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EFL LEARNERS' EXPERIENCES OF PEER FEEDBACK IN PARAGRAPH WRITING THROUGH CLOUD COLLABORATION

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ABSTRACT

Online peer feedback has become common in university writing classrooms due to the availability of computer technology. This study aimed to explore EFL learners' experiences engaged in online peer feedback on writing through cloud collaboration. This study was an extension activity of the paragraph writing class for two weeks, in which ten participants voluntarily took part in it and were monitored by two instructors. The peer feedback exchanges, text revisions, and comments from interviews were qualitatively analyzed, and the emerging patterns of interaction were quantified. The results showed that the involvement of the participants in online peer feedback via cloud collaboration facility enabled students to detect and comprehend numerous writing problems, as well as revise and improve their work; both revision and non-revision-oriented feedbacks are part of the overall online textual interaction and communication that can be used to help them develop their second language; and the students also expressed different perspectives about whether they appreciated or disliked their online peer feedback experience. This study also provided some implications and recommendations for further research.

Key Words: Cloud collaboration: EFL; online peer feedback

ABSTRAK

Umpan balik teman sebaya secara online telah menjadi hal yang umum di ruang kelas menulis di universitas sebagai hasil dari ketersediaan teknologi komputer. Penelitian ini bertujuan untuk mengeksplorasi pengalaman pelajar EFL yang terlibat dalam umpan balik teman sebaya secara online dalam menulis melalui kolaborasi cloud. Penelitian ini merupakan kegiatan perpanjangan dari kelas menulis paragraf selama dua minggu yang diikuti oleh sepuluh peserta secara sukarela, dan dipantau oleh dua orang instruktur. Pertukaran umpan balik dari teman sebaya, revisi teks, dan komentar dari wawancara dianalisis secara kualitatif dan pola interaksi yang muncul dikuantifikasi. Hasil penelitian menunjukkan bahwa keterlibatan para peserta dalam umpan balik teman sebaya secara online melalui fasilitas kolaborasi cloud memungkinkan siswa untuk mendeteksi dan memahami berbagai masalah dalam menulis, serta merevisi dan memperbaiki pekerjaan mereka; umpan balik yang berorientasi pada revisi dan non-revisi merupakan bagian dari keseluruhan interaksi dan komunikasi tekstual online yang dapat digunakan untuk membantu mereka mengembangkan bahasa kedua mereka; serta perspektif individu yang berbeda mengenai apakah mereka menyukai atau tidak menyukai pengalaman umpan balik teman sebaya secara online. Penelitian ini juga memberikan beberapa implikasi dan rekomendasi untuk penelitian lebih lanjut.

Kata Kunci: Kolaborasi cloud: EFL; umpan balik rekan sebaya secara daring

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INTRODUCTION

Collaboration skills refer to a person's capability to work together to solve problems and answer questions, work effectively in teams to achieve common goals, and assume shared responsibility for completing tasks (Ravitz et al., 2012). Collaboration in the process is learning form cooperation to help and complement each other to perform specific tasks to obtain predetermined goal (Kemdikbud, 2017). It is also a learning approach that involves groups working together to solve problems, complete tasks, or produce certain products (Srinivas, 2011). Collaborative activities in writing task, or collaborative writing, helps students to think critically and themselves express more openly, resulting in improved writing abilities (Luna & Ortiz, 2013), and it also allows students to learn through the language they use in the discussion process, which improves their writing skills (Zhang, 2018). These are also in line with Vygotsky's Zone of Proximal Development, which holds knowledge is formed due to social interaction (Saville-Troike, 2012).

Peer feedback is a part of the process-oriented approach in writing. This approach is based on the notion of Zone Proximal Development (ZPD), often known as the zone of optimal

development. With the process of interaction/collaboration with other individuals, learners can attain optimum gains (Vygotsky, 1978). Writing tasks that follow a processoriented approach can help students become more self-reliant (Alwasilah, 2006). The approach offers activities that good writers do: planning, revising, rearranging and deleting, multi-drafting, and producing the final piece. It is an answer to the weaknesses in the product approach, i.e., excessive emphasis on linguistic knowledge (Stanley, 1993). However, this strategy is unconcerned with grammar and sentence structure, pays little attention to the final result, and requires much time (Onozawa, 2010), and it provides inadequate input linguistic to knowledge (Badger & White, 2000). As a response to the drawbacks, extended activity to overcome the weaknesses students show in writing can be carried out (Hyland, 2003).

Peer feedback in collaborative writing provides comments on others' works in pairs or small groups (Hansen & Liu, 2005). Comments toward each other's writing in face-to-face classroom settings can provide EFL students with a favorable circumstance to exercise their English Language skills in a meaningful context. Furthermore, it is also helpful for EFL students to develop collaboration skills, awareness as

readers, and writing quality (Hanjani & Li, 2014). However, in the face-to-face setting, students are limited to their cultural background, which influences their participation in discussion, and to their level of English proficiency, which affects their capability to give and understand comments collaboration (Liu & Hansen, 2002). Furthermore, there are a number of issues that arise from the classroom feedback, setting peer including students' infrequent use of peer feedback, learners' predisposition to address local issues in texts, such as vocabulary, grammar and repeatedly as compared to global issues in writing, such as content and organization (Cho & Schunn, 2007) and feeling of discomfort and anxiety (Wu et al., 2015).

The development of internet technology played an important role in overcoming the cultural background and language proficiency that inhibit participation in learning (Wu et al., 2015; Saeed Ghazali, 2017: & Kurniawan et al., 2020; Pitaloka et al., 2020). In general, some studies found **EFL** students had positive perceptions toward internet technology use in their learning process (Abdullah et al., 2015; Sepahpanah et al., 2015; Loeneto & Kurniawan, 2021; Irana et al., 2021). Internet technology has allowed the facilitation of online peer feedback activities, either synchronously asynchronously, through various media such as Facebook, online discussion forums, and cloud collaboration tools (wiki, google doc, etc.) (Bradley, 2014; Ho, 2015; Inderawati et al., 2018; Kurniawan et al., 2020). Furthermore, Guardado and Shi (2007) concluded that Online peer feedback offers benefits in terms of interactive textual interchange and increased student engagement. They added that the influence on revision differs depending on the contextual situation.

The outbreak of COVID-19, in which Almost half a billion students worldwide were compelled to abandon their face-to-face learning activities (UNESCO, 2020), has led to a dominant mode of e-learning that combines online synchronous and asynchronous learning. Although currently we have transformed into Post Covid-19 and adapted to the near-normal situation, the e-learning mode is not totally abandoned but has been reconstructed as a complement to classroom teaching and learning.

