

International Conference on Public Policy & Social Sciences 2023

13-15 September 2023

Organized by the Faculty of Administrative Science & Policy Studies, Universiti Teknologi MARA (UiTM), Seremban Campus, Negeri Sembilan, Malaysia, and International University of Sarajevo (IUS), Bosnia and Herzegovina

Learning Writing Online and Online Collaborative Writing

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Abstract

Online collaborative writing (OCW) has gained considerable attention as one technique to improve student writing skills. The present study intends to examine motivating and demotivating factors in OCW, and investigate the relationship between learning writing online and OCW. 123 respondents completed a questionnaire comprising six sections with 63 items. Generally, the respondents possess a positive perception towards OCW, and some pertinent factors aid and hinder them in writing. A strong positive relationship between learning writing online and a few factors is also observed. The findings yield significant insights and implications for the teaching and learning of collaborative writing in online settings.

Keywords: online writing; collaborative writing; online learning; learning motivations

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DOI: <https://doi.org/10.21834/e-bpj.v9iSI22.5818>

1.0 Introduction

There is increasing research attention to OCW, focusing on teaching challenges from instructors and teachers (Chanwaiwit & Inpin, 2021; Irshad, 2022; Zhang et al., 2022). These studies have contributed valuable insights into the pedagogical methods and scaffolding techniques to help students. However, a few review studies have investigated how students perceive online writing and the challenges they encounter. While the digital shift in learning and the government education policy is crucial, understanding how students are doing with this transition and their perceptions of online writing, in general, remains underexplored. Additionally, there needs to be more comprehensive research that investigates how different cultural contexts and types of motivation and demotivation for them to learn writing online impact their acceptance of this practice.

This research aims to explore learners' perceptions of online writing, group work, collaborative writing, and demotivating factors, ultimately examining the relationship between learning writing online and OCW. By exploring these elements, this study seeks to provide

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DOI: <https://doi.org/10.21834/e-bpj.v9iSI22.5818>

more holistic understanding of the enablers and barriers to the online writing process, thus contributing to the bigger pool of collaborative language learning technology.

2.0 Literature Review

2.1 Online Collaborative Writing

With the emergence of various modern technologies, online group work has become more accessible. Online group work is beneficial for its convenience and interactivity between group members. In fact, with group work, tasks at hand will become easier and faster to complete (Rahmat, 2022). This is because they can share and exchange ideas as well as learn to negotiate with each other. This positive and supportive environment helps learners improve the quality of work produced and their communication skills too (Vorobel & Kim, 2017). Fathi et al. (2021) also revealed a substantial difference between the mean writing scores of the two groups in their experiment, as those using Google Documents received higher mean scores compared to students working in groups in a traditional classroom.

Thus, it shows that learning writing online is beneficial for learners as it helps to improve their knowledge. Despite various positive feedback regarding doing group work online, learners may experience setbacks too. Even though sharing and receiving feedback is one of the huge benefits of doing group work online, some feedback may need to be addressed by group members (Irshad, 2022). This challenge may lead to reluctance to offer feedback to avoid hurting their friends' feelings. Alwaheebi and Al-Qahtani (2022) further revealed that other challenges may include technical difficulties, limited knowledge of operating technology, and time constraints.

2.2 Benefits and Drawbacks of Online Collaborative Writing

Many studies have investigated the effectiveness and challenges of collaborative online learning. A study done by Nasri et al. (2022) found that most ESL (English as Second Language) learners reacted positively to using Google Docs in learning writing, and the provision of written corrective feedback facilitated the students' understanding of the writing task. Meanwhile, Hashem (2017) found that working in a group is more beneficial than working alone since it improves writing skills through blogging. This is because group members may have had debates while blogging. Furthermore, when students realize that their readers and audience are not only their teacher(s), they become more conscious of paying close attention to what they write and revising it, most often several times, to ensure the final output is more attractive in terms of both content and form. This ongoing contact fuels the learners' drive to continue writing and communicating in a two-way manner, both with the reader and with themselves.

One of the challenges discussed about the online group task is technology issues. Nykopp et al. (2019) examined the quality of essays produced collaboratively by 28 Finnish university students in an online setting. The findings revealed that technical problems significantly impacted students' collaborative writing performance. Less technical issues encountered while writing resulted in better quality essays than groups with more technical problems experienced. The same technological issue and lack of computer skills were also reported by Bui et al. (2021).

