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A Case Study on Reducing Language Anxiety and Enhancing Speaking Skills Through Online Conversation Lessons



KANAKO TABUCHI^a 

SHO KOBAYASHI^b 

STEVE T. FUKUDA^c 

YUYA NAKAGAWA^d 

^a*Graduate School, Marshall University, America*
plume0728@gmail.com

^b*Osaka Kyoiku University, Japan*
kobayashi-s03@cc.osaka-kyoiku.ac.jp

^c*Bunkyo University, Japan*
steve@bunkyo.ac.jp

^d*Mie University, Japan*
nakagawa@edu.mie-u.ac.jp

Abstract

Second language learners, particularly those with lower proficiency, often struggle with insufficient practice and heightened anxiety when speaking. This case study investigates the impact of one-on-one online conversation lessons on a university student's speaking skills and language anxiety. The participant, a university student with low proficiency in the target language, engaged in eight online lessons. Quantitative measurements of speaking skills and anxiety levels were taken using pre- and post-tests. Results indicated that the online lessons effectively improved the participant's speaking abilities and reduced their anxiety. Qualitative analysis of lesson and interview transcripts highlighted specific factors contributing to these changes, such as the role of feedback. This study adds to the field of technology in language learning by demonstrating the potential of online conversation lessons with corrective feedback as an effective individual learning modality for lower-level second language learners.

Keywords: Online learning, anxiety, speaking, interaction

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Introduction

Interaction using the target language is a critical aspect of second language (L2) learning (e.g., Gass & Mackey, 2007; Liu & Littlewood, 1997; Long, 1996). Individual corrective feedback (CF) on accuracy and communication strategies is also essential (Lyster et al., 2013). English as a Foreign Language (EFL) learners with lower proficiency often exhibit reluctance in using the L2, thereby reducing their opportunities for practice (Savaşçı, 2014). Typical EFL classrooms, often comprising of 40 students, seldom provide sufficient CF to individual learners (Li, 2010). Such environments can elevate students' anxiety levels when using the target language, leading teachers to avoid impromptu speaking tasks and further limiting students' opportunities for language use and feedback (Kawashima, 2019). Studies have demonstrated a negative correlation between academic achievement and language anxiety (Botes et al., 2020), prompting initiatives to address these issues. For example, Japan's Ministry of Education, Culture, Sports, Science and Technology has advocated for smaller EFL classrooms and increased opportunities for target language interaction (Ministry of Education, Culture, Sports, Science and Technology, 2013). However, research on the effectiveness of these interventions remains limited.

The COVID-19 pandemic has spurred research into the effectiveness of L2 learning using computer-mediated tools (e.g., Almusharraf & Bailey, 2021; Su & Zou, 2022), yet few studies have examined their impact on speaking skills and anxiety within the individual interaction/feedback cycle. Although various methods have been explored (e.g., Ajabshir, 2019; Liu et al., 2023; Rahimi & Fathi, 2022), in-depth qualitative research on changes in students' speaking skills and anxiety over time during interaction and feedback is sparse. Moreover, the psychological changes in beginner learners with low language proficiency—a category that includes many EFL students—have received little attention.

This case study investigates how one-on-one online conversation lessons with individual CF impacted a beginner learner's speaking skills and anxiety over time. Computer-mediated activities enable researchers to monitor the quantity and quality of L2 usage (e.g., Saito et al., 2021). Thus, a detailed account of psychological changes during these lessons can elucidate the influences of speaking anxiety and measure the impact of feedback on students' speaking skills and anxiety.