In the Indonesian context, as a result of the pandemic, the government has committed to improving online learning and pushing universities to develop a robust eLearning platform. Other than its compatibility with the current situations, online peer feedback

in collaborative writing also offers group cohesion as a result of beyond-classroom writing activity (Razak & Saeed, 2014) or in other words, online activities can provide off-class voluntary learning activity which maximizes the effects of peer feedback in collaborative writing (Chen, 2016).

The current study focuses on EFL undergraduate learners' involvement in asynchronous peer feedback in Google Docs due to the problems and issues from face-to-face arise feedback in writing classes and the strength of online peer feedback. The research questions are formulated as follows: (1) What problems in writing does the feedback from EFL students address in evaluating their works through Google Docs?; (2) How did the participants perceive their experiences in responding to the peer feedback through Google Docs addressed to them?.

METHOD

The current study collected and analyzed data using a qualitative research approach. The rationale for this approach is that studies exploring the dynamics of group learning in general and learners' peer feedback in particular have demonstrated the benefits of qualitative methodologies (Hmelo-Silver et al., 2013). The study

took a case study technique, which focuses on explaining and understanding a phenomenon (Creswell, 2012). This method may also be used to look at EFL Students' Peer Feedback Experiences in Paragraph Writing via Cloud Collaboration.

Context and Participant

The present study concentrated on cloud technology-based peer feedback as a structured extension activity of the paragraph writing courses in department. The participants were ten preservice English teachers in their first year of study. Ten participants were selected out of twenty-four students in the paragraph writing course based on their agreement and availability to be included in the study. Since they were in the initial stage of English teacher training, their writing ability was very much the reflection of the training they had prior to their admission to the department. Their English learning was of Indonesian background in which they were taught writing using a conventional technique that emphasizes individual writing rather than peer or group writing and is almost entirely dominated by the teacher. They reported that they struggle with producing a good piece of writing. Thev assured that were their participation was optional and would not impact their overall performance in the paragraph writing class.

Table 1. Participants' profile

	Initial	Gender	Age
	YIB	M	19
	ZZ	F	19
-	AC	F	19
	FD	F	18
-	AT	F	19
	NF	F	19
	PS	F	19
	С	M	18
	Н	M	18
:	SJ	F	19

Google Docs was selected as the for tool asynchronous cloudcollaboration peer feedback. The rationales for choosing it were that it offers potential in its interactive interface (Zhou et al., 2012; Yim et al., 2014; Alharbi, 2019; Orehovački, 2011; 2016; Yang, Jeong, 2010), higher possibility of participation (Yim et al., 2014; Brodahl et al., 2011; Bradley & Thouësny, 2017; Rowe et al., 2013; Erturk, 2016), and positive impact on revision (Kurniawan & Suganda, 2020; Wang, 2017; Jeong, 2016; Bradley & Thouësny, 2017).

Writing and Cloud-Collaboration Process

All the activities were conducted online. The live online discussions and writing material presentations were held through the university's learning management system (LMS), while the asynchronous activities (peer feedback instructors' and feedback) were administered through Google Docs. The writing process was adapted from a process-oriented approach to writing (Emig, 1971; Hyland, 2003; Oshima & Hogue, 2007), with the following steps: (1) topic selection, (2) prewriting, (3) draft writing, (4) revising, (5) editing, and (6) publication. Two types of paragraphs were assigned to the students: process and comparatives. The students were prepared for writing and peer feedback using cloud collaboration by discussing their needs and putting them into groups before the writing and peer feedback began. The process of writing one paragraph took one week. It took two weeks to finish the two paragraphs. Two instructors were involved in the activity to ensure all the process of writing and feedback ran smoothly. instructors created folders on "Google Drive" labeled with each participant's name before the activity began. All of the actions related to the writing process were saved in those folders.

On the first day of the week, in the synchronous online sessions, the instructors presented material on how to write a good paragraph and also on how to give feedback on others' paragraphs. After that, the participants were asked to write a paragraph of 200 - 300 words. Then, they discussed having the paragraph's general topic to write. Later, it proceeded into a small group discussion of three or four. The small group discussion resulted in a more specific topic to write about. They then wrote the outline of paragraphs and picked up the draft and the paragraph. The drafts were written on Google Docs and accessible to the other participants and the instructors. Over the next two days, the small members reviewed group the paragraph written by others in their group and provided feedback through Google Docs. This peer feedback process was continued for the next two days by the whole participants giving participants' other feedback paragraphs. After this process, the participant revised and edited their paragraph by considering the input from their peers. The instructors also gave feedback on the sixth day, and the participants made revisions and edits accordingly before the week's final day. On days 2 - 5, the instructors gave no feedback but facilitated the process and only intervened when necessary.

Although the instructors provided their feedback, they were not collected as data since this study focuses on peer feedback.

Data collection and analysis

The data collected were from participants' communication or the peer feedback on Google Docs on days 2 - 5 from the two weeks of process writing. The feedback was stored automatically by Google Docs. However, participants can edit and delete their feedback after posting, the instructors save the feedback in Microsoft Word file format at the end of each day. In addition, after the writing process, the participants were interviewed, which lasted an average of 30 minutes and was conducted in English. All the interviews recorded were and transcribed. This current study data analysis focused on peer feedback and interviews.

We used a five-stage procedure (organizing, coding, clustering, quantification, interpreting, and reporting) (Gibbs, 2002) to analyze the qualitative data from peer feedback and interviews. The data coding from the feedback was based on the coding scheme from a similar previous study (Liu & Sadler, 2003). However, the researcher created the definitions based on the instructions given to learners on

the first day of the week, as seen in Table 3. The focus area of the feedback was used as the basis for the coding, whether it was global (content, organization, and argumentative genre and purpose) or local (language, including grammar and meaning, and mechanics).

The feedback was further coded into whether or not they were revision-oriented or non-revision-oriented (Liu & Sadler, 2003). Revision-oriented focused on the issue in the paragraph, leading to a revision, while the other did not. Moreover, the non-revision-oriented feedback was coded using a scheme from an online peer learning study (Janssen et al., 2007): Social support and care, Maintaining good relations, Shared understanding, and Social ties.

Table 3. Feedback coding sample

Codes and their definition Content, any feedback on the paragraph's clarity, sufficiency, or applicability of ideas and supporting details to the topic.