2.3 Conceptual Framework

Figure 1 below shows the conceptual framework of the study. This study is rooted in several past researchers' concepts of learning writing online and collaborative online writing (Loan, 2021; Aulia & Hamzah, 2020; Rahmat, 2022; Farah, 2015). This study explores the factors that demotivate learners regarding online writing. The factors are technical and materials (Loan, 2021; Nguyen & Duong, 2021; Lo & Melor, 2021; Irshad, 2022) and attitude (Loan, 2021; Alyami et al., 2021).

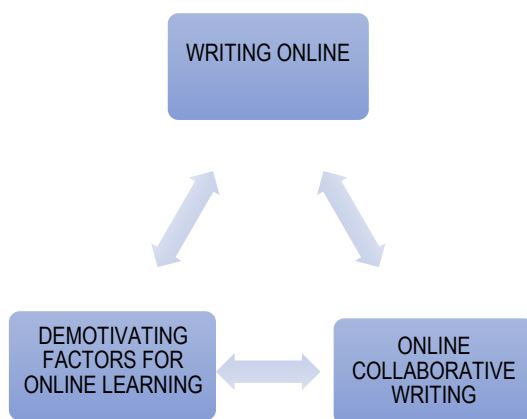


Figure 1- Conceptual Framework of the Study

3.0 Methodology

This quantitative study aims to explore OCW and motivating and demotivating factors for learning among undergraduates. The 5 Likert-scale survey is used to collect data from 123 purposive respondents. Purposive sampling was used as these students were collaboratively writing online to complete their assignments. The survey consists of 6 sections: A) Demographic profile, B) Learning writing online, C) Perception towards group writing, D) Perception of online writing collaboration (Loan, 2021; Aulia & Hamzah, 2020; Rahmat, 2022), E) Demotivation factors for technical and materials (Loan, 2021; Nguyen & Duong, 2021; Lo & Melor, 2021; Irshad, 2022) and F) Demotivation factors-attitude (Loan, 2021; Alyami et. al, 2021). The items in the survey have been reviewed by a lecturer with 40 years of experience in teaching writing. A pilot study was conducted on 30 students to test the items' validity.

Ethics approval was obtained before data collection, and the survey was distributed to the respondents using a Google Form. Reliability analysis shows a Cronbach alpha of .945, thus revealing the good reliability of the instrument used. Further analysis using SPSS is done to present findings to answer the research questions for this study.

4.0 Findings

4.1 Findings for Perception of Online Writing

Table 4.1- Mean for Learning Writing Online

No.	Statement	Mean
1	I am unable to concentrate on my learning when I learn writing online.	3.6
2	There is a lack of student-student and student-teacher interaction when I learn writing online.	3.6
3	I am not good at managing time when I learn writing online.	3.7
4	I am not motivated when I learn to write online.	3.4
5	I find it difficult to collaborate with my classmates when I learn writing online.	3.3
6	It is very EFFECTIVE to learn writing online in terms of increasing knowledge.	3.5
7	It is very USEFUL to learn writing online in terms of increasing knowledge.	3.7
8	It is very CONVENIENT to learn writing online in terms of increasing knowledge.	3.7
9	It is easy to INVOLVE in learning writing online in terms of increasing knowledge.	3.6
10	There are too many obstacles to learning online writing in terms of increasing knowledge.	3.2
11	Learning writing online enhances my social competencies.	3.2
12	The activities during online writing lessons are very active and engaging.	3.4
13	I enjoy writing online so much.	3.5

Table 4.1 illustrates the mean scores for learning writing online. Three statements recorded the highest mean score, which is at 3.7. The participants noted that despite having problems managing their time in learning writing online, they still perceive learning writing online as useful and convenient in increasing their knowledge. The lowest mean score (M=3.2) was recorded for two items; which were Item 10 "There were too many obstacles in learning online writing in terms of increasing knowledge" and Item 11 "Learning writing online enhances my social competencies".

