

Exploring Students' Engagement Perspectives and Overcoming Writing Challenges in Academic Writing Classrooms

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Abstract

Technology-based writing pedagogy in higher education plays an important role in fostering a more interactive and collaborative learning environment. However, the extent to which digital platforms promote meaningful student engagement and support students in overcoming academic writing challenges remains underexplored, particularly in English as a Foreign Language (EFL) contexts. Therefore, this study aims to explore students' engagement in academic writing through the use of Google Docs and to examine how this platform helps address challenges encountered during the writing process. This study employed a qualitative method with a case study approach conducted in a third-semester academic writing class at a university in East Java. Data were collected through questionnaires and semi-structured interviews involving 39 participants. The findings revealed that students perceived Google Docs positively in supporting engagement, motivation, and collaborative productivity during academic writing activities. The platform facilitated active participation, feedback exchange, and collaborative interaction throughout the writing process. However, several challenges were also identified, including maintaining student engagement, supporting more structured and coherent writing, adapting learning practices to digital environments, and managing writing format consistency. These findings suggest that Google Docs can function as a supportive pedagogical tool when integrated with appropriate instructional strategies. This study contributes to a better understanding of how collaborative technology can support student engagement and address writing challenges in EFL higher education contexts.

Keywords: Google Docs; higher education; writing engagement; writing skills

INTRODUCTION

Advances in digital technology have brought about significant changes across various sectors, including higher education. This transformation is driving a shift in the learning paradigm from conventional approaches toward more flexible, interactive, and collaborative models (Crompton et al., 2020). In the context of 21st-century education, technology is no longer viewed as a supplement but as an essential component in supporting the effectiveness of learning (Dakhi et al., 2020). However, increased technology adoption does not always lead to improved learning quality, as its implementation is often still procedural in nature and has not yet reached a transformational level.

The success of technology integration is influenced by various factors, such as the availability of infrastructure, faculty digital competencies, and institutional policy support. To guide meaningful technology use, various conceptual frameworks such as 1) Analyze State Objective, Select Method Materials Media, Utilize Media Materials, Require Learner Participation, Evaluate and Revise (ASSURE); 2) Substitution, Augmentation,

Modification, Redefinition (SAMR); 3) and Technological Pedagogical Content Knowledge (TPACK) have been developed (Chapelle & Sauro, 2017). Nevertheless, several studies indicate a gap between theoretical frameworks and real-world practice. Some studies tend to emphasize the potential of technology in a normative manner but fail to critically examine how it is implemented in real-world learning contexts. This suggests that the effectiveness of technology is determined not only by its presence but also by the quality of its pedagogical integration.

In English as a Foreign Language (EFL) instruction, this challenge becomes even more complex, particularly regarding academic writing skills. Writing demands mastery of linguistic aspects as well as higher-order thinking skills, such as idea organization, cohesion, coherence, and academic conventions (Akram et al., 2022). For EFL students in Indonesia, these difficulties are compounded by structural and rhetorical differences between their first language and English. However, the literature reveals differing perspectives on the primary source of these difficulties—some emphasize linguistic aspects, while others highlight a lack of pedagogical support during the writing process—suggesting that this issue has not yet been fully elucidated.

One of the key components of writing instruction is feedback. Feedback plays a role in helping students identify errors and gradually improve the quality of their writing. However, its effectiveness remains a subject of debate. Some studies emphasize the dominant role of instructor feedback, while others highlight the potential of peer feedback and technology-based feedback. On the other hand, time constraints, large class sizes, and instructors' workloads often hinder optimal feedback practices (Wilson et al., 2021). These conditions suggest that previous research has not fully explained how feedback can be effectively implemented within complex learning contexts.

In this context, Google Docs, as a collaborative platform, offers the potential to support the writing process through features such as comments, revisions, and real-time co-editing. Theoretically, the use of this platform can be situated within a socio-constructivist perspective, where learning occurs through social interaction and collaboration. Google Docs enables continuous peer feedback and feedback from instructors, which can support the process of collaborative knowledge construction.

Furthermore, the use of Google Docs is also related to the concept of student engagement, which encompasses behavioral (active participation), cognitive (thinking processes and reflection), and emotional (interest and motivation) dimensions. Although many studies suggest that technology can enhance engagement, its definitions and measurements remain diverse. This inconsistency indicates that the relationship between technology use, student engagement, and learning outcomes has not yet been clearly conceptualized in the literature.

