

EFL Teacher Intervention in Mediating Students' Interaction in Web-Based Collaborative Writing Environment Using Google Docs

*¹Titin Purwaningtyas,²Joko Nurkamto,³Diah Kristina

¹⁻³ Sebelas Maret University, Indonesia

***Correspondence:**

titinpurwaningtyas@student.uns.ac.id

Submission History:

Submitted: January 28, 2023

Revised: April 13, 2023

Accepted: April 15, 2023



This article is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Abstract

The impact of teacher assistance on students' collaboration and non-collaboration in web-based collaborative writing activities is crucial for enhancing active learning. This study investigates the EFL teacher's role in facilitating group writing activities using Google Docs, a web-based tool. Collaborative writing using technology can significantly promote students' participation and collaboration. The study's qualitative research case participant was an EFL teacher at an Indonesian vocational high school, and data were collected through semi-structured interviews and document analysis of students' worksheets and teacher-student written conversations in Google Docs. The findings suggest that the web-based medium facilitates the teacher in engaging students through organizational, socio-cognitive, and socio-affective support. Additionally, the teacher can efficiently deliver electronic feedback and monitor student progress using Google Docs. However, the study identifies common issues encountered by the teacher, including student issues such as less collaboration and plagiarism, and technical issues such as unstable internet connection and low device specifications. Google Docs is a valuable web-based medium for creating group work and teaching online writing. Future studies should involve more EFL teachers as participants, focusing on different student characteristics and writing quality results using web-based technology.

Keywords: Collaboration, Google Docs, Interaction, Teacher Intervention, Web-based Collaborative Writing

INTRODUCTION

The relevance of writing as a skill is almost universally acknowledged, especially in light of technological development and the Internet expansion. Collaborative writing is when two or more students write a single piece collaboratively, sharing equal authorship and responsibility (Dobao & Blum, 2013; Storch, 2019). This practice emphasized teamwork, sharing knowledge, and togetherness. Individuals with greater levels of expertise were able to pass on their wisdom to those with less experience. The relevance of interaction as a criterion for determining students' academic progress, particularly collaborative work was

reaffirmed as scaffolding (Cho, 2017). Through scaffolding, the sociocultural theory emphasizes interaction as a learning goal element (Vygotsky, 1978). The engagement can occur not only face-to-face but also through various online platforms supporting technology-enhanced teaching and learning.

Although collaborative writing activities pointed out student-centered learning to acquire knowledge from their peers, the most significant failure factor in learning is the teacher's need for more involvement in mediating group work. Teachers facilitate socio-cognitive, socio-affective, and organisational learning (Mangenot & Nissen, 2006). Teachers' interventions in offering specific teaching, splitting groups, and solving issues, affect students' collaborative or non-collaborative. The teacher can motivate pupils to work harder by fostering a sense of team spirit and providing assistance and guidance while working. To sum up, the degree of student participation depends on the teacher's involvement in learning activities.

Web-based learning systems have facilitated writing collaboration in tandem with developing digital resources. Google Docs is well-known as a familiar web-based collaborative writing medium, besides wikis and blogs. Google Docs is a web-based digital software such as Microsoft Word that helps teachers foster collaborative writing by giving students powerful tools to write, edit, and work together on a single piece of document (Jeong, 2016; Suwantarathip & Wichadee, 2014; Widyastanti, 2019). Students can use Google Docs to generate and update online papers while collaborating with other students and the teacher in real-time. Additionally, this tool significantly mediates group interactions, increases students motivation to learn with others, and fun (Zhang & Zou, 2021). As with students, the device allows the teacher to observe, encourage, and follow the discussion to know who is working actively (Irshad, 2021). The teacher is able to monitor the group's progress and deliver digital feedback by leaving comments on the worksheet.

However, in some cases, the teacher felt the online collaborative writing activity failed. Students may experience technical difficulties, such as a lack of internet connection or an inability to log in, as well as interpersonal difficulties, such as losing track of their manuscript changes or struggling to accept the results of their writing assignment (Taghizadeh & Basirat, 2019; Zheng et al., 2021). Similarly, a study by Al Shabibi (2018) found that teachers face challenges when implementing web-based collaborative writing due to students' lack of preparation and technical issues. According to Leeuwen & Janssen (2019), teachers who lead students in a web-based collaborative environment play a central role without stifling their freedom to learn independently.