4.2 Findings for Perception of Group Work Online

Table 4.2- Mean for Perception towards Group Work

No.	Statement	Mean
	IMPROVE INTERACTION	4.0
1	My group members help me understand better.	4.0
2	In group work, my friends' parts help me to make my task complete.	4.0
3	I enhance my interpersonal skills.	4.0
4	I get useful feedback.	4.0
5	I build confidence while working with peers.	4.2
6	I get a chance to express ideas in the group.	4.0
7	I improve my negotiation skills.	4.1
	IMPROVE WORK	4.1
1	In group work, my friends' ideas help me understand the task better.	3.9
2	My group members help me complete the tasks faster.	4.1
3	I become a better user of computers and technology.	3.9
4	I write better essays in a group.	3.8
5	I stimulate my critical thinking skills.	3.9
6	I enjoy writing more when I write collaboratively.	4.0

Table 4.2 presents the mean value for Perception towards Group Work. All items show positive feedback towards group work. Learners agreed that working in groups improves interaction, with the highest mean score for the confidence aspect (M=4.2). They also viewed that peers play essential roles in understanding better, completing tasks, and expressing ideas (M=4). Besides, learners believe they become computer literate (M=3.9) and write better essays in a group (M=3.8).

4.3 Findings for Online Collaborative Writing

Table 4.3- Mean for Perception Towards Online Collaborative Writing

No.	Statement	Mean
1	If I had written the text individually instead of in a group or a pair, I think its content would have been worse.	3.5
2	If I had written the text individually instead of in a group or a pair, I think its vocabulary would have been worse.	3.5
3	If I had written the text individually instead of in a group or a pair, I think its grammar would have been worse.	3.5
4	I think this collaborative writing task helped improve my vocabulary knowledge.	4.0
5	I think this collaborative writing task was helpful in improving my grammar knowledge.	3.9
6	I feel that collaboration is interesting if we select our team members.	4.0
7	I am willing to participate in online discussions if the topic is interesting.	4.0
8	I am willing to collaborate online if the teacher rewards me.	3.5
9	I am willing to collaborate online when the task is divided equally and each of us does her part.	4.1
10	I feel happy if my classmates help me with my project.	4.2
11	I feel happy if I help my friends.	4.3
12	I feel that it is very beneficial for all of us to help each other at work.	4.3

Table 4.3 shows the mean scores obtained for motivation to write online collaboratively. The highest mean score is recorded on items 11 and 12 (M=4.3), indicating that the respondents feel happy if they get help from their friends, and they think it is very beneficial for all of them to help each other at work. Meanwhile, the lowest mean recorded is on item 5 (M=3.9), where most respondents think that the collaborative writing task was helpful in improving their knowledge of grammar.

4.4 Findings for Demotivating Factors (technical and materials) for Online Collaborative Writing

Table 4.4: Mean for Demotivation Factors for Online Group Work (Technical & Materials)

No.	Statement	Mean
1	I have a slow/unstable internet connection.	3.5
2	I have inadequate/insufficient digital devices or equipment to learn writing online.	3.5
3	I have limited ICT knowledge/skills.	3.5
4	The online writing platform is difficult to use.	4
5	I encounter problems/errors related to the online platform used.	3.9
6	I do not understand the nature of the assignment/task that I have to do.	4
7	The course materials provided are unsuitable/difficult for me.	4
8	The explanation given by my lecturer is unclear.	3.5
9	My lecturer has limited knowledge/literacy in ICT.	4.1
10	My partner/groupmate has limited ICT skills to use the online platform.	4.2

Based on Table 4.4, the highest mean (M:4.2) was recorded for the last item, where the participants felt that their partner/groupmate had limited ICT skills to use the online platform. Four items had a mean of 3.5, and they are "explanation given by my lecturer is unclear," "limited ICT knowledge/skills," "inadequate/insufficient digital devices or equipment to learn writing online," and "slow/unstable internet connection,." Next, three items had a similar mean of 4, and they were "online writing platform is difficult to use," "do not understand the nature of the assignment/task that I have to do," and "course materials provided are unsuitable/difficult for me."

4.5 Findings for Demotivation Factors (Attitude) in Online Collaborative Writing

Table 4.5: Mean for Demotivation Factors When Learning to Write Online Collaboratively (Attitude)

No.	Statement	Mean
1	I am easily distracted by other things (e.g. phone, house chores, etc.)	3.7
2	I do not have a proper learning environment to study.	3.1
3	I tend to lose concentration gradually in a long-lasting teaching session.	3.5
4	It is difficult for me to understand what I learn due to less interaction with the teacher and classmates.	3.2
5	I feel that online writing class is less fun without direct interaction with the teacher and classmates.	3.4
6	I am not good at managing time when I take a writing course online.	3.1
7	I find it difficult to do online tasks as it requires more time than on-campus classes.	3.1
8	I often tend to delay my tasks.	3.2
9	I feel that my time management skill needs more improvement.	3.8
10	I find out that online learning is challenging and it has affected my time.	3.3
11	My performance in online learning is degraded due to mis-planning.	3.3
12	I am not motivated when I take a writing course online.	3
13	I find it difficult to be motivated to study as much as I do at school.	3.1
14	I was not excited and could not focus during the online course.	3
15	I am less creative in writing because I am tired of writing courses online.	3