Several studies have examined the use of Google Docs in EFL writing instruction. Alharbi (2020) found that this platform is effective in facilitating feedback interactions. However, other findings show inconsistent results, where its effectiveness is influenced by factors such as digital literacy, internet access, and user readiness (Nabhan & Sa'diyah 2021; Saeed & Al Qunayeer, 2022). These contradictions indicate that claims regarding the effectiveness of Google Docs in the previous literature remain partial and have not fully accounted for the complexity of the implementation context.

Based on the above discussion, the central problem addressed in this study is that despite the potential of collaborative technologies like Google Docs, the extent to which

they foster meaningful engagement while addressing academic writing difficulties in an EFL context remains unclear. This issue is significant because most previous research has focused more on learning outcomes than on students' experiences during the writing process.

Furthermore, there is a significant research gap in several aspects. Methodologically, previous research has been dominated by quantitative approaches that fail to delve deeply into student experiences. Theoretically, student engagement has not been extensively examined in an integrated manner in relation to technology and writing difficulties. Contextually, research in EFL higher education in Indonesia remains limited, thus failing to provide a comprehensive picture of technology implementation within the local context.

Therefore, this study aims to explore students' engagement in academic writing through the use of Google Docs and to investigate how this platform facilitates students in overcoming challenges during the writing process. Using a qualitative case study approach, this study seeks to understand students' perceptions and experiences regarding engagement, collaboration, and writing practices in academic writing classrooms. Thus, this study is expected to provide theoretical and pedagogical contributions to technology-based writing instruction in EFL higher education.

METHOD

This study aims to explore students' engagement in academic writing through the use of Google Docs and to examine how this platform supports students in addressing challenges encountered during the writing process. This study employs a qualitative method using a case study approach to gain an in-depth understanding of the phenomenon of Google Docs usage in the context of academic writing instruction (Creswell, 2021).

This study was conducted in a third-semester Academic Writing class within the English Language Education Program at a university in Malang, East Java. The academic writing course this semester focuses on developing students' abilities to write academic essays, construct arguments, utilize academic sources, and apply language conventions and academic citation standards. This context was selected based on the relevance of using Google Docs to support collaborative activities and the writing revision process during academic writing instruction. The study participants consisted of 39 students enrolled in the third-semester academic writing class. Additionally, the course instructor served as an interview informant to obtain pedagogical perspectives on the implementation of Google Docs in the learning process.

Data collection was conducted using a closed-ended questionnaire and semi-structured interviews. The questionnaire consisted of 10 closed-ended statements designed to explore students' perceptions and experiences regarding their engagement in using Google Docs for academic writing instruction. Meanwhile, semi-structured interviews were conducted with the course instructors to examine challenges encountered and strategies employed to support students during the Google Docs-based academic writing process.

Questionnaire data were analyzed descriptively to identify patterns in students' perceptions and experiences of engagement during academic writing learning. The interview data were analyzed using thematic analysis through several stages, namely: (1) transcribing the interview results verbatim, (2) reading the transcripts repeatedly to gain

a comprehensive understanding of the data, (3) conducting open coding by identifying relevant units of meaning, (4) grouping similar codes into main themes, and (5) interpreting the themes to explain strategies for overcoming students’ writing challenges during academic writing instruction. This analysis process was conducted systematically to enhance the transparency and credibility of the research findings. Demographic information on the participants is presented in the following table.

Table 1. Demographic information of the participants’ interview background

No	Participant Code	Residence	Teaching Experience	Education Qualification
1.	Lecturer 1 (L1)	Malang	5 - 10 years	Graduate
2.	Lecturer 2 (L2)	Malang	5 - 10 years	Graduate
3.	Lecturer 3 (L3)	Malang	5 - 10 years	Graduate
4.	Lecturer 4 (L4)	Malang	11 - 20 years	Postgraduate
5.	Lecturer 5 (L5)	Sidoarjo	11 - 20 years	Postgraduate

RESULTS AND DISCUSSION

This section presents the findings obtained from questionnaire and interview responses that explored students’ perceptions of engagement and examined the challenges encountered during the implementation of Google Docs in academic writing classrooms. The analysis focuses on identifying patterns of students’ engagement, motivation, and collaborative experiences, as well as exploring how Google Docs supports the writing process and addresses challenges experienced during academic writing activities. The findings are organized into several emerging themes that reflect students’ experiences and perceptions of technology-supported writing instruction in the EFL context.