Literature Review

Interaction and Feedback

The interaction (Long, 1996) and output (Swain, 2005) hypotheses of L2 acquisition stress the importance of providing opportunities during classroom instruction for (a) testing hypotheses and negotiating meanings via practice and (b) noticing and raising awareness of language use via feedback. Target language interactions provide repeated practice in hypothesis testing through interlanguage trial-and-error and meaning negotiation to increase comprehension. Interaction in the target language also stimulates grammatical awareness and syntactic processing. This continuous practice/feedback cycle spurs progress in L2 performance and the gradual development of L2 competency. In particular, oral corrective feedback (OCF), which refers to “comments a teacher or an interlocutor makes on errors that occur in second language learners' speech production” (Li, 2021, abstract), plays a crucial role in this process. Previous research on OCF has demonstrated that while corrective feedback can promote L2 development, its effectiveness may be limited by contextual factors and individual differences among learners (Li, 2010; Lyster and Saito, 2010). Using OCF in the language classroom is a common technique to increase students' awareness of their mistakes (Yang, 2016). Ha and Nguyen (2021) demonstrated the efficacy of OCF in accelerating language acquisition. They proposed that training teachers and students in OCF strategies could enhance learning effectiveness. Research by Roothoof

and Breeze (2016) revealed that students generally had positive attitudes towards explicit OCF, appreciating the clarity and purpose of the feedback provided. They found that learners, regardless of their anxiety levels, favored receiving OCF, as they recognized its significance and the various types of feedback they could receive. Furthermore, Rassaei (2015) highlighted that different levels of learner anxiety might necessitate different types of OCF. For instance, low-anxiety learners benefited from metalinguistic feedback, while high-anxiety learners responded better to recasts. However, in the context of Japanese language learning, Moroishi (2002) found that learners often struggled to recognize recasts as feedback for errors. Similarly, a case study by Kamiya (2014) suggested that teachers often refrained from using explicit corrections to maintain a comfortable learning environment and avoid increasing student anxiety. These findings suggest a nuanced approach to OCF is necessary, with consideration given to the learner's anxiety level and the context. This study aims to place learners in a comfortable environment while using OCF to relieve anxiety and enhance speaking skills, highlighting the need for further research into the most effective forms of OCF in different contexts.

Speaking Anxiety

One challenge in interactive speaking tasks in language learning is foreign language anxiety (FLA), which is “a distinctive complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz et al., 1986, p. 128). This form of anxiety specifically pertains to the language learning context and can manifest in various skill areas, such as speaking and writing. Speaking anxiety, in particular, is a significant issue for learners, as it often leads to avoidance of speaking opportunities and decreased performance. Teimouri et al. (2019) established a negative association between FLA and target language performance, highlighting how anxiety can hinder language acquisition. Marzec–Stawiarska (2015) found that participants experienced stress and anxiety when speaking a foreign language. Furthermore, the most common stressors were peers, making mistakes, and being asked to speak spontaneously.

Anxious students often perceive themselves as having lower L2 ability and struggle more with tolerating others' negative comments or evaluations (Chuang, 2020). This can be exacerbated by factors such as the classroom environment, peer pressure, and non-ideal class types, as noted by Inada (2022). Inada's earlier study also found that students with lower levels of anxiety exhibited higher self-confidence. To alleviate speaking anxiety, it is essential to create a comfortable and supportive environment. For instance, pre-task activities and repetition, as suggested by Kawashima (2019), can help students feel more at ease. Additionally, Satake et al. (2023) demonstrated that communication with avatars in a VR context could create a more comfortable environment, thereby reducing psychological burdens and speaking anxiety while boosting confidence.

Moreover, Santos et al. (2021) argued that teachers should be cognizant of speaking anxiety and acknowledge its presence. To reduce anxiety in an EFL context, learners need to feel a sense of accomplishment (Matsuda & Goble, 2004) and experience regular success (Dörnyei, 2001). Masutani (2021) suggested that educators should provide ongoing support to help reduce FLA and boost confidence in speaking English. Creating a threat-free environment, where learners are not pressured to perform in front of classmates, can also help (Crookall & Oxford, 1991). Computer-mediated communication (CMC), such as online lessons, offers an alternative platform where students may feel more comfortable expressing themselves (Freiermuth, 2001). Empirical studies of synchronous computer-mediated communication (SCMC) have consistently revealed significant reductions in student anxiety (Satar & Ozdenar, 2008). Yamada (2009) reported that less proficient students particularly benefited, showing improvements in language skills and a greater tendency to self-correct, which are indicative of authentic communication situations.

