

JALT2024 • MOVING JALT INTO THE FUTURE: OPPORTUNITY, DIVERSITY, AND EXCELLENCE

NOVEMBER 15-18, 2024 • SHIZUOKA GRANSHIP, SHIZUOKA, JAPAN

Collaborative vs. Individual Writing in Japanese EFL High Schools: An Exploratory Study of L2 Writing Anxiety and Engagement

Naomi Sugahara

Toyo Senior High School

Reference Data:

Sugahara, N. (2025). Collaborative vs. individual writing in Japanese EFL high schools: An exploratory study of L2 writing anxiety and engagement. In B. Lacy, R. P. Lege, & M. Swanson (Eds.), Moving JALT Into the Future: Opportunity, Diversity, and Excellence. JALT. https://doi.org/10.37546/JALTPCP2024-24

This exploratory study investigated the effects of collaborative writing (CW), relative to individual writing (IW), on L2 writing anxiety and engagement among Japanese high school learners of English. Data were collected through questionnaires and open-ended responses from two classes: one group of CEFR A2 basic users (n=40) and another of A2 to B1 pre-intermediate users (n=40). CW significantly reduced writing anxiety and increased motivation across proficiency levels compared to IW; however, perceived productivity (sentence output) did not differ significantly. Qualitative analysis revealed that CW facilitated peer learning, idea generation, and error correction, whereas IW promoted greater autonomy and concentration. In CW, students noted unequal participation and concerns about peer feedback quality—especially among lower-proficiency learners—whereas in IW they primarily worried about grammatical accuracy. These findings suggest integrating CW and IW can address L2 writing anxiety while supporting both collaborative interaction and independent writing development.

本研究は、日本の高校生英語学習者を対象に、協働ライティング(CW)と個人ライティング(IW)が書くことへの不安軽減やタスク意欲の向上に与える影響を調査した。初級 (n=40) および初中級 (n=40) 学習者からアンケートと自由記述を用いてデータを収集した結果、CWはIWと比較して書くことへの不安を軽減し、モチベーションを向上させたが、生産性に関しては両者に有意差が見られなかった。質的分析では、CWが相互学習、アイディアの創出、誤り訂正に有益である一方、IWは自主性や集中力を高める役割を果たすと示された。CWでは、不平等な参加やフィードバックの質に対する懸念が特に低習熟度の学習者間で課題として挙げられた一方、IWは主に正確性に関する不安が指摘された。これらの結果から、CWとIWを組み合わせることで、学習者の不安を軽減し、協働的インタラクションと個々の書く能力を効果的に向上させる可能性が示唆された。

Ferris & Hedgcock, 2023; Hyland, 2019). For high school curricula in Japan, the government-designed *Courses of Study* emphasizes writing tasks throughout English courses. Students are required to engage in a variety of writing tasks including brainstorming, outlines, and self- or peer-editing (Ministry of Education, Culture, Sports, Science and Technology–Japan [MEXT], 2018). Engaging in writing tasks also facilitates L2 learning due to the focus on language use in meaningful contexts (Hyland, 2019). However, there are three major challenges to implementing writing tasks in Japanese high school English classes: (a) apprehension about L2 writing, (b) heightened anxiety during the post-writing phase (e.g., peer feedback and editing), and (c) avoidance or unwillingness to engage with writing assignments (Sugahara, 2023). This exploratory study investigates whether collaborative writing (CW) tasks, as an alternative to individual writing (IW), can reduce high school learners' L2 writing anxiety and support their engagement in the writing process.

Literature Review

L2 Writing Anxiety

Previous research has highlighted the detrimental impact of foreign language anxiety on L2 learners' performance (Aida, 1994; Horwitz, 2001; Horwitz et al., 1986; Shang, 2013). Given how common writing anxiety is among L2 learners, researchers have sought to identify its causes, such as fear of making errors or low confidence in expressing ideas, and to develop strategies to mitigate its effects (Rezaei & Jafari, 2014; Shang, 2013). Other factors can also contribute, including fear of teachers' negative feedback, diminished self-confidence, and limited proficiency in the L2 (Rezaei & Jafari, 2014). Understanding these sources of anxiety can help instructors design writing instruction that not only improves learners' proficiency but also bolsters their confidence in the writing process.



