-based writing conventions. For example, the use of brainstorming and drafting are two processes that are included in the process approach while the ready-made chunks and the audience which aided S2 could be associated with the genre approach. "*After knowing which sentence serves what in a paragraph, putting them in proper order, that is, the technique of drawing the general line of the paragraph*." said S2 (male), pinpointing the effectiveness of the genre-based information.

S8 highlighted the effectiveness of a reader-focused view of writing in her following words:

> *While writing my articles, I also took care to use some techniques to influence the reader. I paid particular attention to the order of the conjunctions. A continuous use of conjunctions with the same features would make the paragraph monotonous, and it would make it tight while reading, so I made sure to use different types of conjunctions one after the other. I paid attention to word repetition. If the same words are used repeatedly, the taste of the piece is often missed. It would make more sense to use different words that mean the same thing to keep the reader focused on the piece. There are other techniques I use, but these are just two of what I can tell you. (S8, male)*

3.2 Techniques That Contribute to L2 Writing Improvement

L2 writing development does not take place in a vacuum. Students go though some stages, and they employ some techniques that prove to be useful for developing their writing. When mentioning the techniques, the participants drew attention to hyperbole, genre approach, paraphrasing, revision and consideration of early errors, the use of linking words, dictionary use, drafting and brainstorming as they proved to be instrumental for learners. Peer feedback through Google Docs was a rewarding experience for all the participants. They benefitted from the process notedly to get familiar with the grammar mistakes. S1 said: "*Definitely yes. When people show me my mistakes, it is much less likely for me to repeat the same mistake. That's why I think feedbacks are very efficient* (S1, female)." In similar vein, S9 (female) said that: "*Sometimes even a simple mistake can go unnoticed, so I pay attention to my friends' warnings. It is true that I do it sometimes even if they say wrong. If that happens, I'll warn them. So, feedback seems to me like a mutual exchange of information, so feedback is a helpful thing to me*." What makes the participants' experience rewarding is their experiment with global and local revisions which help them become deeply involved in the writing process.

Feedback offered by the participants was not limited to mechanical issues though. Some provided comments that could guide their friends. It should be kept in mind that peer feedback offered was not reduced to grammar. The integration of peers' comments is evident in the following words: *It helped me to get feedback from my friends, to learn their opinions and to give a general comment about what I wrote. Sometimes we argue over certain parts and try to come to a common conclusion. This way, I and my friends can improve ourselves* (S19, male). However, not all the participants received feedback in the same amount. "*Yes, it was, but I did not get a lot of feedbacks because I am not talking with a lot of people* (S7, male). Some participants were not adequately familiar with other ones due to COVID-19 situation. Therefore, not all participants felt comfortable to ask their peers for feedback provision. As a result, even though the process itself was found to be rewarding for all, not all seem to have benefitted from the experience to the same degree.

With reference to the feelings of feedback receivers, it could be stated that the process was welcoming for them. Since the feedback providers were selected by the participants themselves, they developed rapport with each other, thereby contributing to the formation of a writing community where the texts are constructed and co-constructed. In this community, the writers defined their writing proficiency in relation to others, and such a relative view of progression was an opportunity for many to see how they are/were doing. In daily practices, teacher feedback is usually addressed to the individual student, and students might at times be blinded by their own performance.

S14's expression of "difference" serves as a realistic call for her to invest more on certain areas because she sees that there are people who are doing it better then she does: "*I feel good because thanks to the feedback she gives me, we can understand the level difference between us as I edit my article, which gives us an idea about which subject we need to improve ourselves" (S14, female)*. S9's sentiments echo similarly. When mentioning the effectiveness of the process, she told: "*Keep this secret between us… I'm feeling bad because They are very good (It is good thing. I'm not jealous) I feel inadequate (S9, female)*." The feedback experience surfaces people's strengths and weaknesses and gives them a real challenge for investment. Greater awareness of strengths and weaknesses through collaborative peer writing is in line with previous studies (e.g., Bhowmik et al., 2018). However, for feedback receivers to benefit from the process adequately, it should be comprehensive enough to attract the receivers. Feedback reduced to teachers' do's and don'ts may not be as affective for learners. Moreover, the comparison of learners with their own peers also triggers them to develop a sweet competition. When the inner drive is amiss in second language acquisition contexts, such kind of competitive contexts might energize the learners.