Organization, any feedback focusing on theme coherence, logical flow or sequence of ideas, or sentence coherence.

Feedback sample YIB: Can you describe it more?

PS: This sentence is quite long (over 30 words). Consider breaking it up into two or three shorter sentences. "The first reason is that this restaurant is right on the side of the road. It is near the bus stop,

Purpose, any feedback in the body of the paragraph focusing on unambiguous thesis statements. clarifying authors' perspectives, expressing assertions counterarguments Language, any feedback emphasizing the grammar (form, tenses, etc.) or meaning of linguistic elements

Schools, and campus, making it easy to find.
FD: which one makes them comfortable?

Mechanics, any feedback focusing on punctuation, spelling, or capitalization.

AT: Consider using a past participle here "eaten."

SJ: Capital letter,, but if you want to make it one sentence, youmusto put a comma instead ofa period.

The clustering stage involved categorizing the feedback into two groups: revision-oriented and nonrevision-oriented. The coding classification steps were reiterated repeatedly as the discovered categories or patterns were refined until the two coders agreed 91% of the time. The next involved step quantifying the qualitative data of revision-oriented comments, text revisions, and nonrevision-oriented comments in general. The final step concentrated interpreting and reporting the findings following the study objectives, data analysis, and clustering.

The interview was conducted based on the adapted interview guide with the following questions: (1) Did you find the activity beneficial? (2) Do you like to provide and receive online peer feedback? Why do you think that is? (3) How did you provide online peer feedback? (4) How did you use online peer feedback to help you revise? (5) Is face-to-face peer feedback better than online peer feedback? (6) What difficulties did you encounter during online peer feedback? Please compare your experiences with peer feedback received face to face (Guardado & Shi, 2007). Finally, interviewees' remarks were utilized to analyze students' perceptions of using or ignoring online peer feedback in their revisions.

The research design has been clearly described and is appropriate for the study. The purpose, content, and usage of data collection tools have also been explained and justified.

FINDINGS AND DISCUSSION

Findings

RQ1: What problems in writing does the feedback from EFL students address in evaluating their works through Google Docs?

This study attempted to explore the peer feedback the participants offered through Google Docs. Table 4 shows that the generated feedbacks were 337 in numbers. They were categorized into revision oriented (196 feedbacks, 58.16%) and non-revision oriented (141 feedbacks, 41.84%)

Table 4. Peer Feedback Numbers

Group	Number feedbacks	of	Percentage		
(1) Revisi	ion 196		58.16 %		
oriented					
Global	5		1.48 %		
Local	191		56.68		
			%		
(2) Non-revisi	ion 141	141			
Oriented					
Total	337		100 %		

With sample feedback retrieved from peer feedback sessions, both types and sub-types of peer feedback exchanges are addressed in the following sections.

Revision-oriented feedbacks

The findings indicated that the participants exchanged revisionoriented peer feedback (58.16%). They targeted various problems in paragraph writing at the global and local levels. Only a few global-level feedbacks (5 content, times. 1.48%) addressed organization, and purpose. In following excerpts, the comment posted by H communicated the content, particularly on the details that need to be elaborated. Regarding the organization, feedback PS from

pointing a lack of flow of ideas and suggested breaking longer sentences into multiple sentences. The participant also addressed a problem related to purpose, as pointed out by FD that the writer needed to clarify his perspective.

On the other hand, the participants more dominantly offered local-level feedback (191 times, 56.68%), which addressed issues of language and mechanics. For instance, the following excerpts, they targeted the on the correct use problems pronouns, part of speech, verb tenses, other inflections, and word choices, as pointed out by ZZ, SJ, FJ, and PS. Other instances showed that they also tried to deal with punctuation and capitalization problems, as AT and NF mentioned. The higher number of local level feedbacks might indicate that they have better understanding language structure and mechanics, and they need more training in global level feedback such as content organization and purpose. Despite the low number few of global level feedbacks, participants had exhibited their understanding of identifying the problem on content, organization, and purpose, which is far more difficult to distinguish.

Global Level

H: Can you describe the details more?

PS: This sentence is quite long (over 30 words). Consider breaking it up into two or three shorter sentences.

FD: which one makes them comfortable?

Local Level

ZZ: I think "they" is not consistent. Because to change "kedai mahasiswa" to be pronoun, we actually use "it" By the way, thank you so much for this advice.

SJ: I don't know it is accurate or not, but from the application itself suggests that it should be "other" If you use the word 'shock' in this sentence, it will become noun, thus i use 'shocked' because it works as a verb

FJ: Use verb 1 in a negative sentence of past simple

PS: The verb should probably end in "s" because the subject is singular, "Someone comes"

AT: There should be a space after the punctuation mark or after comma.

NF: This is the pronoun 'I'. I think it is spelled with a capital letter.

The Asynchronous interaction on Google Docs had become a medium of training in pinpointing local and global problems in writing and how to let the writer know of the problem before offering a correction, as AT, C, and PS indicated.

AT: *Is this the personal pronoun* "I"? *It is spelled uppercase.*

C: I mean, you write a word with repetitions three times in that sentence. Try changing it.

PS: This is somewhat unusual. I suggest you to changes "about" with "regarding or as for": Regarding the price

Non-Revision-oriented feedbacks

The participants also posted feedback that did not address any problems in the paragraph (141 times, 41.84%). Most of the non-revision-oriented feedback was offered to build a friendly situation. These comments included thanking, explaining a situation, praising, admitting errors or misunderstandings, and asking for clarification.

Thanking

Okay thank you

Thank you, Fer. I almost forgot about that.

Okay, thanks for reminding

Okay, thank you for your advice

You're welcome.

Explaining a situation

Oh sorry, it happened because my keyboard changed my typing automatically.

Whoa, I see. I did not care about the font before Hehe. Thanks for remind me.

Praising

Good job.

It is a very good paragraph.

Admitting errors or misunderstanding

Ouhh I see, I know it. I was confused how to change it. Do you have any idea how can I change it?

Okey I'll change it

Ouh okey, I'll fix the sentence

Thanks for correcting, I just realized it Oh my god, I'm wrong. Thank you for the advice

Okay, I will change it. Thank you for your advice ♥

I found myself confused when I'm writing this sentence, thanks for the suggestion

Asking for clarification

What do you mean? are you sure about this wkwk

Some of these comments, for example, were to soften the issue addressed in the writing. As pointed out by YIB and SJ in their feedback. Furthermore, the comments can also maintain social support and social ties, as indicated in the comments from AC and H.