Based on the above reasons, it showed that technology-enhanced collaborative writing has helped teachers and students in many ways. Although students did not work together simultaneously and other problems frequently occurred, collaborative work became ineffective without the teacher's intervention (Alghasab et al., 2019; Kajamaa et al., (2019); Alharbi & Alqefari (2021); Taghizadeh & Amirkhani (2022); Purwaningtyas et al., 2023). Therefore, to fill this gap, this study examined the types of an EFL teacher offered and figured out the obstacles while managing students' interaction in web-based collaborative writing. Providing proper help based on the students' conditions and difficulties, using web-based technology-enhance teaching writing was valuable to promote students' successful learning.

METHOD

The researchers did a qualitative case study to reveal more about the phenomena (Creswell & Cresswell, 2017). An Indonesian EFL vocational school teacher participated in this study. Since August 2022, the teacher enrolled in a six-month teacher training program (PPG) by the Ministry of Education and Culture (*Kemdikbud*). Thus, she was unable to teach face-to-face learning. She taught her students online using Google Docs to facilitate group writing sessions consisting of two or three students in each group. Each group should discuss and interact with other collaborators to compile a descriptive text about “My Favorite Idol” by using the Google Docs application. This qualitative study examined teacher intervention types when mediating student interaction and identified teacher problems commonly found to hinder students’ collaboration. Document analysis, including students’ online worksheets and teacher-students comments in Google Docs, was beneficial to identify types of intervention based on the framework taken from Mangelot & Nissenn (2006). In triangulation, researchers conducted semi-structured interviews to validate data. Along with the interview session, the researchers used ‘Zoom’ to record and then took notes on the essential parts of the teacher's online interview. After the interview sessions, researchers transcribed the audio into written texts. Then, the data were analyzed using a thematic analysis framework from Braun & Clarke (2006), including analyzing the data, developing codes, producing themes, reviewing, labeling, and reporting the findings.

FINDING AND DISCUSSION

A. Teacher Intervention in Web-Based Collaborative Writing

The first research question aimed to identify types of teacher intervention when mediating students’ interaction in collaborative writing using the web tool, Google Docs. Taken from the document analysis, they were students’ written tasks, and teacher-students’ comments in Google Docs showed that the teacher helped the students’ group work in three aspects; Organizational, Socio-cognitive, and Socio-affective (Mangelot & Nissen, 2006). Meanwhile, the teacher interview’ results were conducted to reinforce the data from the document analysis.

Organizational Aspect

Organisational is the first type of teacher intervention concerned with the teacher's moves in providing support in organizing and monitoring students' writing process. As shown in the following figure, there was a screenshot of a Google Docs worksheet in which students' written tasks and conversations were among the teacher and the group members.

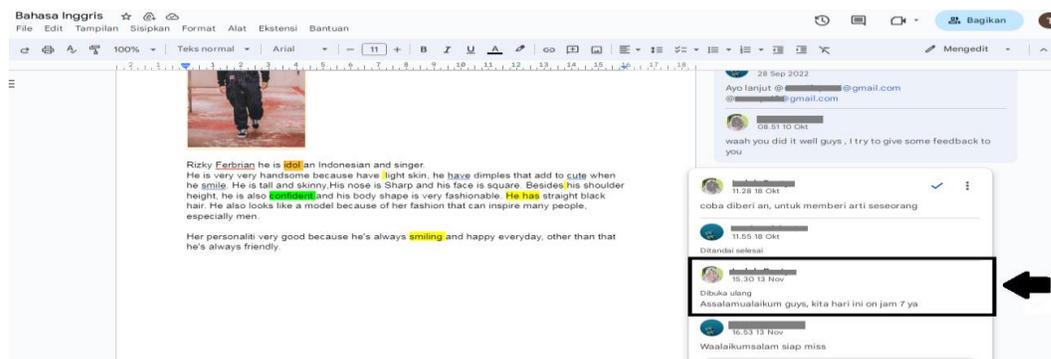


Figure 1. Teacher Intervention in Organisational Aspect

The figure above showed that the teacher utilized the aspect of organizational in terms of giving instructions and managing time using feature of chat and comments. The teacher utterance as showed above was “*Assalamualaikum guys, kita hari ini on jam 7 ya*” or translated into English “**Hi Guys, please standby at 7 p.m for today, okay?**” The teacher's utterances indicated that the teacher provided help by instructing, seeking agreement, and managing time. The teacher informed the students in that group to be online together at a certain time.