In addition, feedback provision is a gain not only on the part of the receivers, but also on the part of the providers. The experience itself is a socializing activity for the learners and the experience facilitates the writing development of both parties. As S7 puts it: *It feels good because I am learning with them. I do not feel alone and feedbacks make me a better writer* (male). For S1, the exchange of feedback results in significant improvements: *It's very enjoyable to read the paragraphs of my friends. We share our thoughts with each other. We see different opinions, different examples on the same issues and I think we are informed at the same time. I'm warning them about simple grammatical mistakes, and it's nice to feel I'm sharing my knowledge with them. Knowledge increases as it is shared (S1, female).* Moreover, the feedback provision also assigns them a new role: "*I feel like a teacher and frankly I like it because I like to teach English* (S8, male)."

3.3 Challenges Related to Peer Feedback

Even though the feedback provision is enlightening and informative for many learners, some do not feel adequate to respond to their friends' texts. The meticulous concern arises from the need to be considerate of the other people's developmental zone. What is a frivolous issue for one could be a big deal for others. To voice this sentiment S19 told: *I am as careful as I can in giving feedback and check it over and over before making a correction. I am aware that we are all still in the learning phase, so I do not want to make a wrong correction and I do not want to discourage my friends (male)."* For S13, the feedback provision is anxiety-breeding: "*Sometimes I was nervous and worried about whether I would say something wrong (female)"*. Apart from these, greater collaboration means greater workload for the teachers. In some

situations, it might not be possible for teachers to keep track of students' progress. For instance, in a study by Alsubaie and Ashuraidah (2017), it was found that 23% of the participants did not have favourable dispositions towards the use of Google Docs. Especially in group works, it was difficult for teachers to monitor students' progress and mark their texts.

3.4 Google Docs as a Peer feedback tool

The exchange of ideas through Google Docs was found beneficial for all participants. The exchange of feedback in fact multiplied the exchange of ideas. As a result, the participants were exposed to many manifestations of suggestions for improvement. Their collaboration means greater social interaction which results in greater learning. Even if some were passive throughout the process, they had a change to observe what was going around them. This situation was made visible by a participant, who said: *Yes. When I confused, I tried to glance my friends' ones. And I can see my shortcomings* (S6, female). The opportunity to benefit from the peers' experience served as a self-efficacy booster for the participants. According to Pajares (2003), learning from the vicarious experiences of other learners helps develop L2 writing self-efficacy.

Moreover, the autocorrect opportunity was helpful for the participants to develop a proper degree of confidence: "*Yes, of course. Sometimes, I forget to add like a/an, the etc. and Google Docs do it for me (S18, female)"*. Another participant pointed out that she understood not only the mistakes but also the reasons for them thanks to Google Docs: *I think it was very useful, because thanks to her I understood the reason for many of my mistakes (S13, female)*. Even though the credit for improved editing skills should go to Google Docs for many learners, one underlined the decision-making skills of users of such software:

> *In fact, this has little to do with Google Docs or any other writing program. It could have been another program. What matters is what we do and can do there. I think most of us have done well with what we do; As for what we can do, what we can do in Google Documents is very convenient and accessible, although other software can also do this (S8, male).*

The people who make use of such software deserve much of the credit, but it should be highlighted that the participants' texts were given feedback in a friendly and accessible manner. In some situations, the software used cannot help us detect the mistakes as clearly as Google Docs does. In this manner, the software is a student-friendly tool especially to detect some mistakes with grammar. Moreover, the feedback providers also used some praises related to content when they were giving feedback. Such treatment of both content and form could have affected the learners, as the experience was more than "noticing" the mistakes.

Even though a great many were happy with the current format, some participants came up with several suggestions to promote the efficiency of technology-enhanced feedback. Accordingly, further practice, integration of multimodal aspects, addition of more editors, setting deadlines, and Google-based training could mean more efficiency of the feedback practices. Overall, it appears from the participants' responses that they had favourable dispositions towards the integration of peer feedback through Google Docs, which is in line with the documented literature (e.g., Hojeij & Hurley, 2017; Lin & Yang, 2013; Schunn et al.,

2016; Zheng et al., 2015). Their receptivity means their potential of embracing peer feedback as a credible source. This might be related to the handling of form as well as content at the same time. Another reason for their positive attitudes and enthusiasm about providing their comment on others' digital writing might be the Turkish cultural structure in that Turkey is a collectivist society, i.e., a high-context culture where socially and emotionally aware individuals like collaborating and feel comfortable when they come together and exchange ideas. Still another reason for their favourable dispositions could be the effects of the COVID-19, in that they might feel the need to join a community to "socialise", where it was not possible due to school closures.