When implementing methodologies for addressing L2 writing anxiety, teachers should provide strategies that both support students' writing processes and mitigate their anxiety (Machida & Dalsky, 2014; Wolfersberger, 2003). For example, implementing effective compensatory strategies that break down the writing process and enable seamless utilization of skills developed in their L1 (e.g., brainstorming and idea organization) would ensure a smoother transition to the L2 writing context (Wolfersberger, 2003). Machida and Dalsky (2014) point out that teachers can help learners utilize strategies, such as generating and organizing their thoughts and ideas in the pre-task writing process, to reduce apprehension levels in L2 writing. To help L2 learners build confidence in their writing, instructors should offer more engaging opportunities that address the relationship between L2 writing anxiety and the writing process.

Collaborative Writing

Collaborative writing (CW) can make the writing process more engaging. It involves two or more learners (including peers with different proficiency levels) working together, which can lead to further L2 development (Li & Zhang, 2023; Storch, 2013). Namely, when students who have different backgrounds and proficiencies collaborate, they can support their writing processes by co-constructing knowledge through social interaction (Storch, 2002; Swain & Lapkin, 1998).

Previous research has found that L2 learners perceived CW positively (Storch, 2013; Sugahara, 2024) and regarded it as helpful in promoting their learning (Shehadeh, 2011). Studies also report perceived improvements in idea generation and grammatical accuracy through dialogues, in which peers engaged in problemsolving and knowledge building (Coffin, 2020; Nixon, 2007). In a study by Jalili and Shahrokhi (2017), participants reported reduced L2 writing anxiety and expressed positive attitudes toward CW.

CW processes involve L2 learners exchanging feedback and revising drafts (Storch & Aldossary, 2019; Storch & Alshuraidah, 2020). Despite some students experiencing heightened apprehension during this phase of L2 writing (Sugahara, 2023), recent literature indicates that the incorporation of peer feedback can play an essential role in writing development (Storch, 2019) and can effectively alleviate learners' L2 writing anxiety (Bolourchi & Soleimani, 2021). Peer feedback can also be applied in Japanese secondary school contexts to enhance responsibility as writers, and promote mutual scaffolding (Kurihara, 2014).

Although the participants in the above-mentioned studies were primarily university students and adult learners, these findings provide valuable insights for educators in

other teaching contexts in which the integration of CW is being considered. Specifically, students reported positive experiences with CW in developing language skills, coconstructing knowledge about compositions, improving problem-solving skills, and building teamwork (Shehadeh, 2011; Storch, 2013; Sugahara 2024). These benefits suggest that CW can be an engaging and effective task in high school classes with learners of varying proficiency levels. This approach also aligns with MEXT's (2018) *Courses of Study*, which emphasizes improving communication skills, particularly collaboration and expression, across all grade levels in secondary school. To the best of my knowledge, there is no research that specifically focuses on English as a Foreign Language (EFL) secondary school students' perceptions of L2 writing and their anxiety when doing CW compared to IW. To fill this gap, this study examined L2 writing anxiety and perceptions of L2 writing development by Japanese high school learners of English. The research questions for this study are the following:

- RQ1. Do CW tasks help reduce L2 writing anxiety among students across a range of proficiency levels?
- RQ2. To what extent do CW tasks support students' L2 writing development?

Methods

Research Design

This exploratory study employed mixed methods research to investigate Japanese high school students' perceptions of CW and IW tasks via a questionnaire with Likert items and open-ended prompts. This approach is suitable for studies exploring complex educational phenomena in order to capture both quantitative trends and qualitative insights (Creswell & Plano Clark, 2018).

Participants

This exploratory classroom study used a convenience sample of two intact classes, typical for mixed-methods research in Japanese secondary EFL settings. The participants (n=80) ranged in age from 15–16, and were first-year high school students at a private upper secondary school in Chiba Prefecture, Japan. This study focused on two classes: a high-proficiency cohort of A2 to B1 pre-intermediate learners (n=40) and a cohort of A2 basic users of English (n=40), based on scores of the *Eiken* test. The participants attended Logic and Expression I classes three times a week and English Communication I classes four times a week. Each class was 50 minutes long. One of the English Communication



classes was taught by a non-Japanese English teacher, while the other six classes were taught by Japanese English teachers.

Prior to this study, approval was obtained from the school and from students' parents to conduct the research. All students in the class were fully informed about the purpose of this study, that their participation was entirely voluntary, and that they had the choice to withdraw at any time. Student survey responses were used solely for research purposes and did not affect academic performance. Confidentiality of student personal data was strictly maintained, and all procedures complied with the ethical standards of the school.