YIB: Oh, that would be great, that's my only suggestion for you.

SJ: That's my suggestion, if you don't want it, that's Okay. I'm just worried about your sentence Fenny.

AC: Please wait for another comment Zahra. Because I will check another sentences ©

H: Okey no problem if our answer is wrong, because we still study right. Please always to remind each other.

Follow-up revision after feedback

A comparison of the first and final drafts show that all participants revised their paragraph. Of the ten students, 5 made revisions to the global issue (content, organization, and purpose),

and all revised the paragraph on the local issue (language and mechanics). From the 196 revision-oriented feedbacks, 163 (83.16%) were addressed, and 63 (16.84%). For global problems, of 5 feedbacks, all were addressed. Furthermore, for the local problems, of 191 feedbacks, 158 were addressed, and 33 were not (table 5).

Table 5. Revision based on Peer Feedback

d	Total	Feed	Feedback Addressed				Fee	Feedback not Addressed				
	Revision-		Global		Local		Global Local					
	Oriented	A	В	C	D	E	A	В	C	D	E	
	Feedback											
	(of two											
	writing											
	tasks)											
YIB	20	-	-	-	12	8	-	-	-	-	-	
ZZ	14	1	-	-	10	3	-	-	-	-	-	
AC	15	-	-	-	9	3	-	-	-	-	3	
FD	21	1	-	-	8	5	-	-	-	5	2	
AT	25	-	1	-	10	5	-	-	-	6	3	
NF	25	-	1	-	10	10	-	-	-	4	-	
PS	23	-	-	-	13	10	-	-	-	-	-	
C	16	-	-	-	10	3	-	-	-	-	3	
Н	20	-	-	1	9	7	-	-	-	3	-	
SJ	17	-	-	-	8	5	-	-	-	2	2	
Total	196	2	2	1	99	59	-	-	-	20	13	
%		1.02	1.02	0.51	50.51	30.10			-	10.20	6.63	
A=Content B= Organization C=Purpose D=Language E=Mechanics												

The participants posted five pieces of feedback on the global problem, and all were addressed. Global feedback usually does not provide a clear and direct part of the sentence requiring revision, so it needs more examination

of what to revise from the paragraph, for instance, in the following excerpt. FD commented on the topic sentence of AT that it is not connected to the paragraph's content. In responding to this, AT added one sentence that clearly

express the topic and made other revisions to make the meaning more readily understandable. Another example is from AC, who commented on NS to revise the title of her paragraph so that the organization of ideas would be more seamless. In responding to this, NS added a specific detail to the title corresponding to the paragraph's topic sentence.

Feedback from FD: Your topic sentence is not connected to the content.

Original text from AT: Thinking about a budget during college is hard. From the textbooks and tuition to housing, and basic things like eating, the costs add up. College students generally live on income from a part-time job, work study, or student loans. Make sure you are not spending more than you are receiving. Whether it is student loans money, a monthly allowance from your parents, or money you have saved or earn for a part-time job, DON'T overdo your spending.

Revised text from AT: Thinking about a budget during college is hard. From the textbooks, tuition to housing, and basic things like eating. College students generally live on income from a part-time job, work study, or student loans. Make sure you are not spending more than you are receiving. Whether it is student loans money, a monthly allowance from your parents, or money you have saved or earn for a part-time job, do not over-spend your

money. So, here are some additional tips for how you can save money.

Feedback from AC: from your paragraph explaining making fried rice from leftover rice, you can change the title according to the examples you wrote so that they are more suitable and easier to read.

Original text from NS: *How to Make Fried Rice*

Fried rice is a delicious food that can be easily made from leftover rice, but not everyone knows how to make it. You need ingredients like are eggs, vegetables (cabbage, peas, etc.), and also soy sauce, flavorings and of course rice. So here are some steps to make fried rice using leftover rice.

Revised text from NS: *How to Make Fried Rice with Leftover Rice*

Fried rice is a delicious food that can be easily made from leftover rice, but not everyone knows how to make it. You need ingredients like eggs, vegetables (cabbage, peas, etc.), and also soy sauce, flavorings and of course rice. So here are some steps to make fried rice using leftover rice.

Compared to the Global one, local-level feedbacks were far higher in number. From 158 addressed feedbacks, 99 were of language while the other 59 were of mechanics. The local feedbacks were more specific on what to address and usually required only addition, deletion, or alteration of

certain words or phrases. Most often, the revisions were easy to do. For instance, in their comment to AC and C, H and PS suggested the use of alternative words for a more appropriate meaning. AC and C, responded by doing exactly as in the feedbacks of H and PS. Furthermore, AC generated a revision beyond the suggestions, resulting in a better sentence. Contrary to what AC did, C did not generate his own revision.

Feedback from H: you've used this word before. it'd be better if you don't repeat. so, just use the synonym of that word like special or particular.

Original text from AC: This campus has a distinctive yellow characteristic, this can be seen from the yellow landmark located in front of the campus area that reads UNSRI, the symbol of Sriwijaya University and also the color of the student's university jacket which is also yellow.

Revised text from AC: This campus has a **special** yellow characteristic, this can be seen from the light yellow landmark located in front of the campus area that reads UNSRI with the symbol of Sriwijaya University and also the yellow color of the student's jacket.

Feedback from PS: It should be disadvantages

Original text from C: The second advantage is caused by the outdoor

situation. There is no roof but there are trees and small tents to cover some areas.

Revised text from C: The second disadvantages caused by the outdoor situation. There is no roof but there are trees and small tents to cover some areas.

Local-level problems are easier to offer since the issues in the sentence are much easier to spot and require less examination to offer feedback. For instance, the excerpts from YIB and SJ clearly showed that the sentences lack verbs, which was exactly what ZZ and H offered them. Interestingly, YIB extended to correct another identical problem to the sentence, although ZZ did not suggest it. However, this was not done by SJ. Another instance is the use of pronoun which was discussed multiple times by participants, as shown by AC in his feedbacks to NF.

Feedbacks from ZZ: Change to "depends" because it is like a habit, right?

Original text from YIB: Of course, it depended on how crowded the restaurant was. Likewise, the prices were expensive, yet I still like to eat there occasionally.

Revised text from YIB: Of course, it depends on how crowded the restaurant is. Likewise, the prices are expensive, yet I still like to eat there occasionally.

Feedback from H: *Add* "is" after it
Original text from SJ: *First, it cheap*.