Meanwhile, in the interview session, the teacher stated that helping the students with organizational aspect created students' preparation before starting the project. The teacher further said that most of her students were afraid, shy, and unconfident to start the discussion. Undoubtedly, they prefer to wait for other friends' initiation to invite and start the action. The teacher stated:

“The students were mostly shy and confused about how and who would start the discussion while constructing the text in Google Docs, in the end they just waited each other, and yeah.... no interaction and collaboration”

The teacher's help in this stage was crucial to promoting students' participation and mutual engagement with their teammates. By leading the student to promote engagement on Google Docs' chat and comment feature, the teacher claimed she could determine whether or not each student was prepared to participate in an online learning environment based on whether they were active or passive. If there found a passive one, the teacher initiated other students to contact their peers. Alghasab, (2015) asserted that this type of teacher's instructions (i.e., instructing students to participate) decreased instances of students acting as social loafers (i.e., those who contribute less than their fair share) and free riders (i.e., those who do nothing to complete the activity). However, this study rejected the study conducted by Elabdali & Arnold (2020); Li & Zhu (2017) who asserted that the teacher regulation and mediation could destroy the students' interaction in collaborative work situation.

Socio-cognitive Aspect

The final product of collaborative writing activities was a well-written manuscript. Seeing the fact that writing was the most challenging skill since good writing needed many complicated aspects. The students mostly needed to improve their writing. Therefore, the teacher's presence significantly helped to give feedback and correct students' text errors (Alsubaie & Ashuraidah, 2017; Jeong, 2016; Khalil, 2018; Widyastanti, 2019). This kind of help was classified as an intervention in the socio-cognitive aspect. This level indicates the teacher's efforts to direct students' collaborative activities using problem-solving techniques such as offering feedback, providing assistance, and soliciting suggestions as showed in following figure.

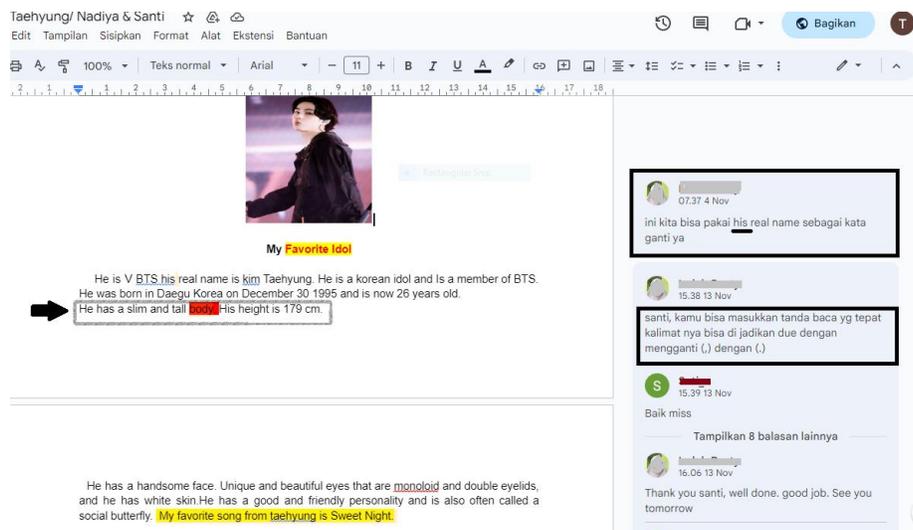


Figure 2. Teacher Intervention in Socio-cognitive Aspect

Based on the figure above showed that the teacher used help in terms of socio-cognitive by delivering feedback on students' typing. The teacher's threads in the comment section provided help by suggesting the students use the pronoun "His" as a possessive adjective to replace the subject "**Taehyung**" which was an initial name for a man. Further, the teacher convinced the students to fix the sentence fragment of the sentence from "**He has a slim and tall body, his height is 179 cm**" by splitting the sentence with punctuation (.) rather than (,) to become "**He has a slim and tall body. His height is 179 cm**".