Online Conversation Lessons

Computer-mediated tools have been reported to improve the L2 learning environment by enhancing L2 speaking opportunities (Bashori et al., 2020). Research has also suggested that language learners experience less anxiety during online speaking lessons than in face-to-face lessons (Behforouz et al., 2022; Yaniafari & Rihardini, 2021). Computer-mediated learning environments decrease learning environment stress, helping lower anxiety (Shahi, 2016). Moreover, online speaking tasks change learners' interactions by compelling them to focus on meaning rather than form, which can particularly benefit inexperienced or low-proficiency L2 learners (Chew & Ng, 2021). For example, SCMC, such as online lessons, has been shown to facilitate speaking skills development (Fauzi et al., 2022) and enable considerable bi-directional feedback (Bayode, 2020). For instance, Saito and Akiyama's (2017) participants improved their L2 speaking skills in a nine-week online conversation course during which they received feedback from native-speaking university students. Dharma et al. (2017) reported that online media is effective for learning grammar and conversation. Furthermore, Chen and Lee (2011) found that teacher feedback and instruction reduced the speaking anxiety of English learners with low speaking proficiency in online English-speaking training using a web-based one-to-one synchronous learning environment system.

However, the development of aspects other than fluency (such as complexity and accuracy) has not been fully explored in computer-mediated learning in subject contexts (Kamiya, 2022). Relatedly, Higuchi et al. (2020) showed that online conversational language learning did not improve participants' English communication skills due to low program usage. Similarly, the short duration of one-to-one videoconferencing interaction did not directly transfer to the improvement of students' oral skills (Lee, 2007a). In addition, Cheung (2021) found that the ZOOM context significantly constrained teacher-student interaction, and student engagement was generally low, with no instances of student-initiated interaction.

On the other hand, several studies have investigated synchronous conversations between L2 learners during online chats (e.g., Gurzynski-Weiss & Baralt, 2014; Yilmaz, 2012) and a teacher's synchronous provision of CF while learners are composing texts (Shintani & Aubrey, 2016). Nevertheless, there is very little research that has investigated a teacher's synchronous provision of CF while learners are creating a narrative and orally presenting the story.

Purpose of the Study and Guiding Questions

This study investigated the psychological changes in a language learner through both qualitative and quantitative approaches. While the quantitative data provided insights into overall tendencies, it did not capture the learner's thoughts and emotions driving these changes. Therefore, qualitative data were gathered to track the learner's perceived L2 speaking ability and anxiety throughout the study. Analysis of lesson and interview transcripts revealed the participant's consciousness and attitudes, offering a deeper understanding of when speaking anxiety was experienced and reduced, as well as the learner's feelings about their speaking ability during the intervention. The following two guiding questions (GQs) were then formulated:

GQ1.

How does feedback from one-on-one English conversation online lessons influence L2 speaking skills (e.g., fluency, complexity, and accuracy) in lower-level language learners?

GQ2.

How does feedback from one-on-one English conversation online lessons influence L2 speaking anxiety in lower-level language learners?

Method

Participant

The participant was a Japanese female first-year university student who did not major in English and had low English proficiency. In qualitative research, participant selection differs from that in quantitative research (Holloway & Wheeler, 1996). According to Kitamura et al. (2007), it is crucial to consider the purpose and criteria behind the selection rather than the number of participants. Therefore, this study selected one participant based on specific aims and criteria. The chosen participant aligns with the study's goal of providing a detailed account of psychological changes during lessons to clarify the possible influences behind speaking anxiety and determine the impact of CF on speaking skills and anxiety. The participant, a beginner English learner with low proficiency, particularly in speaking. She had never tried online English conversation before.