Table 4.5 shows the mean scores for demotivating factors regarding attitude for online group work. The highest mean score (M=3.8) was recorded for item 9, where the participants felt that their time management skills needed to be improved. In contrast, items 12, 14, and 15 recorded the lowest mean score of 3.00. The items were "I am not motivated when I take a writing course online, I am not excited and cannot focus during the online course and I am less creative in writing because I am tired of writing courses online".

4.6 Findings on Relationships between Learning Writing Online and Online Collaborative Learning

To determine if there is a significant association in the mean scores between learning writing online and online collaborative writing, data is analyzed using SPSS for correlations. Results are presented separately in tables 4.6, 4.7, 4.8, and 4.9 below.

Table 4.6: Correlation of Learning Writing Online Vs. Perception Towards Group Work

		Writing Online	Group Work Perception
Writing Online	Pearson Correlation	1	.685**
	Sig. (2-tailed)		.000
	N	123	123
Group Work Perception	Pearson Correlation	.685**	1
	Sig. (2-tailed)	.000	
	N	123	123

** . Correlation is significant at the 0.01 level (2- tailed).

Table 4.6 shows an association between learning writing online and perception towards group work. Correlation analysis shows a highly significant association between learning writing online and perception towards group work. ($r=.685^{**}$) Moreover, ($p=.000$). According to Jackson (2015), the coefficient is significant at the .05 level, and a positive correlation is measured on a 0.1 to 1.0 scale. A weak positive correlation would be between 0.1 to 0.3, a moderate positive correlation from 0.3 to 0.5, and a strong positive correlation from 0.5 to 1.0. This means there is also a strong positive relationship between learning writing online and perception towards group work.

Table 4.7: Correlation of Learning Writing Online Vs. Motivation to Do Collaborative Online Writing

		Writing Online	Motivation for collaborative online writing
Writing Online	Pearson Correlation	1	.599**
	Sig. (2-tailed)		.000
	N	123	123
Motivation for collaborative online writing	Pearson Correlation	.599**	1
	Sig. (2-tailed)	.000	
	N	123	123

** . Correlation is significant at the 0.01 level (2- tailed).

Table 4.7 shows an association between learning writing and motivation to do collaborative online writing. Correlation analysis shows that there is a highly significant association between learning writing and motivation to do collaborative online writing ($r=.599^{**}$) and ($p=.000$). According to Jackson (2015), the coefficient is significant at the .05 level, and positive correlation is measured on a 0.1 to 1.0 scale. A weak positive correlation would be between 0.1 to 0.3, a moderate positive correlation from 0.3 to 0.5, and a strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between learning writing and motivation to do collaborative online writing.

Table 4.8: Correlation Motivation Online Collab Vs. Demotivation-Technical Aspects & Materials

		Motivation for collaborative online writing	Demotivation Factors (tech & material)
Motivation for collaborative online writing	Pearson Correlation	1	.093**
	Sig. (2-tailed)		.308
	N	123	123
Demotivation Factors (tech & materials)	Pearson Correlation	.093**	1
	Sig. (2-tailed)	.308	
	N	123	123

Table 4.8 shows no association between motivation for online collaboration and demotivation factors (technical aspects and materials).

Table 4.9: Correlation Motivation Online Collab Vs. Demotivation -Attitude

		Motivation for collaborative online writing	Demotivation Factors (attitude)
Motivation for collaborative online writing	Pearson Correlation	1	.222*
	Sig. (2-tailed)		.013
	N	123	123
Demotivation Factors (attitude)	Pearson Correlation	.222*	1
	Sig. (2-tailed)	.013	
	N	123	123

*. Correlation is significant at the 0.05 level (2- tailed).