The figure above showed that the teacher evaluated the students' incorrect texts and then clarified on how to correct the mistakes with proper solutions. This findings was based on the suggestion of previous research conducted by Poorebrahim (2017), English teachers should use explicit feedback for editing and revising and implicit feedback for knowledge-building. Teacher's role was a resource for their students in which teacher' feedback was more essential to students' writing ability rather than peer feedback (Wihastyanang et al., 2020). Alharbi & Alqefari (2021) reinforced that when students work together on writing, the teacher should validate their grammatical form through comments.

Socio-affective Level

Minority teachers used affirmatively to appreciate and build comfortable learning. However, they prefer to shed light on correcting students' error texts without any emerging positive emotions. The emerging socio-cognitive aspect was crucial for the teacher to boost students' self-motivation and teamwork motivation. Socio-affective intervention refers to how teachers build interpersonal connections and harmony with the students (Mangenot & Nissen, 2006; Nguyen, 2011). The intervention was in the form of greeting group members, encouraging and applauding students' work, acknowledging, seeking agreement, agreeing or disagreeing, and expressing thankfulness and other good feelings, promoting group harmony and cohesion, such as depicted below.

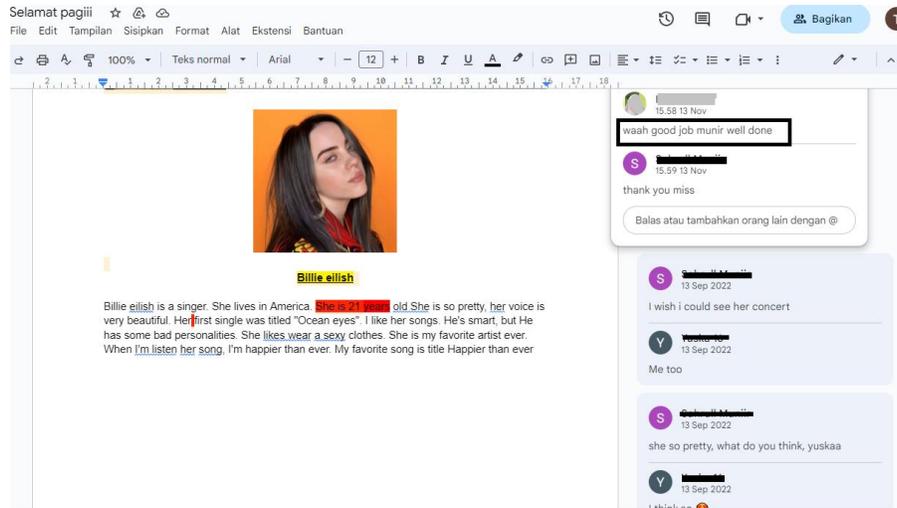


Figure 1.3 Teacher Intervention in Socio-affective Aspect

The figure above showed that the teacher delivered a praising expression with the utterance, "**waaah, good job, well done.**" The utterance was used to applaud the students' works work after checking the correct texts. By giving an appreciation to give reward after finding what the students wrote was correct. These results correspond with Yu et al., (2020), showing that expressive feedback can significantly increase students' writing motivation. In contrast, this study results declined a study conducted by Fathi & Shabani (2020) who said that the teacher appearance caused anxiety and panic during learning process. The teacher in this study said that these strategies were commonly used to appreciate little or much students' effort to boost their enthusiasm to accomplish the task.

"Their writing products are not completely perfect, but I always try to appreciate their hard work, willingness to learn, and revision. Compliment, praising, gratitude, and other positive feeling was meaningful for boosting the students' motivation."

Conveying positive emotions made students more convenient and satisfied that their writing was correct. In addition, the slang word "**Guys**" was commonly found in several written conversation when the teacher welcomed students in non-formal situations showed how the teacher tried to grow positive emotions and build close relationships with the students through dialogic utterances. Maros and Halim (2018), cited in Suci et al., (2021), informed that addressing phrases could promote friendliness in social interactions. Therefore, compliments, guidance, and honorifics may be advantageous in dialogic contact.