Students’ Engagement Perspectives on the Use of Google Docs as Learning Media

To provide a more cohesive presentation of the findings, the questionnaire results were synthesized into three thematic categories: Engagement, Motivation, and Collaborative Productivity.

1. Engagement

Table 2. Students’ Engagement toward the Use of Google Docs

Code	Statements	SA	A	D	SD
ENG1	I feel more involved in the writing process when using Google Docs.	28.2%	53.8%	15.4%	2.6%
ENG2	Working with Google Docs makes my learning experience more engaging.	41.0%	43.6%	12.8%	2.6%
ENG3	I feel more comfortable receiving feedback via Google Docs than other means.	35.9%	43.6%	17.9%	2.6%
ENG4	Using Google Docs improves the quality of my writing.	35.9%	41.0%	17.9%	5.1%

Based on Table 2, the questionnaire results show that the majority of students have a positive perception of the use of Google Docs in enhancing their engagement in academic writing. For indicator ENG1—engagement in the writing process when using Google

Docs—28.2% of respondents strongly agreed, and 53.8% agreed. Thus, a total of 82% of respondents expressed a positive perception that using Google Docs made them more engaged in the writing process. These findings indicate that the features available in Google Docs, such as real-time editing and flexible accessibility, encourage active student participation during the writing process.

Regarding indicator ENG2, concerning the perception that using Google Docs makes the learning experience more engaging, 41.0% of respondents strongly agreed, and 43.6% agreed, resulting in a total of 84.6% of respondents providing a positive response. This percentage is one of the highest in the engagement dimension, indicating that students view Google Docs as a learning medium capable of creating a more interactive and engaging learning experience compared to conventional methods.

Next, regarding indicator ENG3—which examines students’ comfort with receiving feedback via Google Docs compared to other platforms—35.9% of respondents strongly agreed, and 43.6% agreed, for a total positive response rate of 79.5%. These results indicate that the majority of students feel more comfortable receiving feedback through a digital platform, which allows comments to be provided directly, documented, and reviewed at any time during the revision process.

For indicator ENG4, regarding the perception that using Google Docs can improve writing quality, 35.9% of respondents strongly agreed and 41.0% agreed. With a total of 76.9% positive responses, these findings indicate that the majority of students believe that the use of Google Docs contributes to improving the quality of their academic writing. This may be because students have greater opportunities to make repeated revisions based on feedback received directly through the platform.

2. Motivation

Table 3. Students’ Motivation toward Writing through Google Docs

Code	Statements	SA	A	D	SD
MOT1	I feel more motivated to revise my writing after receiving feedback through Google Docs.	30.8%	48.7%	17.9%	2.6%
MOT2	I would like to use Google Docs in future learning.	41.0%	41.0%	17.9%	0%
MOT3	I feel more motivated to write when using Google Docs.	23.1%	51.3%	15.4%	10.3%

Based on Table 3, the questionnaire results indicate that the use of Google Docs has a positive effect on students’ motivation in academic writing activities. The majority of respondents stated that this platform is able to increase their motivation both in the revision process and in writing activities in general.

For indicator MOT1, which relates to students’ motivation to revise their writing after receiving feedback via Google Docs, 30.8% of respondents strongly agreed, and 48.7% agreed. With a total of 79.5% positive responses, these results indicate that most students feel more motivated to revise their writing when feedback is provided via Google Docs. This finding suggests that the integrated commenting and revision system in Google Docs facilitates the revision process in a more practical, structured, and responsive manner, thereby increasing students’ readiness to improve their writing.

Regarding indicator MOT2, which pertains to students’ interest in continuing to use Google Docs for learning in the future, 41.0% of respondents strongly agreed, and 41.0% agreed, resulting in a total of 82% of respondents expressing a positive perception. This percentage is the highest within the motivation dimension, indicating that students have a high level of acceptance toward the use of Google Docs as a learning tool. These

findings suggest that students not only perceive the benefits of Google Docs in their current learning but also have a desire to continue using it in future learning activities.