Table 4.9 shows an association between motivation for online collaborative writing and demotivation factors (attitude). Correlation analysis shows that there is a highly significant association between motivation for online collaborative writing and demotivation factors (attitude) ($r=.222^{**}$) and ($p=.000$). According to Jackson (2015), the coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. A weak positive correlation would be between 0.1 to 0.3, a moderate positive correlation from 0.3 to

0.5, and a strong positive correlation from 0.5 to 1.0. This means that there is also a weak positive relationship between motivation for online collaborative writing and demotivation factors (attitude).

5.0 Discussion

The present study aims to find perceptions and relations between learning writing online and OCW. In general, the finding suggests that learners perceived learning writing online as valuable and convenient in gaining knowledge despite their problem in managing time. They also agreed that working collaboratively online enhances their interpersonal skills and confidence level to write better essays as they help each other at work. This result parallels the studies by Rahmat (2021) and Fathi et al. (2021), who found that positive and supportive environments motivate learners to communicate and perform better.

Regarding the demotivating factors (technical and materials) for collaborative writing, learners felt that their group mates had difficulties and were not capable enough to operate the online tools when writing. The same finding has been reported by Nykopp et al. (2019) and Bui et al. (2021). Regarding attitude as the demotivating factor, learners admitted that their time management skills needed improvement. These technical and people issues in online writing significantly contribute to poor-quality writing.

The following research question points to the relationship between learning writing online and OCW. Overall, there is a strong positive relationship between learning writing online and i) perception towards group work and ii) motivation to collaborative online writing. In addition, correlation analysis shows a highly significant association between motivation for OCW and demotivation factors (technical aspects and materials). Meanwhile, there is a weak positive relationship between motivation for OCW and demotivation factors (attitude).

6.0 Conclusion & Recommendations

In conclusion, the study suggests that learning writing online is perceived as a valuable and convenient approach to acquiring writing skills. OCW is seen to enhance interpersonal skills and confidence among learners. However, technical issues and inadequate materials can be demotivating factors that impact the quality of collaborative writing. Improving technical proficiency, addressing material limitations, and enhancing time management skills are crucial for fostering a positive and productive online writing environment.

These findings may lead to the first pedagogical implication, which is integrating collaborative technologies into the language learning classroom. This integration will equip students with new learning aids for completing group tasks and help them see the possibilities that online collaboration can provide while learning writing and working collaboratively. Support and assistance from teachers are also necessary to facilitate and maximize student learning potential in writing.

Due to the sample size, the findings are limited to these respondents only and cannot be generalized to the whole population of ESL learners. Future studies should include a larger sample size from different demographics and proficiency backgrounds to address the research question effectively and obtain more accurate data. Second, semi-structured interviews could be conducted to triangulate the data from the survey and gain an in-depth understanding of OCW.

Acknowledgment

We thank Universiti Teknologi MARA (UiTM) Cawangan Johor for the funding under Geran Penyelidikan Bestari Fasa 1/2022 (600-UiTMCJ (PJA. 5/2) that made the publication of this research possible. Before data collection, Ethics approval (REC/07/2022 (PG/MR/140) was also obtained to collect data from the respondents. We are truly grateful for the financial assistance that enabled us to carry out this study and explore new avenues of knowledge.

Paper Contribution to Related Field of Study

This research paper contributes significantly to online learning and collaborative writing. By examining how learners engage and interact with one another while engaging in collaborative writing tasks, this research uncovers the dynamics and benefits of online collaboration. The findings provide educators and researchers valuable insights into designing practical online collaborative writing activities and fostering meaningful collaboration among learners.

References

- Alyami, A., Abdulwahed, A., Azhar, A., Binsaddik, A., & Bafaraj, S. M. (2021). Impact of Time-Management on the Student's Academic Performance: A Cross-Sectional Study. *Creative Education*, 12, 471-485. <https://doi.org/10.4236/ce.2021.123033>
- Andrew, M. (2019). Collaborating online with four different google apps: Benefits to learning and usefulness for future work. *Journal of Asia TEFL*, 16(4), 1268-1288. <https://doi.org/10.18823/asiatefl.2019.16.4.13.1268>
- Alwaheebi, E. W. & Al-Qahtani, F. M. (2022). EFL Instructors' and Students' Perceptions of Online Writing Instruction During the COVID-19 Pandemic. *Journal of Language Teaching and Research*, 13 (4), pp. 809-819. DOI: <https://doi.org/10.17507/jltr.1304.14>