Revised text from SJ: First, it is cheap.

Feedback from AC: change into "these" because it shows the plural things.

Original text from NF: The buildings that are grouped by faculties look like different cities, and also **this** "cities" have different colors, such as purple, pink, brown, green, blue, orange, etc.

Revised text from NF: The buildings that are grouped by faculties look like different cities, and also **these** "cities" have different colors, such as purple, pink, brown, green, blue, orange, etc.

For mechanics, capitalization and punctuation are the most frequently discussed issues. These two issues are actually almost identical in all languages so it is quite effortless to spot the issues hence the dominant feedback about them, as illustrated in the following excerpts.

Feedback from NF: This sentence does not start with capital letter, and that is incorrect.

Original text from AT: *there* are four points that are differences and similarities between Indonesia and China.

Revised text from AT: *There* are four points that are differences and similarities between Indonesia and China.

Feedback from SJ: There should be no space between specifically and coma.

Original text from C: This university is located in Sumatera Selatan, more specifically, in Indralaya and Palembang.

Original text from C: This university is located in Sumatera Selatan, more specifically, in Indralaya and Palembang.

The feedback that the writers thought was incorrect or unnecessary went unaddressed. They frequently responded to the feedback by commenting that the changes were not required or that what they had written had no mistake, as illustrated in the following exchanges and the corresponding sentences.

YIB: Because the subject is "It", you need to change it to "serves"

C: But I tell my experience in the past, so I used past verb.

Text: Besides, it also **served** unique drinks, for example, Green Tea Yakult, Orange Lychee Sparkle, Sunrise Italian Soda, etc.

PS: Do not use the phrase "this building", because it will confuse the readers. Use the phrase The auditorium instead.

NF: Is it confusing? I just want to use pronoun, because I had mention auditorium before.

Text: On the left side, you will see a rectorate building. It is a nice building with a unique roof that has a big hole in the

middle of the inside. Next, you can see the auditorium building in front of the rectorate building. **This building** is usually used for big campus events. Inside of it, there is a stage and audience chairs.

RQ2: How did the participants perceive their experiences in responding to the peer feedback through Google Docs addressed to them?

The research question is answered by summarizing the participants' answers to every question. In addition, extracts from the interview transcript will also be displayed to support the summary.

First, the students perceived that the activity could help them improve their writing skills. As some of them pointed out:

"Yes I did. I thought that by having peer checking helped me in knowing my writing better. ... They can help us in realizing stuff that needs to be improved in our writing."

"yes, I feel this paragraph writing class is very useful for me, because it can make me understand better how to write paragraph."

"Yes, I did. I think that activity is very useful for student especially in doing writing. ...Students knew their mistakes of grammar and also some typos they have made."

All the participants felt the online peer feedback through Google Docs was helpful. They think it helps them identify errors they made and address the problem. Furthermore, they also believe that reading others' pieces of writing has also sharpened their ability to spot errors they made in their writing, and eventually, the activity can help them improve their writing skill.

Second, most students preferred to give and receive feedback anonymously. As indicated in the following excerpt:

"I agree to give advice anonymously because I like to use a pseudonym to advise others."

"I love giving and receiving peer feedback anonymously because students are more willingness to comment on the mistakes as many as possible."

"I prefer to give and receive feedback UN-anonymous. I want my friends to know that the commenter is me because even though I give comment and suggestion, it does not mean I'm correct."

Most of the participants agreed that they prefer to give and receive feedback anonymously by using pseudonyms since it can eliminate the pressure of what others will feel concerning their feedback. However, one participant thought it was better to give and receive comments about his identity known by the other party. It would be easier, he believes, to discuss with other people with the knowledge of their identity.

Third, the participants mainly gave online feedback through Google Docs. As stated in the following:

"I gave feedback online through Google Document. So, my friend will send her paragraph writing in the form of Microsoft Word to Google Document"

"Usually, I use Ms. Word and send it through email, or I also sometimes use Google Docs."

"By using the google form, select the incorrect phrase/word/sentence, then give the correct one or give another suggestion."

In giving online feedback, the participants mainly did it through Google Docs. In addition, they also did it using Microsoft Word and email.

Fourth, most students considered the activities to help them write easier. As shown below:

"Online feedback really helped me with the revision. ...Online feedback from my lecturer and my friends helped me realizing the typos or some grammatical error."

"So, it helps me identifying the area that needs to be changed."

"Every time I get feedback, I could learn more and more. How to make the sentence properly and grammatically correct, etc."

The online feedback, they believed, helps them identify the mistakes they have made in writing easier since the system has made it possible to place the feedback exactly on the parts that need revision.

Fifth, they like to do online peer feedback better. As stated in the following transcription:

"I think online peer feedback activity is better than face-to-face because. Sometimes you cannot muster up the words you want to say in front of the people you wanted to give feedback."

"I think online is better in this case Because the feedbacks we got can be kept as a file, and we can just open it whenever we want to learn about it again."

"I think online peer-feedback activity is better because when we can highlight the certain mistakes. Meanwhile, face-to-face peer feedback is also good but it's only in short time that we remember our mistakes so that I prefer to choose Online Peer Feedback."

All participants prefer to do online peer feedback than face-to-face activity.

They believe that the anonymity offered by the online system can create a comfortable situation for communicating their feedback. Cloud computing technology has also made it possible that the feedback can directly be viewed by the writer regardless of time and place. They generally think online feedback through cloud collaboration technology more straightforward and accessible.

Sixth, the challenges they faced in doing the online peer feedback through cloud collaboration technology include difficulty in understanding others' comments, insufficient internet connection, and unsupported devices, as described below:

"The challenge that I often face in situations like this is that I quite often have difficulty understanding the meaning of the responses that other people have given to my writing."

"The challenges that I faced in online peer review are internet signal and my own confusion."

"I think the challenges I face during online peer review is how-towrite a great feedback and help friends without giving bad vibes, as in face-toface peer feedback, I felt it was the same."

"I was still new about Google Docs. I did not know how to comment from that application. I preferred to use paper back then."

Some of them feel that their unfamiliarity with cloud collaboration technology overwhelmed them at first. However, after several times of trials, it was not a problem anymore. Interestingly, when discussing the challenges of online peer feedback, some claimed that face-to-face was just the same as online learning or even slightly better.