She had received eight years of English lessons from elementary to senior high school. In Japan, the curriculum is nationally unified, aiming to ensure the A2–B1 level of the CEFR (Common European Framework of Reference for Languages) or a passing grade on the Eiken Foundation of Japan's Level 2 Practical English Proficiency Test upon high school graduation. Based on Ishikawa and Ishikawa's (2008) classification, our participant was a beginner learner with a Test of English for International Communication score of 295 points, equivalent to the CEFR A1 level. Prior to the study, the participant had no experience with improvised interaction practice in the target language, online lessons, or study abroad. Her self-perceived language level was low (as noted in interviews). Participant responses were in Japanese and translated into English using DeepL Translator to avoid subjective word choices by the analyst. Below is an excerpt from our pre-study interview:

In the classes I have taken so far, I have never communicated my thoughts or made presentations. I am not good at that. I had no experience speaking in English in an improvised manner. I know what I want to say in Japanese, but I cannot say it in English, and I get stuck, so I do not like it. I feel anxious because words and grammar do not come out smoothly. (author's translation via interview transcript)

After the study was explained to the participant, the participant agreed to participate, viewing it as a valuable experience. The second author, being her course instructor, could communicate extensively with the participant, facilitating open and honest expression without nervousness. Written consent for study participation and data use was obtained in compliance with confidentiality obligations, explained in the participant's native language.

Setting

The study was conducted at the national university in Japan where the participant was enrolled. The participant engaged in 25-minute online lessons via video call, held twice per week for a total of eight sessions over four weeks. Instructors used a tablet device positioned to keep their faces visible and conducted the lesson without headphones so that both participant and instructor voices were audible. All lessons and data collection took place in the same laboratory at the university.

Design

Speaking tasks were consistent across all lessons to minimize psychological burden from varying tasks. A practice lesson was conducted before the actual experiment to familiarize the participant with the lesson flow. Each of the eight lessons had a different instructor, all female Filipino instructors in

their 20s with over three years of experience teaching English to beginners. To standardize feedback quality and quantity, instructors were instructed to proactively highlight vocabulary and grammar mistakes and provide relevant cf. Conversations were conducted under uniform conditions by specifying content, procedure, and time allocation, communicated to instructors in advance.

Each one-on-one online conversation lesson lasted 25 minutes and was conducted via Skype, a platform previously used in oral proficiency research (e.g., Yang et al., 2012). Skype was chosen for its ability to simulate face-to-face conversation (Lee, 2007b), convenience for learners regardless of location or time, and the creation of a psychologically safe environment for learners to take risks (Turner & Harder, 2018). Additionally, written feedback in the chat box could serve as a scaffolding mechanism when spoken feedback was not understood. Learners could review vocabulary at their own pace post-lesson and summarize discussed content.

Teaching materials were provided by the DMM English Conversation Division (n.d.) and included picture descriptions arranged in sequences similar to those used in pre-, post-, and delayed speaking tests, allowing for question-and-answer interactions in English. Each lesson focused on topics such as jobs, healthy mind, war, bullying, recycling, pollution, technology, and traveling, with materials at a consistent level to ensure uniform session difficulty.

Prior to lessons, the participant received a worksheet with five illustrations (Figure 1). The online lesson included the following steps: In Step 1, she received Task Card 1 with instructions and five sequential photographs, given one minute to observe and understand these images, then instructed to create a narrative based on the sequence. In Step 2, she presented her story in English to the instructor within two and a half minutes. Step 3 involved the instructor providing explicit feedback on the story's overall impression, grammatical errors, and English expressions used. In Step 4, she repeated the descriptive task with Task Card 1, pausing after each illustration to receive further feedback. This iterative process aimed to clarify areas for improvement and enhance understanding of the feedback. In Step 5, she received Task Card 2 with instructions and two photographs, engaging in a second exercise to answer questions related to the images (Figure 2 and 3). Following the lesson, she wrote a 100-word report in English about her Exercise 1 story, incorporating the feedback received, and submitted it in the next lesson.