Next, regarding the MOT3 indicator—which measures students’ motivation to write when using Google Docs—23.1% of respondents strongly agreed, and 51.3% agreed, for a total of 74.4% positive responses. Although this percentage still indicates a positive trend, it is the lowest figure in the motivation dimension compared to other indicators. Additionally, 10.3% of respondents strongly disagreed, which is the highest percentage for the “strongly disagree” category across all motivation dimensions. This suggests that while the majority of students feel Google Docs enhances their writing motivation, a small portion of students have not yet experienced a significant increase in motivation solely through the use of this digital platform. This situation may indicate that students’ writing motivation is also influenced by factors other than learning media, such as personal interest in writing, level of technological proficiency, or learning style preferences.

Overall, the results regarding the motivation dimension indicate that Google Docs is perceived positively as a tool capable of enhancing students’ motivation in academic writing, particularly in encouraging the revision process and increasing students’ readiness to continue using the platform in future learning activities. These findings confirm that the integration of digital technologies such as Google Docs can play a role in strengthening both students’ intrinsic and extrinsic motivation in academic writing.

3. Collaborative Productivity

Table 4. Collaborative Productivity through Google Docs

Code	Statements	SA	A	D	SD
CP 1	Google Docs makes me more productive.	35.9%	41.0%	23.1%	0%
CP 2	Google Docs makes it easy for me to provide feedback to friends.	56.4%	33.3%	5.1%	5.1%
CP 3	Google Docs helps me to collaborate more with classmates.	48.7%	33.3%	15.4%	2.6%

Based on Table 4, the questionnaire results indicate that Google Docs is perceived positively in supporting students’ collaborative productivity during academic writing instruction. The majority of respondents believe that the use of Google Docs not only enhances individual work efficiency but also facilitates interaction and collaboration among students during the writing process.

For indicator CP1, which relates to students’ perceptions of increased productivity when using Google Docs, 35.9% of respondents strongly agreed and 41.0% agreed. With a total of 76.9% positive responses, these results indicate that most students feel the use of Google Docs helps them work more productively in completing academic writing assignments. These findings indicate that ease of access, the autosave feature, and the ability to edit documents flexibly contribute to the efficiency of the writing task process.

For indicator CP2, regarding the ease of providing feedback to peers via Google Docs, 56.4% of respondents strongly agreed and 33.3% agreed, resulting in a total of 89.7% of respondents giving a positive response. This percentage is the highest within the collaborative productivity dimension, indicating that students strongly perceive the benefits of the comment and suggestion modes in facilitating peer-to-peer feedback. These findings indicate that Google Docs significantly supports peer review practices in academic writing instruction.

Furthermore, regarding indicator CP3—which addresses the role of Google Docs in enhancing collaboration with classmates—48.7% of respondents strongly agreed, and 33.3% agreed, resulting in a total of 82% positive responses. These results indicate that the majority of students view Google Docs as an effective tool for enhancing cooperation during group writing activities and text-based discussions. The real-time collaborative editing feature allows students to interact simultaneously within a single document, making the collaboration process more efficient and coordinated.

Findings regarding the dimension of collaborative productivity indicate that Google Docs significantly contributes to enhancing work efficiency, facilitating peer feedback, and improving collaboration among students in academic writing instruction. These findings confirm that the use of Google Docs serves not only as a digital writing tool but also as a collaborative learning platform capable of enhancing academic interaction and student productivity throughout the writing process.

Overall, the research findings indicate that students have a positive perception of the use of Google Docs in academic writing instruction across all dimensions examined: engagement, motivation, and collaborative productivity. Regarding engagement, Google Docs is perceived as enhancing students' active participation in the writing process, creating a more interactive learning experience, and providing a comfortable environment for receiving feedback during the revision process. Regarding motivation, the use of Google Docs was found to encourage students to be more motivated in both writing and revising academic texts, as well as fostering a desire to continue using the platform in future learning activities. Meanwhile, regarding collaborative productivity, Google Docs was deemed effective in improving students' work efficiency, facilitating the peer-to-peer feedback process, and strengthening collaboration in joint writing activities.