- Aulia, A., and Hamzah. (2020). Students' Perception on Online Learning Media for Learning English Writing Skill during Covid-19 Pandemic. *Advances in Social Sciences, Education and Humanities Research*, Vol 579, pp 202-206. <http://dx.doi.org/10.2991/assehr.k.210914.039>
- Bui, T. X. T., Ha, Y. N., Nguyen, T. B. U., Nguyen, V. U. T., & Ngo, T. C. T. (2021). A Study on Collaborative Online Learning among EFL Students in Van Lang University (VLU). *AsiaCALL Online Journal*, 12(3), 9-21. Retrieved from <https://asiacall.info/acoj/index.php/journal/article/view/32>
- Chanwaiwit, P., & Inpin, B. (2021). Synchronous collaborative writing instruction in a university EFL context: Challenges and solutions. *World Journal of Educational Technology: Current Issues*, 13(4), 721-739. <https://doi.org/10.18844/wjet.v13i4.6259>
- Diem Thi Ngoc Hoang & Thinh Hoang. (2022). Enhancing EFL students' academic writing skills in online learning via Google Docs-based collaboration: a mixed-methods study. *Computer Assisted Language Learning*, DOI: 10.1080/09588221.2022.2083176
- Fathi, J., Arabani, A.S. & Mohamadi, P. (2021). The Effect of Collaborative Writing Using Google Docs on EFL Learners' Writing Performance and Writing Self-regulation. *Language Related Research*, 12 (5), 333-359. <https://doi.org/10.29252/LRR.12.5.12>
- Hashem, A. Alsamadani. (2017). The Effectiveness of Using Online Blogging for Students' Individual and Group Writing. *International Education Studies*; Vol. 11, No. 1; 2018, pp 44-51. Retrieved from <https://doi.org/10.5539/ies.v11n1p44>
- Irshad, M. (2022). Challenges Encountered During Synchronous Online Collaborative Writing via Google Docs. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, 17(6), 1-14. <http://doi.org/10.4018/IJWLTT.287554>
- Jackson, S.L. (2015). *Research methods and Statistics-A Critical Thinking Approach (5th Edition)* Boston, USA: Cengage Learning.
- Loan, B.T.K. (2021). The Challenges of Online Writing Learning via Microsoft Teams. *AsiaCALL Online Journal*. Vol 13(1), pp 132-149. Retrieved from <https://www.researchgate.net/deref/http%3A%2F%2Fdoi.org/10.11251%2Facoj.13.01.008>
- Lo, Y. K. & Melor, M.Y. (2021). Collaborative Tools in Enhancing ESL Writing during Covid 19: A Systematic Review. *International Conference on Business Studies and Education (ICBE)*. <https://www.icbe.my/wp-content/uploads/2021/07/Lo-Yuok-Yee.pdf>
- Nasri, N. F., Habali, A. H. M., & Adam, M. H. M. (2022). Google Docs: Students' Perceptions as Online Collaborative Tool in Learning Writing Skills. *International Journal of Academic Research in Progressive Education and Development*, 11(3), 690-705. <http://dx.doi.org/10.6007/IJARPE/v11-i3/14611>
- Nguyen, H. U. N., & Duong, L. N. T. (2021). The Challenges of E-learning Through Microsoft Teams for EFL Students at Van Lang University in COVID-19. *AsiaCALL Online Journal*, 12(4), 18-29. Retrieved from <https://asiacall.info/acoj/index.php/journal/article/view/60>
- Nykopp, M., Marttunen, M. & Erkens, G. (2019). Coordinating collaborative writing in an online environment. *J Comput High Educ* 31, 536-556. <https://doi.org/10.1007/s12528-018-9203-3>
- Rahmat, N.H. (2022). Exploring Task Environment for Online Academic Writing: The Case for Coloured Scaffolds. *International Journal of Academic Research in Business & Social Sciences*, Vol 12(3), pp 694-707. Retrieved from <http://dx.doi.org/10.6007/IJARBS/v12-i3/12928>
- Vorobel, O. & Kim, D. (2017). Adolescent ELLs' collaborative writing practices in face-to-face and online contexts: From perceptions to action. *System*, 65, 78-89. <http://dx.doi.org/10.1016/j.system.2017.01.008>
- Zhang, R., Zou, D., Cheng, G. et al. (2022) Implementing technology-enhanced collaborative writing in second and foreign language learning: A review of practices, technology and challenges. *Educ Inf Technol* 27, 8041-8069. <https://doi.org/10.1007/s10639-022-10941-9>