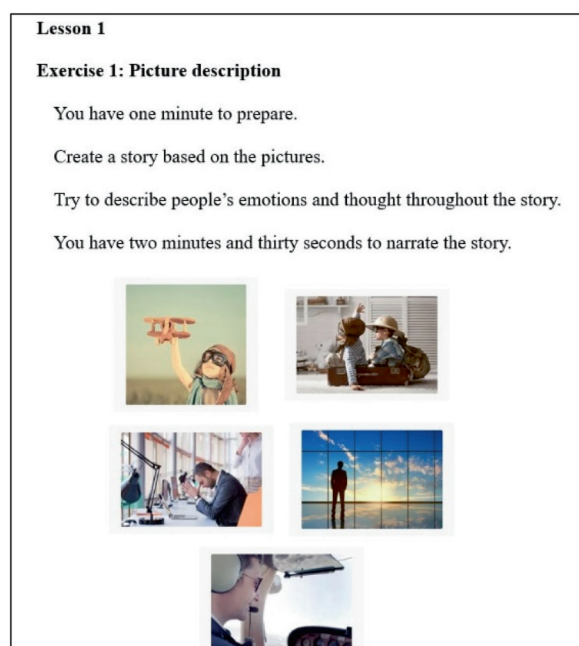
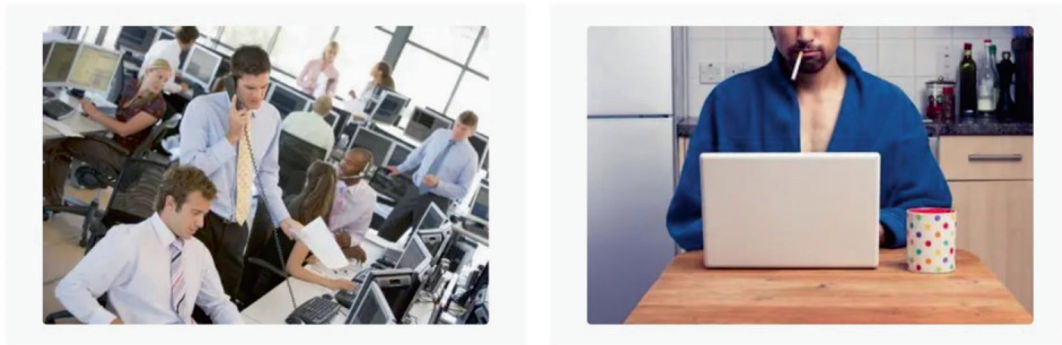
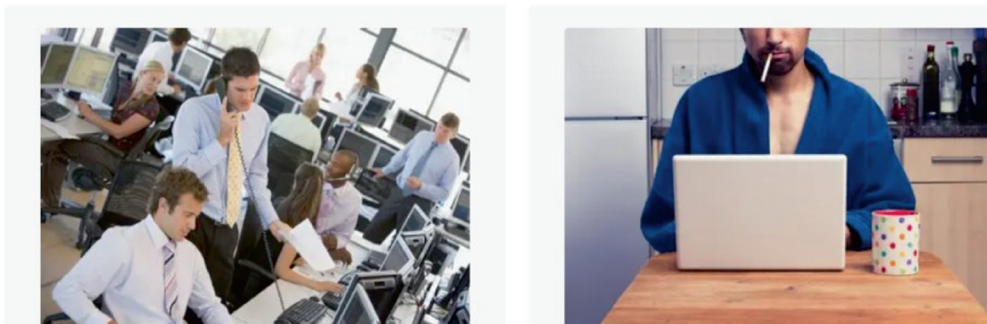


Figure 1 *Exercise 1 Example: Task Card 1.*

Exercise 2: Answer the Questions:**Figure 2** *Exercise 2 Example: Task Card 2.***Exercise 2: Answer the questions**

1. What jobs do you think these people have?
2. How would you say the people in these pictures are different, personality-wise?
3. What is the social impact of each of the two jobs on a person's life?
4. What about the impact on their health and lifestyles?
5. What can you say about the productivity and the tendency to procrastinate, regarding these two jobs?

**Figure 3** *Exercise 2 Example: Questions for Exercise 2.***Data Collection*****Speaking Skills Tests***

A speaking test was employed to measure changes in L2 speaking ability. Three tests were conducted face-to-face by a university professor with over 10 years of experience in the subject context. These tests were administered in November (pre-practice), December (post-practice), and February (follow-up). With the participant's consent, questions from the Eiken Foundation of Japan's Level 2

Practical English Proficiency Test were used. The participant encountered all test items for the first time. Each test included three illustrations with five descriptions. The participant was given one minute for planning before responding, and their answers were recorded.