These findings indicate that the integration of Google Docs into academic writing instruction serves not only as a supporting technological tool but also as a pedagogical instrument capable of facilitating a more participatory, reflective, and collaborative writing learning experience. Thus, Google Docs holds significant potential for implementation as a digital learning tool to support the development of academic writing skills in education.

Challenges of the implementation of writing engagement through Google Docs

From the lecturer's perspective, several challenges were identified regarding student engagement during the use of Google Docs. L1 and L4: *"One of the significant challenges during writing engagement using Google Docs is operating it effectively."* Meanwhile, students gave positive and interactive responses to the simple learning model and integrated learning technology. The aspect that made students' views positive was when they collaborated to write with friends through Google Docs. L5 stated, *"Google Docs makes students in my class more interactive. This is because, during the learning process, I asked them to form groups to create essays with themes I had determined. Then, they could collaborate easily by utilizing the edit, comment, and suggestion features. However, during writing, students were also found to be continuously involved, and some lost focus when collaborating"*. This highlighted the need for more strategies to maintain student engagement in writing through Google Docs.

In addition, the lecturer noted the challenges related to students' comprehension and understanding of writing in a structured manner. L3 *"While involved in writing and collaborating, students have difficulty in writing essays with a coherent structure, especially when the transition of understanding the discussion from one paragraph to the next paragraph there is a difference in a discussion so that it makes the writing less*

comprehensive.” L2 “not all students can understand the transition of writing with their group members on the topic that I have given them, this is because not all students have the same skills in writing.” This underscores students' need for intensive teaching on writing mechanisms and additional supporting mechanisms to make writing more structured and coherent.

Lecturers also highlighted challenges related to adapting to diverse learning when writing using Google Docs. L4 *“Learning to write with Google Docs is learning by utilizing various features they have not learned before.”* The features of this technology will be beneficial when students have mastered and understood all the existing features. L1 *“During the writing process using Google Docs, students are involved during the before stage, during stage, and after stage well, but some students are still passive in their involvement in writing because writing collaboratively with Google Docs is not easy, as they have to master the basics of good writing and know the features of Google Docs.”* From these results, it can be concluded that to overcome this problem, an intensive learning model adaptation is needed.

The next challenge in the process of involving students in writing using Google Docs is the inconsistent Google Docs page format. The problem often found when writing participation with the application is that collaborative writing often results in inconsistent formatting and disorganized paragraph structures. L2 remarked, *“When monitoring the process of student writing involvement in my class, there are many problems. I often find that the writing they work on collaboratively is often messy and needs to be tidied up again.”* This point requires a solution to present a more effective writing involvement process to maintain a neat writing format.

DISCUSSION

The findings of this study reveal that students perceived Google Docs positively in supporting engagement, motivation, and collaborative writing practices during academic writing instruction. Rather than merely demonstrating the effectiveness of technology, these findings should be interpreted through the pedagogical processes underlying students' learning experiences. The positive perceptions identified in this study may be attributed to several affordances of Google Docs, particularly its capacity to facilitate real-time interaction, provide transparency in the revision process, and enhance the visibility of individual contributions. These features support students' active participation and create opportunities for continuous feedback and collaborative knowledge construction. In this regard, the findings align with the socio-constructivist perspective, which emphasizes that learning develops through social interaction, reflection, and collaborative engagement among learners. However, the extent to which students experienced meaningful engagement varied depending on how technology was integrated into instructional practices and supported through appropriate pedagogical strategies.

Upon further analysis, student engagement in this study is not singular but encompasses behavioral, cognitive, and emotional dimensions. Behaviorally, students demonstrated increased participation through collaborative writing activities and the provision of feedback. Cognitively, the revision process and discussions fostered reflection on the quality of their writing. Meanwhile, emotionally, the comfort of using the digital platform contributed to increased confidence in writing. Nevertheless, this

engagement does not occur uniformly among all students, indicating that technology does not automatically generate deep engagement.

The findings also show that interactions via Google Docs are more active than face-to-face discussions in certain situations. This can be explained by the asynchronous and flexible nature of digital platforms, which allow students time to think before responding. These findings expand upon previous research (e.g., Liu & Lan, 2016; Neumann & Kopcha, 2019), which emphasized the effectiveness of digital feedback, by showing that increased interaction depends not only on the speed of feedback but also on the reflective space provided by technology. However, these findings are not entirely consistent with other studies reporting that online interactions can be superficial or lack meaning. This discrepancy indicates that the quality of interactions is significantly influenced by task design and the pedagogical strategies employed.