B. Teacher's Challenges in Web-Based Collaborative Writing Using Google Docs

The second research aimed to examine teacher's problems in facilitating web-based collaborative writing using Google Docs. According to the interview, the teacher had trouble conducting web-based collaborative situations in two specifics issues; student's issues and technological issues.

Students' Personal Issues

Initially, the most significant challenges that affected non-collaboration in constructing the texts were the students' unwillingness and ability to work together. There were moments when the students did not collaborate effectively with their peers. Students' issues come from a lack of collaboration and disregard for taking online classes. According to Al Shabibi (2018), teachers frequently meet students' obstacles in online collaborative writing, such as students' lack of collaboration with their teammates and immediately obtaining task data from the internet.

First, in terms of lack of collaboration, based on the findings, the teacher claimed that the students were hard to work with unfamiliar peers. This finding supported the previous research by Amalia et al., (2021) that only a small percentage of students can complete writing projects; meanwhile, the remaining groups did not appear interested in completing the writing job with their partners. Since the teacher in this study randomly selected the group work members, some students may be partnered with acquaintances with whom they had no close intimacy. As a result, the students were unmotivated to work with their teammates, and social interaction was difficult to cultivate. The teacher further explained that grouping students consisting of less knowledgeable were not successful if they did not have closeness in daily life.

"I (the teacher) wanted to teach them how to work together and learn from each other. So, I randomly paired students with different levels of proficiency. As a result, lower knowledgeable students relied on more knowledgeable students, while knowledgeable students preferred to complete the group tasks alone without discussing with their peers."

Besides a lack of collaboration, the teacher faced obstacles in detecting students' product plagiarism issues. The teacher found that students cheated on the assignments from Google. During the time, the teacher said that she discovered the results of the student's writing assignments were not the student's original work but instead were copied from Google. Some students copied the texts from the internet and pasted them on their online worksheets. This condition made students lazy and preferred the instant way to get the final product.

Technological Issues

The teacher struggled with several technological challenges, making the teaching and learning process ineffective. The issues that the teacher had with technology were related to a poor internet connection, fundraising (energy cost, data cost, and electronic device maintenance expenses (Brodahl & Hansen, 2014; Irshad, 2021; Kim, 2020; Taghizadeh & Basirat, 2019; Zheng et al., 2021). The initial disadvantage of using Google Docs was that it could only be accessed when the internet connection was stable. The teacher stated that the quality of the internet connection at her students' homes and the school was unstable. It is in line with Efriana (2021), who discovered that even though students have internet access, they still require assistance connecting to the network due to the locations of their homes. Due to this issue, the teacher noted:

"The most significant difficulty in accessing Google Docs was a poor internet connection. We lived in the area of unstable internet signals. Sometimes, we need to reconnect and move to other spots to get back the internet signals"

Internet connectivity was a significant problem for the teacher and some students who lived in rural areas with low signal access. Internet connectivity was required for the program to work accurately. If neither the teacher nor the students had a reliable internet connection, they were to access online applications on their mobile devices while at home.

Google Docs could be operated via computers and smartphones. However, the teacher also stated that not all her students had compatible smartphones and laptops. In their study, Nabhan & Sa'diyah (2021) found that unsupported smartphone specifications and overflowing RAM made a few students fail to install the Google Docs application. Thus, they need to provide enough storage by deleting other phone applications.

CONCLUSION

Despite the usefulness of web-based collaborative writing successfully facilitated students to work with peers or small groups discussion through online platform such as Google Docs, the appearance of the teacher can not be ignored. The teacher' presence should transform become multiple figures, such as a facilitator, motivator, and technological expert depended on students' condition. Seeing this urgency, much or less of the teacher' involvement became the fundamental criteria of successful or failure of implementing web-based collaborative writing activities. Thus, before agreeing to use a web-based collaborative writing, the teacher was strongly motivated to prepare the input materials, provide proper help, and give adequate technical training. The limited number of participants was a shortcoming of this study. Therefore, future researchers must include a greater number of teachers and students in their research to get more comprehensive data. This study may be informative and provide insight for EFL teachers, especially before adopting technology to support their work, especially in teaching writing.