Procedure

Students were assigned CW tasks as part of their Logic and Expression I course and IW as part of their English Communication I course. Tables 1 and 2 summarize the schedule, time, and content for CW and IW.

For CW tasks, groups of three to four students created original short stories that incorporated the targeted grammatical forms (see Table 1).

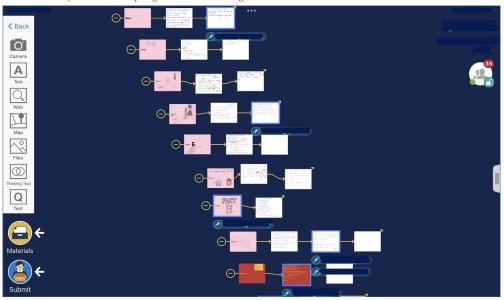
Table 1 *CW Schedule for Logic and Expression I*

	Time	Unit	Target Grammatical Feature
1	April	0	Sentence Patterns
2	May	1	Tense
3	May	2	Perfect Aspect
4	June	3	Auxiliary Verbs
5	June	4	Passive Voice
6	September	5-1	Infinitives
7	September	5-2	Infinitives
8	October	6	Gerunds

In the online notebook platform *LoiLoNote* (LoiLo Inc., n.d.), which was used for all subjects at the school, students edited their shared drafts in real time while discussing what to write and how to develop their stories (see Figure 1). In subsequent lessons,

students checked and revised stories with their group members and then presented scripts to members of other groups. Teachers withheld error correction and explicit grammar instruction until the end of each unit. This sequencing follows the principles of inductive grammar instruction, where learners experiment with language patterns in meaningful contexts before rules are formally introduced. The aim was to enhance students' engagement with the target forms, promote collaborative problem solving, and deepen understanding through peer interaction. The same procedure was repeated for each of the grammatical features covered in the textbook.

Figure 1
Screenshot of LoiLoNote program used during CW



For the IW component, students completed 50 to 80-word argumentative writing tasks throughout the English Communication I course. These tasks focused on broad, everyday topics appropriate for the CEFR A2 level (see Table 2), using a supplementary textbook (The Japan Times Publishing & Logoport, 2020) and were designed to match academic learning goals.



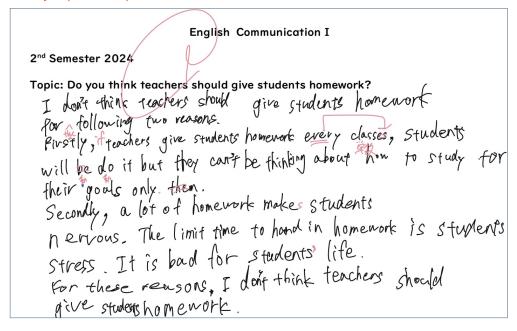
 Table 2

 IW Schedule for English Communication

No.	Time	Topic	Target Length
1	April	Describe food you like	50-60 words
2	April	Best season to visit Japan	
3	May	A place to visit in Japan	
4	May	City vs. countryside	60-70 words
5	May	Club activity	
6	June	Convenience store	
7	June	Study alone vs. in groups	
8	September	Homework	70-80 words
9	September	Study abroad	

As a pre-writing task, students first discussed the pros and cons of the assigned topics. Students then wrote their arguments individually and submitted them via LoiLoNote. After receiving written corrective feedback (i.e., specific grammatical and lexical corrections with general comments) from the instructor (see Figure 2), a follow-up discussion was conducted.

Figure 2
A Sample of Feedback for Students' IW



Data Analysis

In the middle of the second semester, students completed a questionnaire via Google Forms (see Appendix A) that took approximately 10 minutes. The questionnaire, developed specifically for this study, aimed to capture the unique context and objectives of the writing tasks implemented in these high school courses. It included Likert items measuring L2 writing anxiety and attitudes toward peer feedback, as well as open-ended questions about students' experiences in both courses.

The Likert items used a six-point scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*), to encourage respondents to lean toward agreement or disagreement rather than selecting a neutral midpoint. These items addressed four categories for both IW and CW:

- level of L2 writing anxiety during the tasks
- degree of anxiety reduction throughout the tasks



- level of motivation to work on writing tasks
- perceived productivity of composition

The open-ended questions explored:

- concerns about writing English individually and in groups
- positive aspects of writing English individually and in groups
- feelings about peer feedback during group writing

The questionnaire was administered in Japanese, with all items and open-ended questions written in Japanese. Students' Japanese responses were translated into English by the author and verified by a colleague from the United Kingdom, who is proficient in both languages.