Although there is a trend toward increased engagement, this study also found passive participation among some students. This phenomenon suggests that the presence of collaborative technology does not guarantee active engagement. Passive participation can be caused by various factors, such as low self-confidence in English language ability, reliance on more dominant group members, and a learning culture that remains teacher-centered. In the context of higher education in Indonesia, where students are often accustomed to more structured and hierarchical learning approaches, the transition to technology-based collaborative learning can present its own challenges. Additionally, factors such as digital literacy and access to technology also have the potential to influence student participation levels.

These findings confirm that the effectiveness of Google Docs depends heavily on the pedagogical design that accompanies it. Strategies such as collaborative role-sharing, the use of structured feedback rubrics, and the utilization of revision history features to track individual contributions have proven crucial in fostering student accountability. Thus, technology serves as a facilitator, not the primary determinant of learning success. Without the support of appropriate strategies, the collaborative potential of technology may not be fully realized.

Additionally, the user-friendliness of the technology plays a role in supporting student engagement. A simple interface and features like auto-save provide a sense of security during the writing process. However, this ease of use does not necessarily correlate directly with improved writing quality. This indicates that technical factors must be combined with pedagogical interventions focused on the substantive development of writing skills. These findings expand upon previous studies (Zhang & Zou, 2022) by emphasizing that ease of use is merely a supporting condition, not the primary factor in improving learning quality.

Overall, the results of this study indicate that Google Docs has the potential to support student engagement, motivation, and collaboration in academic writing instruction, but only within specific contexts and when supported by structured instructional design. In other words, its effectiveness is conditional and cannot be broadly generalized. This study contributes by demonstrating that the relationship between technology, student engagement, and writing instruction is complex and influenced by interacting pedagogical, cultural, and individual factors.

CONCLUSION

This study shows that the use of Google Docs in academic writing instruction is associated with increased student engagement, motivation, and collaborative interaction. Rather than merely serving as a technical tool, this platform functions as a learning space

that facilitates more open interaction, transparent revision processes, and more responsive feedback exchanges. These findings suggest that features such as real-time editing, comments, and revision tracking can support learning practices aligned with the principles of social constructivism, where knowledge is constructed through collaboration and social interaction.

However, the effectiveness of Google Docs cannot be separated from its accompanying pedagogical context. Research results show that increased student engagement and motivation are not solely due to technology, but also to structured instructional design, clear instructions, and mechanisms for monitoring individual contributions. Thus, the use of digital technology in writing instruction must be understood as part of a broader pedagogical strategy, not as a standalone solution.

In the context of EFL higher education in Indonesia, these findings highlight the potential of collaborative platforms to address challenges in writing instruction, such as limited feedback and low student participation. However, factors such as variations in language proficiency, digital literacy, and a teacher-centered learning culture remain critical considerations.

This study has several limitations. The data used are largely perceptual and obtained through questionnaires and interviews, so it does not fully represent improvements in writing ability objectively. Additionally, the limited scope of the sample to a single institutional context restricts the generalizability of the findings.

Therefore, future research is recommended to examine the impact of using Google Docs longitudinally, using an experimental design, and to further explore the dimensions of student engagement (behavioral, cognitive, and emotional) in various EFL contexts. With this approach, a more comprehensive understanding of the role of technology in academic writing instruction can be developed.

ACKNOWLEDGMENT

We want to express our deepest gratitude to the students who participated. Your enthusiasm, effort, and commitment were invaluable contributions to the success of this study. In addition, we would also like to express our most profound appreciation to the advisors for their outstanding guidance, support, and expertise throughout the research process. Your guidance and constructive input were vital in shaping this research and ensuring its success. We greatly appreciate the dedication and encouragement you have provided.