REFERENCES

- Al Shabibi, Y. J. (2018). *Teacher ' s Role in A Collaborative Writing Environment Using Wiki*. University of Exeter.
- Alghasab, M. (2015). *Student-Student collaboration in wiki mediated collaborative writing activities: Exploring EFL teachers' roles in the collaborative process* (Doctoral dissertation, University of York).
- Alghasab, M., Hardman, J., & Handley, Z. (2019). Teacher-student interaction on wikis: Fostering collaborative learning and writing. *Learning, Culture and Social Interaction*, 21, 10–20. <https://doi.org/10.1016/j.lcsi.2018.12.002>
- Alharbi, M. A., & Alqefari, A. N. (2021). The Impact of Teacher Feedback Via Google Doc in L2 Learners ' Writing. *International Journal of Learning, Teaching and Educational Research*, 20(11), 170–194. <https://doi.org/https://doi.org/10.26803/ijlter.20.11.10>
- Alsubaie, J., & Ashuraidah, A. (2017). Exploring Writing Individually and Collaboratively Using Google Docs in EFL Contexts. *English Language Teaching*, 10(10), 10. <https://doi.org/10.5539/elt.v10n10p10>
- Amalia, H., Abdullah, F., & Fatimah, A. S. (2021). Teaching writing to junior high school students: A focus on challenges and solutions. *Journal of Language and Linguistic*

- Studies*, 17(2), 794–810. <https://doi.org/10.17263/jlls.904066>
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology; in Qualitative Research in Psychology. *Uwe Bristol*, 3(2), 77–101. <http://eprints.uwe.ac.uk/11735>
- Brodahl, C., & Hansen, N. K. (2014). Education Students' Use of Collaborative Writing Tools in Collectively Reflective Essay Papers. *Journal of Information Technology Education: Research*, 13, 91–120.
- Cho, H. (2017). Synchronous web-based collaborative writing: Factors mediating interaction among second-language writers. *Journal of Second Language Writing*, 36, 37–51. <https://doi.org/10.1016/j.jslw.2017.05.013>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Dobao, A. F., & Blum, A. (2013). Collaborative writing in pairs and small groups: Learners' attitudes and perceptions. *System*, 41(2), 365–378. <https://doi.org/10.1016/j.system.2013.02.002>
- Elabdali, R., & Arnold, N. (2020). Group Dynamics across Interaction Modes in L2 Collaborative Wiki Writing. *Computers and Composition*, 58, 102607. <https://doi.org/10.1016/j.compcom.2020.102607>
- Fathi, S., & Shabani, E. A. (2020). The Effect of Teacher-and Peer-Assisted Evaluative Mediation on EFL Learners' Metacognitive Awareness Development. *Englisia: Journal of Language, Education, and Humanities*, 8(1), 58. <https://doi.org/10.22373/ej.v8i1.7101>
- Irshad, M. (2021). Challenges Encountered During Synchronous Online Collaborative Writing via Google Docs. *International Journal of Web-Based Learning and Teaching Technologies*, 17(6), 1–14. <https://doi.org/10.4018/ijwlts.287554>
- Jeong, K. O. (2016). A study on the integration of google docs as a web-based collaborative learning platform in EFL writing instruction. *Indian Journal of Science and Technology*, 9(39). <https://doi.org/10.17485/ijst/2016/v9i39/103239>
- Kajamaa, A., Kumpulainen, K., & Olkinuora, H. R. (2020). Teacher interventions in students' collaborative work in a technology-rich educational makerspace. *British Journal of Educational Technology*, 51(2), 371–386. <https://doi.org/10.1111/bjet.12837>
- Khalil, Z. M. (2018). EFL Students' Perceptions towards Using Google Docs and Google Classroom as Online Collaborative Tools in Learning Grammar. *Applied Linguistics Research Journal*, 2(2), 33–48. <https://doi.org/10.14744/alrj.2018.47955>
- Kim, J. (2020). Learning and Teaching Online During Covid-19: Experiences of Student Teachers in an Early Childhood Education Practicum. *International Journal of Early Childhood*, 52(2), 145–158. <https://doi.org/10.1007/s13158-020-00272-6>
- Leeuwen, A. Van, & Janssen, J. (2019). A Systematic Review of Teacher Guidance During Collaborative Learning in Primary and Secondary Education. *Educational Research Review*, 27, 71–89. <https://doi.org/10.1016/j.edurev.2019.02.001>
- Li, M., & Zhu, W. (2017). Good or bad collaborative wiki writing: Exploring links between group interactions and writing products. *Journal of Second Language Writing*, 35, 38–53. <https://doi.org/10.1016/j.jslw.2017.01.003>
- Mangenot, F., & Nissen, E. (2006). Collective Activity and Tutor Involvement in E-learning Environments for Language Teachers and Learners. *Calico Journal*, 23(3), 601–622. <https://doi.org/10.1558/cj.v23i3.601-622>
- Nabhan, S., & Sa'diyah, H. (2021). Collaborative Writing Using Google Docs in an EFL