Descriptive statistics including means and standard deviations were calculated for Likert responses using Microsoft Excel. Paired samples *t*-tests examined significant differences between IW and CW conditions, and between student proficiency levels.

Open-ended responses were analyzed using thematic analysis (Stake, 2010). Coding was first conducted manually to identify initial categories, then NVivo software was used to systematically organize and refine those codes. Common concerns and positive aspects of IW and CW, along with reactions to peer feedback, were categorized for interpretation.

Results

Quantitative Analysis

Table 3 presents students' perceptions of IW and CW throughout the courses. As shown in Table 3, students engaged in CW (M=3.48) felt less anxious than when doing IW (M=4.21), indicating a statistically significant difference in L2 writing anxiety between the two modes. Also, learners reported that their L2 writing anxiety decreased during CW (M=4.16) compared to IW (M=3.09) throughout the courses. Effect sizes were $d_z=0.61$ for anxiety and $d_z=0.50$ for anxiety reduction (see Table 3).

In terms of motivation, students were significantly more motivated to write when collaborating with classmates (M = 4.03) than when writing alone (M = 3.33), a statistically significant difference. However, students did not perceive a significant

difference in how much they were able to write in terms of productivity between CW (M = 3.71) and IW (M = 3.54). Effect sizes were d_z = 0.29 for motivation and d_z = 0.08 for productivity. These results suggest CW effectively reduced students' L2 writing anxiety and increased motivation but did not significantly impact the quantity of sentences produced (see Table 3).

Table 3
Perceptions of IW vs. CW

	I	W	CW		_		Cohen's d _z (paired)	95% CI	
Variable	M	SD	M	SD	t(79)	p	Coh (pai	LL	UL
Writing anxiety	4.21	1.41	3.48	1.23	5.46	<.001***	0.61	0.47	1.01
Reduced anxiety	3.09	1.30	4.16	1.28	-4.43	<.001***	0.50	-1.56	-0.59
Motivation	3.33	1.45	4.03	1.28	-2.60	.011*	0.29	-1.24	-0.16
Productivity	3.54	1.36	3.71	1.29	-0.70	.486	0.08	-0.67	0.32

Note. N = 80. Differences computed as IW – CW (positive = higher rating for IW). Scale: 1 = strongly disagree, 6 = strongly agree. Effect sizes are absolute values. *p < .05. **p < .01. ***p < .001. CI = confidence interval; LL = lower limit; UL = upper limit

With regard to proficiency, basic users exhibited significantly higher L2 writing anxiety than the pre-intermediate class for both IW (M = 4.63 vs. 3.80) and CW (M = 3.90 vs. 3.05; see Table 4). However, no other statistically significant differences were observed between proficiency levels for anxiety reduction (IW: M = 3.15 vs. 3.03; CW: M = 4.20 vs. 4.13), motivation (IW: M = 3.43 vs. 3.23; CW: M = 4.13 vs. 3.93), or productivity (IW: M = 3.48 vs. 3.60; CW: M = 3.85 vs. 3.58; see Table 4).



 Table 4

 Perceptions of IW vs. CW Between Groups

		Basic Users		Pre-Intermediate			
Variable		M	SD	M	SD	t(78)	p
Writing	IW	4.63	1.37	3.80	1.34	-2.72	.008**
anxiety	CW	3.90	1.15	3.05	1.18	-3.27	.002**
Reduced	IW	3.15	1.31	3.03	1.31	-0.43	.671
anxiety	CW	4.20	1.18	4.13	1.38	-0.26	.795
Motivation	IW	3.43	1.47	3.23	1.44	-0.62	.540
	CW	4.13	1.22	3.93	1.35	-0.70	.489
Productivity	IW	3.48	1.40	3.60	1.34	0.41	.684
	CW	3.85	1.23	3.58	1.36	-0.95	.345

Note. Independent samples *t*-tests. Scale: 1 = strongly disagree, 6 = strongly agree. *p < .05. ***p < .01. ****p < .001.

In summary, CW reduced students' L2 writing anxiety and increased their motivation compared to IW but did not significantly affect productivity. Basic users reported higher anxiety levels than their pre-intermediate peers, though no significant group differences were found between the proficiency levels in terms of reduced anxiety, motivation, or productivity.

Qualitative Analysis

Thematic analysis of student responses to the open-ended questions revealed several recurring patterns regarding their experiences with IW and CW.