4. Discussion

It is evident that the advent of new technologies such as Google Docs, wikis, blogs etc. has contributed to transformation of writing as a social activity (Storch, 2019). As a result, writing is no longer a solitary activity, but rather it is something co-constructed by learners. Therefore, designating learners as e-partners could create the dialogic learning environment which is desirable for L2 writing contexts. Teacher-based feedback is the predominant form in many EFL and ESL settings. Therefore, finding viable option(s) through which other forms of feedback, such as self-feedback or peer feedback, is integrated could be enriching for writing development. Peer feedback was not found as welcoming as teacher feedback in several studies (see, for instance, Ruegg, 2018; Yang et al., 2006). Therefore, there is a pressing need to find ways to promote the effectiveness of peer feedback practices. Based on the findings, collaborative peer feedback could be instrumental in several ways.

First, peer feedback is aligned with several theories of learning, including collaborative learning, the interactionist theory, sociocultural theory, and activity theory (Yu & Lee, 2016). Peer feedback offered through Google Docs is a socially constructed activity, and in this sense, it is congruent with the collaborative learning theory. Through the exchanges of feedbacks, the students can notice their weaknesses and strengths in their interlanguage system and make changes accordingly. Moreover, we see that the participants' cognitive development is social in nature. Based on the peers' suggestions, the participants were able to improve their actual development. Also, mediation throughout the feedback practices is achieved through physical or symbolic tools.

It appears that the way feedback is constructed through Google Docs is student-friendly. Most of the participants extended their appreciation and recommended the practice to continue. This might be attributed to the classroom dynamics or the choice of the peers. When the participants were told to exchange their texts, they were allowed to choose the feedback providers. The feedback providers, to this end, acted as co-constructers of the text. In anonymously delivered feedback provision, however, the peers as editors may not claim such ownership. Therefore, this could be an explanation why peer feedback is not unanimously welcomed as learners usually find their feedbacks "not adequately reliable".

It should be noted that the peers in this study were conveniently-selected participants, and as the learners chose their friends as feedback providers, they were not critical of their friends as feedback providers. Part of the reason for this could be associated with their wiggle room in their choice of peers. As they were free to choose any peers as their feedback providers, they were not bounded by the "accuracy" of their feedback providers. In L2 writing contexts

where anonymous reviewers act as "peers", the outcomes could be different. Therefore, it might be a good idea to examine how peer feedback in different contexts works.

Dissemination of the collaboration practices and L2 writers' agency through technological affordances does not seem to be difficult. However, researchers and practitioners of L2 writing are challenged by the advancements in L2 writing. With new technologies such as Google Docs increasing, it might be difficult to catch up with the advancements, thereby failing to appeal to the context-specific needs (Li et al., 2017). Besides, integrating technology driven by pedagogy is a significant call by educators. In McCarthy's (2010, p. 732) words "It is important that new technologies are integrated into learning and teaching only when driven by pedagogy, rather than technology for technology's sake." Therefore, institutional steps need to be taken to empower teachers and researchers to make the most of such technologies, and making well-informed decisions in the trajectory of pedagogy seems evident.

The collaboration with the peers also brings a close cooperation to the teacher. Collaborating with the peers could help language learners promote their motivation, boost their confidence, and develop interpersonal skills. Besides, seeing what others are doing and how they are doing it could trigger learners to incorporate new ideas and develop new writing patterns. That is, they will feel more encouraged to take risks and experiment with their writing.

What counts at the end of the day is "feedbacks", not specifically teacher or peer feedback. Getting rid of such dichotomy could also mean a balanced view of the feedback providers, and different feedback providers could also mean different audience. In many language learning settings, the audience for the students is the teachers. Peer editors could also mean new readership, and this could promote authenticity of the texts created by the students.

Such technology-supported peer feedback platforms could help writing practitioners achieve a sense of community in both face-to-face and remote classes where peers are motivated to interact to teach and learn from each other. This is a must for particularly remote teaching to reduce the sense of isolation as there is limited or no social interaction, which could lead to frustration, thereby decreasing positive outcomes (McInnerney & Roberts, 2004). In online courses, this sense does not occur naturally; therefore, practitioners should take purposeful steps (Trespalacios & Uribe-Florez, 2020) such as the use of Google Docs as a support to the delivery of writing instruction through learning management systems during emergency remote teaching.