Discussion

The interaction between the participants reciprocal was asynchronous feedback in which each received and provided feedback. The participant's interaction in online peer feedback through the cloud collaboration facility, as the finding showed, has enabled students identify and comprehend various writing problems and make revisions and refine their writing. In other words, they achieved better results with the process of interaction or collaboration (Vygotsky, 1978; Kurniawan Suganda, 2020;, Zhou et al., 2012; Yim et al., 2014, Zhu et al., 2017; Karsenti & Gauthier, 2018; Min et al., 2018; Suwantarathip & Wichadee, Without the interactions, it might be difficult for them to figure out the problems they need to solve and how to

solve them. (Chang, 2012; Bradley, 2014; (Long & Richards, 1987). The findings also indicated that participants had higher numbers of revision-oriented feedback. These higher numbers might be caused by the more time they have to reflect on giving feedback and responding to them as compared to the face-to-face peer feedback in which they are required to provide and respond to the feedback at the allocated time. This aligns with the role of asynchronous online tools, including cloud collaboration tools, in promoting reflection on problems in writing through the time distance between feedback provision reaction (Liu & Sadler, 2003). This is supported by what the participants pointed out that the activity aids them in identifying errors and resolving them and that reading other people's work has improved their capacity to notice errors in their work. This is also partially backed up by the concept that the primary mediating influences on the dimensions of collaboration were forms of communication, task representations, matches/mismatches between participants' self-perceived and other-perceived roles, and peer feedback perceptions (Cho, 2017).

The online peer feedback in writing activity through cloud collaboration technology rooted its concept in the process-oriented

approach to writing. The findings that the interactions in online peer feedback participants empowered the improving their writing and their belief that it improved their capacity to identify their own writing errors is in line with the process-oriented approach in teaching writing (Hayes, 2012). The participants offered global-level writing in the activity at a deficient level compared to what they offered in locallevel problems. This might be due to participants' lack of writing experience and insufficient knowledge of global issues and the topics of their essays (Liang, 2010). The difficulties English teachers have implementing complicated processes of processoriented-approach writing, such as brainstorming, prewriting, drafting, and editing, as well as the emphasis of EFL traditional classroom practices on local writing features, may also have contributed to the problem (Ariyanti, 2016).

The non-revision-oriented feedback accounted for almost half of the total number. Although these feedbacks are not the primary target, they are without importance which depends on the purpose of the peer feedback. Both revision and non-revision-oriented feedback from the whole online written interaction and communication can be input into their second language learning in general. It

is generally understood that second language learning depends on input that converts into the intake when used in meaningful communication (Long, 1985; Guan et al., 2006). This aligns with the concept that knowledge is actively formed through discussion collaboration (Ravitz et al., 2012). In words, interaction the participant feedback is the power in the background that help English learner improve their language. The revision-oriented feedbacks essential in that they help to create group cohesion (Bradley, 2014; Liang, 2010) and eventually can assist in creating a comfortable atmosphere for collaboration.

The peer feedback activities through cloud collaboration were perceived as a positive experience, as supported by their interview results. All the participants felt the online peer feedback through Google Docs was helpful. They commented that the activity helped them to be better at writing and, more specifically, it helped them be more conscious of their own writing. Anonymity certainly contributed to their positive experience in the peer feedback activity. Only one participant reported that he preferred to know the peer's identity that gave the feedback. Almost everyone felt that giving and receiving feedback anonymously using pseudonyms is preferable since it removes the pressure of others' reactions to their input. Their experience in using Google Docs as the facility for peer feedback collaboration was with minimal difficulty. However, participants described difficulty when using Google Docs initially. They stated that the online feedback made it simpler to identify the problems they had made in writing since the system allowed them to place the feedback precisely on the spots that needed improvement. They generally believe online feedback via cloud collaboration technology more convenient and accessible, regardless of time. The location or positive experience is also reflected in the higher revision rate in addressing the revisionoriented feedback. On the other hand, the participants' exchanges in nonrevision-oriented feedback were lighthearted and cheerful.

Although it was not perceived as a negative experience by the participants, some challenges were also faced in doing the peer feedback activity. Some felt that the feedback provided by peers was too challenging to understand and later caused difficulty in responding or addressing the problem. The lack of direct communication between the writer and reviewer demonstrates how a delayed communication process may have resulted in misconceptions and unanswered relevant comments.

However, this difficulty eventually resulted in more extended exchanges discussing the content of the feedback, which was a well-written language practice. Other challenges were poor internet connection and unsupported devices. Despite these interview comments, Google Docs do not need a internet connection solid advanced device (Google, 2021). Some believed their lack of knowledge of cloud collaboration technology initially overwhelmed them. However, after repeated trials, it was no longer an issue. One participant felt uncomfortable with the anonymity and perceived that communication would be more accommodating if both parties knew each other. Interestingly, when discussing the challenges of online peer feedback, some claimed that face-toface was just the same as online learning or even slightly better.

CONCLUSIONS AND SUGGESTION

The findings and discussions of this study have led to some conclusions and implications. First, as the findings demonstrated, the involvement of the participants in online peer feedback via cloud collaboration enabled students to detect and comprehend numerous writing problems, as well as revise and improve their work. This is not to imply that peer feedback should take the place

of teacher or instructor input entirely. On the other hand, they must employ technology to inspire students and increase peer feedback outside of traditional writing courses without undermining regular formal and writing classes. Second, revision and non-revision-oriented feedbacks part of the online textual interaction and communication that can help them develop their second language. As is generally understood, learning a second language is dependent on input, which transforms into intake when language is employed in meaningful communication. Third, the findings also reveal individuals' divided perspectives about whether they appreciated or disliked their online peer feedback experience. The findings support the learners' and teachers' responsibility for language learning in asynchronous environments. Learners are expected to take more active roles in their learning, with instructors/teachers serving as facilitators and providing support as needed.

Although the study's current findings future appear optimistic, should research consider few limitations. To begin with, the number of participants is extremely limited. As a result, future studies should focus on a diverse variety of learners in order to allow findings and implications to be generalized to multiple contexts. This

study did not measure the participant's progress but focused on their experience and perceptions. Future study can also extend their observation of the experience and measure the participant's progress. A comparison between synchronous and asynchronous peer feedback can also be made to see each mode's contribution to writing progress and experience.