Table 5
Students' Perceived Pros and Cons of IW and CW

337 *.*				
Writing Format	Pros	n	Cons	n
Individual Writing (IW)	Concentration without distractions	27	Grammar-related anxiety	44
	Freedom to express thoughts	20	Vocabulary uncertainty	15
	Growth in L2 writing	8	Difficulty generating ideas	7
	Efficient task completion	7	Trouble expressing ideas clearly	4
	Reflection on ability to write alone	6		
Collaborative Writing (CW)	Support for grammar, vocabulary, spelling correction	23	Concern about grammar and vocabulary accuracy	28
	ldea generation with peers	17	Difficulty organizing group ideas	12
	Teaching each other	14	Slow progress or unequal participation	9
	Easier to ask for help	13	Difficulty generating ideas	8
	Expanded writing repertoire	6		
Peer Feedback	ldentifying grammatical errors	24	Group members not identifying grammar or spelling mistakes	19
	Increased motivation	11	Embarrassment over errors	4
	Incorporating diverse perspectives	10		



The most frequently mentioned advantage of IW was being able to concentrate fully without distractions (n = 27). Learners also valued the freedom to express their thoughts independently without external influence (n = 20), along with efficiency in task completion (n = 7). In addition, they could reflect on their current ability to write sentences on their own when writing individually (n = 6) and their growth in L2 writing (n = 8). IW provided students with the opportunity to work at their own pace, focus on the tasks without distractions, and improve their sentence construction skills.

In contrast, 23 of 80 students reported that the support they received for correcting grammar, vocabulary, and spelling mistakes during CW was beneficial. Additionally, they also appreciated the opportunity to generate ideas together (n = 17). Others highlighted benefits, such as teaching each other (n = 14), asking for help easily (n = 13), and expanding their writing repertoire (n = 6). Overall, CW allowed students to correct errors, generate ideas, and incorporate peers' views or expressions into their writing.

Despite the benefits, students faced several challenges during IW that were significant sources of anxiety, including concerns about grammatical correctness (n = 44), uncertainty about vocabulary (n = 15), difficulty generating ideas (n = 7), and concerns about expressing ideas effectively (n = 4). These findings suggest that individual writing heightened students' concerns about language accuracy, idea generation, and organization due to the lack of peer support.

When writing collaboratively, students' primary concerns also centered on worries about grammar and vocabulary (n = 28) along with difficulties in organizing their ideas into sentences in groups (n = 12). They also noted slow progress due to unequal participation within groups and distractions that hindered concentration (n = 9) and idea generation (n = 8). These responses indicate that, while CW encouraged interaction, students faced a range of linguistic and group-related difficulties during the process.

Students' perceptions of peer feedback during CW varied. Many students found peer feedback beneficial, noting that it helped them identify grammatical errors (n = 24), increasing their motivation (n = 11), and providing diverse perspectives (n = 10). Nevertheless, some students expressed concerns about the feedback process, particularly in the lower-proficiency group. Challenges included the concerns about grammar (n = 19) and embarrassment about errors (n = 4). Some students noted difficulties when no group members were able to identify grammatical errors, especially in the absence of more proficient peers. Others worried about criticism from group members for making mistakes in their writing. Such concerns highlight how peer dynamics and varying proficiency levels within groups influenced students' emotional responses to the feedback process during CW.

These student-identified advantages and challenges provide valuable insights for developing classroom practices to address L2 writing anxiety.

Discussion

The current study investigated whether L2 CW helped reduce high school learners' anxiety toward writing across different proficiency levels. Regarding whether CW tasks help reduce L2 writing anxiety among students across proficiency levels, participants perceived significantly lower L2 writing anxiety in CW compared to solo writing. However, students in the basic class reported significantly higher anxiety in both IW and CW than pre-intermediate students. Despite these proficiency-based differences, both groups reported that CW was more effective than IW at reducing their writing anxiety. These findings suggest that while addressing L2 writing anxiety is crucial for lower-proficiency students, CW can effectively support students across various proficiency levels in reducing their writing anxiety. These findings support previous research which suggested that CW reduces anxiety by promoting peer interaction and emotional support (Bolourchi & Soleimani, 2021).

The study also investigated how CW tasks support students' L2 writing learning development. The results of both the quantitative and qualitative analyses show that students expressed greater motivation to engage in the CW process rather than IW. This finding is similar to previous literature (e.g., Coffin, 2020; Shehadeh, 2011). However, there was no significant difference in students' perceptions of the number of sentences they were able to produce when working in groups compared to when writing individually. As Storch (2005) noted, CW tasks require more time and do not necessarily facilitate the production of writing. While CW increases motivation and engagement, it might focus more on idea exchange and feedback than on a higher volume of written output for high school learners of English.