Fluency, complexity, and accuracy indices from Iino and Yabuta (2016) were used for measurement. Fluency was assessed by (a) the number of description points given, (b) number of utterances, (c) utterance time, (d) number of words per minute (WPM), and (e) a holistic evaluation (Table 1). Two evaluators, both university professors with over 10 years of experience, evaluated fillers, pauses, repetitions (including modifications), and utterance rates on a five-level scale. Complexity was measured by (a) number of clauses and (b) number of words per sentence, calculated by dividing the total number of words by the number of sentences (subordinate clauses counted as one sentence). Accuracy was assessed by (a) number of correctly used past tense verbs and (b) the ratio of correctly used verbs among the predicate verbs in a sentence. This was a clear indicator since the speaking test instructions included past tense verbs, and the instructor specified that utterances should be in the past tense.

Table 1 *Fluency Criteria in the Holistic Evaluation (Iino & Yabuta, 2016)*

5	Speaks at an appropriate speed with few unnatural fillers, pauses, or corrections
4	Occasional unnatural fillers, pauses, and corrections, but speaks at an appropriate speed
3	Lots of unnatural fillers, pauses, and corrections, and speaks slowly
2	Many unnatural fillers, pauses, and corrections, and speaks very slowly
1	Only unnatural fillers, pauses, and corrections, and no coherent speech

These criteria, based on Iino and Yabuta's (2016) framework, were used to holistically evaluate fluency. The kappa coefficient, calculated to examine the reliability of the evaluations by the two evaluators, yielded a high coefficient of $\kappa = 1$, indicating an exact match.

Speaking Anxiety Questionnaire

A questionnaire based on the Japanese Language Anxiety Scale, modified for EFL learners (Motoda, 2000), was used. This scale, developed for Japanese learners of English, comprises eight statements describing anxiety associated with communication difficulties when conversing with a non-Japanese English speaker. Examples included the fear of being unable to express oneself or not being understood. Each item is scored on a five-point scale, with higher scores indicating stronger agreement with the statement. Scores were summed and means calculated. The questions were as follows:

1. I get anxious when foreigners don't understand my English no matter how many times I say it.
2. I get anxious when I can't express what I want to say in English properly during a conversation with a foreigner.
3. I get anxious when foreigners hear my English and look like they don't understand.
4. I get anxious when foreigners hear my English and ask "Huh?" back.
5. I get anxious when I don't understand a foreigner's English and don't know how to respond.

6. I get anxious when I can't remember any English I know during a conversation with a foreigner.
7. I worry about whether I can speak English well when talking to someone I meet for the first time.
8. I worry about making mistakes in English when talking to foreigners.

Lesson Field Notes and Video Recordings

Following Archibald et al. (2019), the authors recorded the time and date of each lesson, meaning negotiation and feedback from instructors, the participant's response method and emotional state, and the participant's questions in field notes. An inductive approach was used for analysis. The authors re-read the field notes and coded points of interest related to changes in the learner's attitude. After video calls, recorded data were reviewed, and any untranscribed details were added to the field notes for subsequent video analysis.

All video calls between instructors and the participant were recorded with a video camera and an IC recorder. The authors transcribed all utterances from the recordings and examined interactions and learning. Changes in the learner's attitude were analyzed by focusing on situations where the participant could not understand and where incomprehensible input was transformed into comprehensible input.

Semi-Structured Interviews

Creswell (2020) provides comprehensive guidelines for conducting various qualitative research methods, including technology-based strategies, online tools, and single-subject research methods. Among these, semi-structured interviews are widely recommended (Takeuchi & Mizumoto, 2023) for their flexibility in exploring predetermined topics while allowing deeper exploration. In this study, semi-structured interviews lasting approximately 30 minutes were conducted in the participant's native language after each session, resulting in eight interviews.