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REFERENCES

- Abdullah, Z. D., Ziden, A. B. A., Aman, R. B. C., & Mustafa, K. I. (2015). Students' attitudes towards information technology and the relationship with their academic achievement. Contemporary Education Technology, 6(4), 338-354.
- Alharbi, M. A. (2019). Exploring the potential of Google Docs in facilitating innovative teaching and learning practices in an EFL writing course. Innovation Language Learning and Teaching, 227-242. 14(3),

- https://doi.org/10.1080/1750122 9.2019.1572157
- Alwasilah, A. C. (2006). Developing theories of teaching academic Indonesian to non - language majors: Ways of collecting and analyzing data. Indonesian Journal of English Language Teaching, 2(1), 125-136.
- Ariyanti, A. (2016). The Teaching of Writing in Indonesia. Dinamika Ilmu. 16(2),263. https://doi.org/10.21093/di.v16i 2.274
- Badger, R., & White, G. (2000). A process approach genre teaching writing. ELT Journal, 54(21), 153-160.
- Bradley, L. (2014). Peer-reviewing in an intercultural wiki environment student interaction and reflections. Computers and 80-95. Composition, 34, https://doi.org/10.1016/j.compc om.2014.09.008
- Bradley, L., & Thouësny, S. (2017). Students' collaborative reviewing in an online writing environment. Themes in Science & *Technology Education*, 10(2), 69–83.
- Brodahl, C., Hadjerrouit, S., & Hansen, Collaborative N. K. (2011).writing with web 2.0 technologies: Education students' perceptions. Journal of Information Technology Education: Innovations in Practice, 10, 73-103.

- Chang, C. F. (2012). Peer Review via Three Modes in an EFL Writing Course. Computers and Composition, 29(1), 63-78. https://doi.org/10.1016/J.COMP COM.2012.01.001
- Chen, T. (2016). Technology-supported peer feedback in ESL/EFL writing classes: a research synthesis. Computer Assisted Language 365-397. Learning, 29(2), https://doi.org/10.1080/0958822 1.2014.960942
- Cho, H. (2017). Synchronous web-based collaborative writing: **Factors** interaction among mediating second-language writers. Journal of Second Language Writing, 36, 37-51.
 - https://doi.org/10.1016/j.jslw.20 17.05.01
- Cho, K., & Schunn, C. D. (2007). Scaffolded writing and rewriting in the discipline: A web-based reciprocal peer review system. Computers and Education, 48(3), 409-426. https://doi.org/10.1016/j.compe
 - du.2005.02.004
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Pearson Education, Inc.
- Emig, J. (1971). The composing process of twelfth graders. National Council of Teachers of English.
- Erturk, E. (2016). Using a cloud-based collaboration technology in a

- systems analysis and design course. International Journal of Emerging Technologies in Learning 11(01), 33-37. (IIET), https://doi.org/10.3991/ijet.v11i 01.4991
- Gibbs., G. R. (2002). Qualitative data analysis: explorations with NVivo. In Understanding social research. Open University Press. https://doi.org/10.4236/oalib.11 03499
- Google. (2021). System requirements and browsers. Web https://support.google.com/docs /answer/2375082?hl=en&co=GE NIE.Platform%3DAndroid&oco=
- Guan, Y. H., Tsai, C. C., & Hwang, F. K. (2006). Content analysis of online senior-highdiscussion on a school discussion forum of a laboratory. physics virtual Instructional Science, 34(4), 279https://doi.org/10.1007/s11251-005-3345-1
- Guardado, M., & Shi, L. (2007). ESL students' experiences of online peer feedback. Computers and Composition, 24, 443-461. https://doi.org/10.1016/j.compc om.2007.03.002
- Hanjani, A. M., & Li, L. (2014). **Exploring** writers' L2 collaborative revision interactions and their writing performance. 101-114. System, 44(1),

- https://doi.org/10.1016/j.system .2014.03.004
- Hansen, J. G., & Liu, J. (2005). Guiding principles for effective peer response. *ELT Journal*, 59(1), 31–38. https://doi.org/10.1093/elt/cci0 04
- Hayes, J. R. (2012). Modeling and Remodeling Writing. Written Communication, 29(3), 369–388. https://doi.org/10.1177/0741088 312451260
- Hmelo-Silver, C., Chinn, C., Chan, C., & O'Donnell, A. (2013). The International Handbook of Collaborative Learning. In *The International Handbook of Collaborative Learning* (1st ed.). Routledge. https://doi.org/10.4324/9780203837290.ch3
- Ho, M. (2015). The effects of face-to-face and computer-mediated peer review on EFL writers' comments and revisions. *Australasian Journal of Educational Technology*, 31(1), 1–15.
 - https://doi.org/10.14742/ajet.495
- Hyland, K. (2003). Second Language Writing. Cambridge University Press.
- Inderawati, R., Pratama, A. H., & Loeneto, B. A. (2018). Assessment in Facebook comment column about one topic in Writing II Subject of the fourth semester students of Sriwijaya University English Study Program. *ENGLISH*

- FRANCA: Academic Journal of English Language and Education, 2(1), 49–71.
- Irana, N. A., Hayati, R., & Kurniawan, (2021).The relationship between preservice english teachers' perception of watching english video on youtube as a and listening achievement. The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language, 8(1), https://doi.org/10.36706/jele.v8i 1.14018
- Janssen, J., Erkens, G., Kanselaar, G., & Jaspers, J. (2007). Visualization of participation: Does it contribute to successful computer-supported collaborative learning? *Computers & Education*, 49(4), 1037–1065. https://doi.org/10.1016/J.COMP EDU.2006.01.004
- Jeong, K. (2016). A Study on the Integration of Google Docss as a Web-based Collaborative Learning Platform in EFL Writing Instruction. *Indian Journal of Science and Technology*, 9(39), 1–7. https://doi.org/10.17485/ijst/2016/v9i39/103239
- Karsenti, T., & Gauthier, M. (2018). An exploratory study of student online collaborative writing with teacher metacognitive prompts. *EdMedia + Innovate Learning 2018*, 29–36.
- Kemdikbud. (2017). Panduan Implementasi Keterampilan Abad 21

- Kurikulum 2013 di SMA. Kementerian Pendidikan dan Kebudayaan.
- Kurniawan, D., & Suganda, L. A. (2020).