Additionally, whereas students viewed peer feedback during CW positively, some lower-proficiency learners exhibited concerns about its effectiveness. Previous studies have shown that L2 learners often prefer feedback from higher-proficiency peers over lower-proficiency ones (e.g., Kim & McDonough, 2008; McDonough, 2004). During CW, these attitudes and preferences might be related to findings that lower-proficiency peers tend to produce fewer language-related episodes (LREs), which are defined as "segments in the pair talk during which learners focused explicitly on language items" (Storch & Aldosari, 2013, p.310). Therefore, it is vital to investigate how to enhance the perceived



effectiveness of peer feedback from lower-proficiency learners, particularly by exploring strategies to increase the quantity and quality of language-related episodes.

Nonetheless, several limitations should be acknowledged. This study investigated a limited number of students from the same high school, ranging from basic to preintermediate proficiency levels. To gain a more comprehensive understanding of L2 learners' perceptions of CW, future studies should include more extensive and diverse samples from different teaching contexts and proficiency levels over an extended period (Li & Zhang, 2023; Storch, 2013). Although this study measured anxiety, motivation, and sentence production, future work could examine the quality of writing produced through CW and IW to provide a more nuanced understanding of learning outcomes. In addition, the growing availability of Al technologies, such as automated writing evaluation tools (e.g., Grammarly and ChatGPT), has provided us with expanded opportunities for enhancing L2 writing learning. Previous research suggests that such tools can promote students' engagement in L2 writing processes through Al-peerteacher feedback (Zhang & Hyland, 2022) while reducing L2 writing anxiety (Hawanti & Zubaydulloevna, 2023), but further research is needed to examine the broader implications of Al tools in L2 writing.

Pedagogical Implications

This exploratory study has several implications for L2 writing learning and instruction. Firstly, CW can help reduce L2 writing anxiety while increasing student motivation. Teachers should consider implementing CW tasks to enhance students' emotional engagement and reduce their anxiety levels. At the same time, although students showed no significant difference in perceived sentence production when writing in groups compared to individually, qualitative responses also showed advantages of IW. Many students appreciated the ability to concentrate without distractions, work at their own pace, and express their ideas freely. Therefore, instructors might consider incorporating a combination of CW and IW tasks to leverage the benefits of both peer interaction and independent work.

Secondly, regardless of their proficiency levels, students were able to reduce their L2 writing anxiety through CW tasks. This finding suggests that teachers can effectively introduce CW in the classroom with different proficiency levels to engage students in L2 writing tasks. However, less proficient learners felt significantly higher anxiety levels and reported more concerns about peer feedback in CW than pre-intermediate level students. To support such learners, instructors can offer task modeling (Kim & McDonough, 2011;

Wette, 2014) or peer feedback training to improve task familiarity and their attitude toward CW (Min, 2006, 2016; Rahimi, 2013).

Conclusion

In conclusion, this study explored how CW and IW affected Japanese high school students' writing anxiety and learning. The research questions as to whether CW helped reduce anxiety across proficiency levels and how it supported L2 writing were addressed quantitatively and qualitatively. CW was found to reduce writing anxiety and increase motivation more than IW, though there was no difference in how much students thought they could write. Students valued idea-sharing and peer support in CW, while IW allowed for more focus and independence. Combining both approaches may help reduce anxiety and support balanced writing development. By fostering a supportive environment where students can collaborate and learn from one another, L2 writing instructors can empower learners to develop greater confidence and motivation in writing.

Bio Data

Naomi Sugahara is a Ph.D. student at Swansea University (Distance Learning) and an English teacher at a private high school in Chiba Prefecture, Japan. He received a master's degree in TESOL from Kanda University of International Studies. His research interests mainly focus on professional development strategies for L2 writing instruction in EFL secondary school contexts. He is currently exploring the use of Al-generated written corrective feedback. <naomisghr@gmail.com>

References

Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal*, *78*(2), 155–168.

Bolourchi, A., & Soleimani, M. (2021). The impact of peer feedback on EFL learners' writing performance and writing anxiety. *International Journal of Research in English Education*, *6*(1), 1–15. https://doi.org/10.52547/ijree.6.1.1

Coffin, P. (2020). Implementing collaborative writing in EFL classrooms: Teachers and students' perspectives. *LEARN Journal: Language Education and Acquisition Research Network*, *13*(1), 178–194.





- Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). Sage.
- Ferris, D. R., & Hedgcock, J. S. (2023). *Teaching L2 composition: Purpose, process, and practice* (4th ed). Routledge. https://doi.org/10.4324/9781003004943
- Hawanti, S., & Zubaydulloevna, K. M. (2023). Al chatbot-based learning: Alleviating students' anxiety in English writing classroom. *Bulletin of Social Informatics Theory and Application*, *7*(2), 182–192. https://doi.org/10.31763/businta.v7i2.659
- Horwitz, E. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112–126. https://doi.org/10.1017/S0267190501000071
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, *70*(2), 125–132. https://doi.org/10.1111/j.1540-4781.1986.tb05256.x
- Hyland, K. (2019). Second language writing (2nd ed.). Cambridge University Press.
- Jalili, M. H., & Shahrokhi, M. (2017). The effect of collaborative writing on Iranian EFL learners' L2 writing anxiety and attitudes. *Journal of Applied Linguistics and Language Research*, 4(2), 203–215.
- The Japan Times Publishing & Logoport. (2020). Saitan gōkaku! Eiken jun 2-kyū raitingu kanzen seiha 最短合格! 英検®準2級ライティング完全制覇 [The fastest way to pass Eiken grade pre-2 test: Complete mastery of writing]. The Japan Times Publishing.
- Kim, Y., & McDonough, K. (2008). The effect of interlocutor proficiency on the collaborative dialogue between Korean as a second language learners. *Language Teaching Research*, *12*(2), 211–234. https://doi.org/10.1177/1362168807086288
- Kim, Y., & McDonough, K. (2011). Using pretask modelling to encourage collaborative learning opportunities. *Language Teaching Research*, *15*(2), 183–199. https://doi.org/10.1177/1362168810388711
- Kurihara, N. (2014). Adoption of the process-oriented writing approach in a Japanese high school classroom. *The Language Teacher*, *38*(5), 31–36. https://doi.org/10.37546/JALTTLT38.5-9
- Li, M., & Zhang, M. (2023). Collaborative writing in L2 classrooms: A research agenda. *Language Teaching*, *56*(1), 94–112. https://doi.org/10.1017/S0261444821000318
- LoiLo Inc. (n.d.). LoiLoNote [Computer software]. https://n.loilo.tv/en/
- Machida, N., & Dalsky, D. J. (2014). The effect of concept mapping on L2 writing performance: Examining possible effects of trait-level writing anxiety. *English Language Teaching*, *7*(9), 28–35. https://doi.org/10.5539/elt.v7n9p28
- McDonough, K. (2004). Learner-learner interaction during pair and small group activities in a Thai EFL context. *System*, *32*(2), 207–224. https://doi.org/10.1016/j.system.2004.01.003

- Ministry of Education, Culture, Sports, Science and Technology–Japan. (2018). Kōtō gakkō gakushū shidō yōryō (Heisei 30-nen kokuchi) kaisetsu: Gaikokugo-hen, Eigo-hen 高等学校学習指導要領(平成30年告示)解説:外国語編·英語編 [Course of study for senior high schools (announced in 2018): Foreign languages, English]. https://www.mext.go.jp/a_menu/shotou/new-cs/1407074.htm.
- Min, H.-T. (2006). The effects of trained peer review on EFL students' revision types and writing quality. *Journal of Second Language Writing*, 15(2), 118–141. https://doi.org/10.1016/j. jslw.2006.01.003
- Min, H.-T. (2016). Effect of teacher modeling and feedback on EFL students' peer review skills in peer review training. *Journal of Second Language Writing*, *31*, 43–57. https://doi.org/10.1016/j. jslw.2016.01.004
- Nixon, R. M. (2007). *Collaborative and independent writing among adult Thai EFL learners: Verbal interactions, compositions, and attitudes* [Doctoral dissertation, University of Toronto]. University of Toronto TSpace. http://hdl.handle.net/1807/122120
- Rahimi, M. (2013). Is training student reviewers worth its while? A study of how training influences the quality of students' feedback and writing. *Language Teaching Research*, *17*(1), 67–89. https://doi.org/10.1177/1362168812459151
- Rezaei, M., & Jafari, M. (2014). Investigating the levels, types, and causes of writing anxiety among Iranian EFL students: A mixed method design. *Procedia: Social and Behavioral Sciences*, *98*, 1545–1554. https://doi.org/10.1016/j.sbspro.2014.03.577
- Shang, H.-F. (2013). Factors associated with English as a foreign language university students' writing anxiety. *International Journal of English Language Teaching*, 1(1), 1–12.
- Shehadeh, A. (2011). Effects and student perceptions of collaborative writing in L2. *Journal of Second Language Writing*, 20(4), 286–305. https://doi.org/10.1016/j.jslw.2011.05.010
- Stake, R. E. (2010). Qualitative research: Studying how things work. Guilford Press.
- Storch, N. (2002). Patterns of interaction in ESL pair work. *Language Learning*, 52(1), 119–158. https://doi.org/10.1111/1467-9922.00179
- Storch, N. (2005). Collaborative writing: Product, process, and students' reflections. *Journal of Second Language Writing*, *14*(3), 153–173. https://doi.org/10.1016/j.jslw.2005.05.002
- Storch, N. (2013). *Collaborative writing in L2 classrooms*. Multilingual Matters. https://doi.org/10.21832/9781847699954
- Storch, N. (2019). Collaborative writing as peer feedback. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (2nd ed., pp. 143–162). Cambridge University Press. https://doi.org/10.1017/9781108635547.010
- Storch, N., & Aldosari, A. (2012). Pairing learners in pair work activity. *Language Teaching Research*, 17(1), 31–48. https://doi.org/10.1177/1362168812457530