- Classroom: Voices from High School Students. *VELES Voices of English Language Education Society*, 5(2), 156–166. <https://doi.org/10.29408/veles.v5i2.3863>
- Nguyen, L. Van. (2011). Computer-Mediated Collaborative Learning in a Vietnamese Tertiary EFL Context: Process, Product, and Learners' Perceptions. *Applied Linguistics*, (Doctoral dissertation, Massey University).
- Poorebrahim, F. (2017). Indirect written corrective feedback, revision, and learning. *Indonesian Journal of Applied Linguistics*, 6(2), 184–192. <https://doi.org/10.17509/ijal.v6i2.4843>
- Purwaningtyas, T., Nurkamto, J., & Kristina, D. (2023). EFL Teacher 's Challenges in Utilizing Web-based Collaborative Writing Activities Using Google Docs Platform. *International Journal of Multicultural and Multireligious Understanding*, 10(3), 118–125.
- Storch, N. (2019). Collaborative writing. *Language Teaching*, 52(1), 40–59. <https://doi.org/10.1017/S0261444818000320>
- Suci, D. N., Basthomi, Y., Mukminatien, N., Santihastuti, A., & Syamdianita. (2021). EFL students' responses on teacher's online written feedback: Interaction, revision, and perception. *Indonesian Journal of Applied Linguistics*, 11(2), 292–306. <https://doi.org/10.17509/ijal.v11i2.28549>
- 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(2), 148–156.
- Taghizadeh, M., & Amirkhani, S. (2022). Pre-service EFL teachers' conceptions and strategy use in managing online classes. *System*, 104(October 2021), 102671. <https://doi.org/10.1016/j.system.2021.102671>
- Taghizadeh, M., & Basirat, M. (2019). EFL Instructors ' Perceptions of Computer-Mediated Communication in Language Classes. *Proceedings of the 7th International Conference on E-Learning and E-Teaching (ICELET)*, Toosi University of Technology, Tehran, Iran.
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press. <https://doi.org/10.2307/1421493>
- Widyastanti, M. (2019). Using Google Docs On Collaborative Writing Activity In SMPN 1 Driyorejo - Gresik. In *Uin Sunan Ampel Surabaya*.
- Wihastyanang, W. D., Kusumaningrum, S. R., Latief, M. A., & Cahyono, B. Y. (2020). Impacts of providing online teacher and peer feedback on students' writing performance. *Turkish Online Journal of Distance Education*, 21(2), 178–189. <https://doi.org/10.17718/TOJDE.728157>
- Yu, S., Jiang, L., & Zhou, N. (2020). Investigating what feedback practices contribute to students' writing motivation and engagement in Chinese EFL context: A large scale study. *Assessing Writing*, 44(2), 100451. <https://doi.org/10.1016/j.asw.2020.100451>
- Zhang, R., & Zou, D. (2021). Types, features, and effectiveness of technologies in collaborative writing for second language learning. *Computer Assisted Language Learning*, 1-31.
- Zheng, Y., Yu, S., & Lee, I. (2021). Implementing Collaborative Writing in Chinese EFL Classrooms: Voices From Tertiary Teachers. *Frontiers in Psychology*, 12(6), 1–9. <https://doi.org/10.3389/fpsyg.2021.631561>