 Cloud collaboration: Its effect toward writing achievement and impact toward attitude to learning. | IRJE | Indonesian Research Journal in Education |, 4(2), 466–482. https://doi.org/10.22437/irje.v4i 2.11211
- Kurniawan, D., Suganda, L. A., & Zuraida. (2020). Cloud collaborative reflective strategy and its effect toward english pronunciation of preservice teachers in their teaching practice program. *International Conference on Progressive Education (ICOPE 2019)*, 422, 141–146. https://doi.org/10.2991/assehr.k..200323.107
- Liang, M. Y. (2010). Using synchronous online peer response groups in EFL writing: Revision-related discourse. Language Learning and Technology, 14(1), 45–64.
- Liu, J., & Hansen, J. G. (2002). Peer Response in Second Language Writing Classrooms (2nd ed.). The University of Michigan Press.
- Liu, J., & Sadler, R. W. (2003). The effect and affect of peer review in electronic versus traditional modes on L2 writing. *Journal of English for Academic Purposes*, 2(3), 193–227.

- https://doi.org/10.1016/S1475-1585(03)00025-0
- Loeneto, B. A., & Kurniawan, D. (2021).

 Preservice teachers' attitude toward internet use in learning and their academic achievement.

 English Education: Journal of English Teaching and Research, 6(1), 1–12.
- Long, M.H., & Richards, J. C. (1987). Methodology in TESOL, A Book of Readings. Newbury House.
- Long, Michael H. (1985). Input and second language acquisition theory. In S. M. Gass & C. G. Madden (Eds.), Input in second language acquisition (Issue 1982, pp. 377–393). Newbury House.
- Luna, A. M. R., & Ortiz, L. S. H. (2013). Collaborative writing to enhance academic writing development through project work. *HOW, A Colombian Journal for Teachers of English*, 20, 130–148.
- Min, S., Wang, Z., & Liu, N. (2018). Integrating a cloud learning environment into Englishmedium instruction to enhance English-speaking non-native students' learning. Innovations in Education and Teaching International, 56, 1-2. https://doi.org/10.1080/1470329 7.2018.1483838.
- Onozawa, C. (2010). A study of the process writing approach. *Proceedings of Kyoai Gakuen College, Japan*, 153–163.

- Orehovački, T. (2011). Perceived quality of cloud based applications for collaborative writing. Ī. Pokorny, V. Repa, K. Richta, W. Wojtkowski, H. Linger, C. Barry, & M. Lang (Eds.), Information Systems Development - Business Systems and Services: Modeling and Development 575-586). (pp. Springer. https://doi.org/10.1007/978-1-4419-9790-6 46
- Oshima, A., & Hogue, A. (2007). *Introduction to academic English* (3rd ed.). Pearson Education, Inc.
- Pitaloka, N. L., Anggraini, H. W., Kurniawan, D., Erlina, E., & Jaya, H. P. (2020). Blended learning in a reading course: Undergraduate EFL students' perceptions and experiences. | *IRJE* | *Indonesian Research Journal in Education* | , 4(1), 43–57.
- Ravitz, J., Hixson, N., English, M., & Mergendoller, J. (2012). Using project based learning to teach 21st century skills: Findings from a statewide initiative. *Annual Meetings of the American Educational Research Association.*, 1–9.
- Razak, N. A., & Saeed, M. A. (2014). Collaborative writing revision process among learners of English as a foreign language (EFL) in an online community of practice (CoP). Australasian Journal of Educational Technology, 30(5), 580–599.
 - https://doi.org/10.14742/ajet.786

- Rowe, M., Bozalek, V., & Frantz, J. (2013). Using Google Drive to facilitate a blended approach to authentic learning. *British Journal of Educational Technology*, 44(4), 594–606. https://doi.org/10.1111/bjet.120
 - https://doi.org/10.1111/bjet.120
- Saeed, M. A., & Ghazali, K. (2017). Asynchronous group review of EFL writing: Interactions and text revisions. *Language Learning and Technology*, 21(2), 200–226.
- Saville-Troike, M. (2012). Introducing
 Second Language Acquisition. In
 Introducing Second Language
 Acquisition (2nd ed.). Cambridge
 University Press.
 https://doi.org/10.1017/cbo9780
 511808838.002
- Sepahpanah, M., Movahedi, R., & Farani, A. Y. (2015). The study of students' attitudes towards the use of internet in education (case study: Kermanshah Azad University). Interdisciplinary Journal of Virtual Learning in Medical Sciences, 6(3), 40–51.
- Srinivas, H. (2011). What is collaborative learning?

 https://www.gdrc.org/kmgmt/c-learn/what-is-cl.html
- Stanley, G. (1993). Approaches to process writing.

 https://www.teachingenglish.org
 .uk/article/approaches-processwriting
- Suwantarathip, O., & Wichadee, S. (2014). The effects of collaborative

- writing activity using Google Docs on students' writing abilities. *Turkish Online Journal of Educational Technology*, 13, 148–156.
- UNESCO. (2020). 290 million students out of school due to COVID-19: UNESCO releases first global numbers and mobilizes response. https://en.unesco.org/news/290-million-students-out-school-due-covid-19-unesco-releases-first-global-numbers-and-mobilizes
- Vygotsky, L. S. (1978). Mind in society:

 The development of higher psychological processes. Harvard University Press.
- Wang, J. (2017). Cloud computing technologies in writing class: Factors influencing students' experience. learning Turkish Online Journal Distance 197-213. Education, 18(3), https://doi.org/10.17718/tojde.3 28954
- Wu, W.C.V., Petit, E., & Chen, C.H. (2015). EFL writing revision with blind expert and peer review using a CMC open forum. Computer Assisted Language Learning, 28(1), 58–80. https://doi.org/https://doi.org/10.1080/09588221.2014.937442

- Yang, C. C. R. (2010). Using Google Docs to facilitate collaborative writing in an English Language classroom practice. *Teaching English as a Second or Foreign Language*, 14(3).
- Yim, S., Warschauer, M., Zheng, B., & Lawrence, J. F. (2014). Cloud-based collaborative writing and the common core standards. *Journal of Adolescent and Adult Literacy*, 58(3), 243–254. https://doi.org/10.1002/jaal.345
- Zhang, M. (2018). Collaborative writing in the EFL classroom: The effects of L1 and L2 use. *System*, *76*, 1–12. https://doi.org/10.1016/j.system .2018.04.009
- Zhou, W., Simpson, E., & Domizi, D. P. (2012). Google Docs in an out-of-class collaborative writing activity. *International Journal of Teaching and Learning in Higher Education*, 24(3), 359–375. http://www.isetl.org/jtlhe/
- Zhu, Y., Yue, S., Yu, C., & Shi, Y. (2017). CEPT: Collaborative editing tool for non-native authors. Proceedings of the ACM Conference on Computer Supported Cooperative Work, CSCW, 273–285. https://doi.org/10.1145/2998181. 2998306