- Storch, N., & Aldossary, K. (2019). Peer feedback: An activity theory perspective on givers' and receivers' stances. In M. Sato & S. Loewen (Eds.), *Evidence-based second language pedagogy* (pp. 123–144). Routledge. https://doi.org/10.4324/9781351190558
- Storch, N., & Alshuraidah, A. (2020). Languaging when providing and processing peer feedback. In W. Suzuki & N. Storch (Eds.), *Languaging in language learning and teaching: A collection of empirical studies* (pp. 111–128). John Benjamins. https://doi.org/10.1075/lllt.55.05sto
- Sugahara, N. (2023). L2 writing anxiety of Japanese high school learners. In P. Ferguson, B. Lacy, & R. Derrah (Eds.), *Learning from students, educating teachers—Research and practice* (pp. 187–195). JALT. https://doi.org/10.37546/JALTPCP2022-22
- Sugahara, N. (2024). Integrating online collaborative learning in Japanese EFL high school. In B. Lacy, R. P. Lege, & P. Ferguson (Eds.), *Growth mindset in language education* (pp. 188–199). JALT. https://doi.org/10.37546/JALTPCP2023-21
- Swain, M., & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *The Modern Language Journal*, *82*(3), 320–337. https://doi.org/10.1111/j.1540-4781.1998.tb01209.x
- Wette, R. (2014). Teachers' practices in EAP writing instruction: Use of models and modeling. *System*, 42, 60–69. https://doi.org/10.1016/j.system.2013.11.002
- Wolfersberger, M. (2003). L1 to L2 writing process and strategy transfer: A look at lower proficiency writers. *TESL-EJ*, 7(2).
- Zhang, Z. V., & Hyland, K. (2022). Fostering student engagement with feedback: An integrated approach. *Assessing Writing*, 51. https://doi.org/10.1016/j.asw.2021.100586

Appendix A

Questionnaire Items

This is a translation of the Japanese-language questionnaire used. Students first responded to the following statements on a six-point Likert scale from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*).

(I)

- 1. I feel particularly anxious when writing alone in English.
- 2. I feel incredibly anxious when writing in English in a group (e.g., story-making).
- 3. I feel more motivated when working on a writing task alone than when writing in a group.
- 4. I am more motivated when working on a writing task in a group than when writing alone.
- 5. I was able to write more English sentences when working on a writing task alone than when writing in a group.
- 6. I was able to write more when working on a writing task in a group than when writing alone.
- 7. I was less anxious about writing when working on writing tasks alone than when writing in a group.
- 8. I was less anxious about writing when working on writing tasks in a group than when writing alone.

Students then answered the open-ended questions in Japanese.

(II)

Open-ended Questions

- 1. Briefly describe your concerns about writing in English individually.
- 2. Briefly describe your concerns about writing in English in a group.
- 3. Briefly describe what you like about writing in English individually.
- 4. Briefly describe what you think is good about writing in English in groups.
- 5. Briefly describe how you feel when checking writing in pairs or groups.