REFERENCES

- Akram, H., Abdelrady, A. H., Al-Adwan, A. S., & Ramzan, M. (2022). Teachers' Perceptions of Technology Integration in Teaching-Learning Practices: A Systematic Review. *Frontiers in Psychology, 13*(June), 1–9. <https://doi.org/10.3389/fpsyg.2022.920317>
- Alharbi, M. A. (2020). Exploring the potential of Google Docs in facilitating innovative teaching and learning practices in an EFL writing course. *Innovation in Language Learning and Teaching, 14*(3), 227–242. <https://doi.org/10.1080/17501229.2019.1572157>
- Artama, K. K. J., Budasi, I. G., & Ratminingsih, N. M. (2023). Promoting the 21st Century Skills Using Project-Based Learning. *Language Circle: Journal of Language and Literature, 17*(2), 325–332. <https://doi.org/10.15294/lc.v17i2.39096>
- Chapelle, C. A., & Sauro, S. (2017). Introduction to the Handbook of Technology and Second Language Teaching and Learning. *The Handbook of Technology and Second*

- Language Teaching and Learning*, 1–9. <https://doi.org/10.1002/9781118914069.ch1>
- Creswell, J. W. (2021). *A Concise Introduction to Mixed Methods* (Second edi). SAGE publications.
- Crompton, H., Bernacki, M., & Greene, J. A. (2020). Psychological foundations of emerging technologies for teaching and learning in higher education. *Current Opinion in Psychology*, 36, 101–105. <https://doi.org/10.1016/j.copsyc.2020.04.011>
- Dakhi, O., Jama, J., & Irfan, D. (2020). Blended learning: a 21St Century Learning Model At College. *International Journal of Multi-Science*, 1(7), 50–65. <https://multisciencejournal.com/index.php/ijm/article/view/92>
- Deakin Crick, R., & Goldspink, C. (2014). Learner Dispositions, Self-Theories, and Student Engagement. *British Journal of Educational Studies*, 62(1), 19–35. <https://doi.org/10.1080/00071005.2014.904038>
- Liu, S. H. J., & Lan, Y. J. (2016). Social constructivist approach to web-based EFL learning: Collaboration, motivation, and perception on the use of Google Docs. *Journal of Educational Technology & Society*, 19(1), 171-186.
- Hakimah, N. (2023). Assessing the Impact of Project-Based Learning on Students' Writing Skills: A Pre-Experimental Study. *Acitya: Journal of Teaching and Education*, 5(2), 434–448. <https://doi.org/10.30650/ajte.v5i2.3723>
- Marshall, S. (2007). Engagement Theory, WebCT, and academic writing in Australia Simone Marshall University of Sydney, Australia. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, 3(2), 109–115. <https://www.learntechlib.org/p/188040/>.
- Moonma, J. (2021). Comparing Collaborative Writing Activity in EFL Classroom: Face-to-Face Collaborative Writing versus Online Collaborative Writing Using Google Docs. *Asian Journal of Education and Training*, 7(4), 204–215. <https://doi.org/10.20448/journal.522.2021.74.204.215>
- 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>
- Neumann, K. L., & Kopcha, T. J. (2019). Using Google Docs for Peer-Then-Teacher Review on Middle School Students Writing. *Computers and Composition*, 54, 102524. <https://doi.org/10.1016/j.compcom.2019.102524>
- Richards, J. C., & Renandya, W. A. (2022). Methodology in Language Teaching An Anthology of Current Practice, Chapter 1 ~ English Language Teaching in the “Post-Method” Era: Toward Better Diagnosis, Treatment, and Assessment. *Research Gate*, May. <https://doi.org/10.13140/RG.2.2.36344.72962>
- Saeed, M. A., & Al Qunayeer, H. S. (2022). Exploring teacher interactive e-feedback on students' writing through Google Docs: factors promoting interactivity and potential for learning. *Language Learning Journal*, 50(3), 360–377. <https://doi.org/10.1080/09571736.2020.1786711>
- Wilson, J., Ahrendt, C., Fudge, E. A., Raiche, A., Beard, G., & MacArthur, C. (2021). Elementary teachers' perceptions of automated feedback and automated scoring: Transforming the teaching and learning of writing using automated writing evaluation. *Computers and Education*, 168(April), 104208. <https://doi.org/10.1016/j.compedu.2021.104208>
- Zhang, R., & Zou, D. (2022). Types, features, and effectiveness of technologies in collaborative writing for second language learning. *Computer Assisted Language Learning*, 35(9), 2391–2422. <https://doi.org/10.1080/09588221.2021.1880441>

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/ijtlhe/>