For a rewarding online peer editing experience through Google Docs, practitioners could negotiate with students to decide the most appropriate e-platform to exchange ideas. They also need to explain the justification of choosing e-platforms to extend writing instruction and assessment outside school borders clearly at the beginning to motivate learners intrinsically and to ensure a healthy and fruitful interaction. They should also know what practitioners expect them to do in the process. Besides, earlier studies (see, for example, Kaya & Yaprak, 2020) have shown that when students are trained about how to give effective peer feedback, their self-confidence is boosted, and they tend to provide more useful and high-quality peer feedback. Thus, offering students training about how to edit others' written products objectively by paying attention to mechanical issues, structure and organisation,

critical comments on content, and suggestions to improve them could be a wise attempt to get desired outcomes in this interactional process.

As is true of every single research attempt, this study is not without limitations. First, the sample size is a limitation to making generalizable predictions. Future studies with more participants could produce more generalizable findings. Besides, cross-cultural case studies or further investigations with a larger pool of participants with different proficiency levels and majors could be interesting. Moreover, in some tasks some of the participants failed to provide and receive feedback from their peers. Experimental studies which control outside influences could be a promising avenue for research. Further longitudinal research on collaborative writing could be instrumental to understand the complexities regarding the writing development and the way collaboration is implemented. It appears that the uses of such platforms might add much to the communicative repertoire of the students, triggering them to meaning-making and enhancing their engagement. Also, further studies could focus on the possible role of Google Docs for the enhancement of learner autonomy and higher-order thinking skills such as critical thinking and problem solving, as two important rarely highlighted gains of the process other than the oft-documented language-related ones. Lastly, comparative studies investigating the role of peer e-feedback through this Cloud-based environment for the creation of a sense of community particularly in emergency remote teaching could be of use, taking social isolation into consideration.

5. Conclusion

It is evident from the participants' reports that they had significant improvements in writing quality particularly in grammar and vocabulary development, organization, coherence, and punctuation. Such improvements are aligned with the course objectives which outline priorities related to the areas mentioned. Apart from the reported improvements, the participants drew attention to the techniques that contribute to L2 writing improvement, reporting the effectiveness of hyperbole, genre approach, paraphrasing, revision and consideration of early errors, the use of linking words, dictionary use, drafting and brainstorming. For some, however, further improvement is expected to help them improve creativity and become engaged in more practice. Based on such accounts, it could be inferred that tasks or genres that will help students tap their creativity will add more meaning to enhancement of writing skills.

From feedback providers' perspectives, it could be argued that feedback provision meant a strong escalation of commitment, and the providers perceived a positive learning experience. However, even though feedback provision was an informative experience for many learners, some do not feel armed with a capacity to respond to their friends' texts. That being the case, feedback provision turns out to be an anxiety-breeding experience for some learners. It is evident from such sentiments that some learners need to be empowered to provide feedback. Provision of further feedback training to increase students' awareness will prove to be instrumental for those learners. Moreover, if learners have misconceptions or deeply entrenched beliefs regarding feedback provision, then those learners might be offered extra training in which they are introduced to a great deal of opportunities regarding peer responses. Exposure to a great deal of suggestions for improvement will help develop a greater awareness of response provision strategies as well as eradicate misconceptions of preconceived ideas.

The use of cloud-based technologies is a tremendous opportunity to socialize writing. Students' collaboration or feedback exchanges result in a mediated experience, and such facilitating role of technologies enhances the effectiveness of peer feedback. Peer feedback activities, at the end of the day, are opportunities for conversation and meaning exchange, which, in turn, will trigger students' academic literacy development. The ability to write appropriately is a great necessity in many contexts, and peer feedback opportunities will contribute much to shift roles as writers and readers, nurturing empathy and connection.

Above all, compensating education losses including writing instruction via creating a community of practice through emergency remote education during global crises in unprecedented times including the COVID-19 pandemic is a yielding attempt. Such technology-integrated socialising attempts could also ironically serve well for students and teachers who feel isolated in the 21st century, thereby meeting their social and emotional developmental needs. Those who could feel isolated to technology addiction could find chance to "socialise" thanks to such cloud-based technologies while practising writing, one of the most challenging and demanding language skills for foreign language learners.

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