Immediately after each interview, the participant engaged in stimulated recall by watching the recorded video call for approximately 30 minutes and reporting her state of mind. This technique, which uses stimuli to elicit authentic recollections of thoughts (Gass & Mackey, 2000), was particularly effective when the anticipated scenes, actions, or emotions were somewhat expected (Takeuchi & Mizumoto, 2023). The second author focused on situations where the participant was silent for a long time and where she used fillers, feedback, and meaning negotiations. The participant was asked about her feelings and thoughts during these moments. The analysis also considered any communication that might have triggered a reduction or increase in anxiety.

Data Description

To answer our guiding questions, preliminary data were clarified through interviews, assessing the participant from multiple angles to enhance the study's trustworthiness based on quantitative and qualitative data.

In a single-participant case study, employing a comprehensive data collection strategy is crucial to capture the complexity of the participant's experience and provide a holistic view of the phenomenon under investigation (Yin, 2018). This approach enables a deeper understanding of the participant's

development and the intervention's impact. Stake (1995) emphasizes the importance of triangulation in case study research, where multiple sources of evidence corroborate findings and enhance result credibility. By utilizing a combination of speaking tests, field notes, recorded videos, questionnaires, and semi-structured interviews, we ensured a robust and multi-faceted analysis. This methodology aligns with principles outlined by Merriam (2009), who advocates for diverse data sources in qualitative research to achieve a comprehensive understanding of the case.

Thus, our data collection was designed to provide a rich, detailed description of the participant's experience, focusing on observable changes and self-reported perceptions. This descriptive approach is particularly suited to single-participant case studies, allowing for an in-depth exploration of individual experiences without the need for broad generalizations (Flyvbjerg, 2006). By emphasizing detailed, contextualized descriptions, we aim to offer valuable insights that contribute to the field's understanding of similar interventions and their potential impacts.

Results

Quantitative Analysis

Speaking Skills

Speaking tests were conducted pre- and post-intervention and two months later. Changes in speaking ability were evaluated considering fluency, complexity, and accuracy (Table 2). Greater fluency was observed in the post-test compared to the pre-test, as indicated by the number of description points and uttered words, words per minute (WPM), and holistic evaluation indicators. Although utterance time was shorter in the post-test than in the pre-test, the WPM results showed that the participant spoke more concisely. Regarding complexity, the pre-test included only a few short English sentences, whereas the use of conjunctions such as *and*, *while*, *so*, and *but* increased in the post-test, demonstrating linguistic progression in sentence structure. All indicators showed increased accuracy in the post-test, with the past tense used more appropriately and accurately (Table 2).

Table 2 *Pre-, Post-, and Delayed English-Speaking Tests Results*

		Pre-	Post-	Delayed
Fluency	Illustration description points (5)	2.00	5.00	5.00
	Number of utterances	40.00	85.00	69.00
	Utterance time	177.00	146.00	85.00
	WPM	13.56	34.93	48.71
	Holistic evaluation (5)	2.00	3.00	4.00
Complexity	Number of clauses	6.00	11.00	10.00
	Word count/sentence	8.00	17.00	13.80
Accuracy	Number of correct verb usages (past tense)	3.00	8.00	8.00
	Rate of correct verb usage (%)	50.00	66.67	80.00

Note: WPM: words-per-minute.

The delayed speaking test highlighted improvements in WPM and the holistic evaluation of fluency from the post-test, indicating that the participant spoke more fluently. Although complexity decreased

in the delayed test, few changes were observed from the post-test, suggesting maintained complexity. Meanwhile, accuracy in verb usage improved in the delayed speaking test. Despite potential testing effects, the results indicate that even eight video calls in one month can maintain and improve lower-level learners' speaking ability.

Speaking Anxiety

The results of the pre- and post-questionnaires are presented in Figure 4. The mean values of speaking anxiety in the pre- and post-questionnaires were 4.00 and 1.75, respectively. The participant's speaking anxiety was notably high before the intervention but significantly lower afterward, suggesting that the improvisational one-on-one online English lesson intervention effectively reduces speaking anxiety in beginner learners with low English proficiency.

A closer examination of individual questionnaire items reveals more nuanced changes. Questions one and two showed the most substantial decreases, with scores dropping from 5 to 1 and 4 to 1 on the Likert scale, respectively. These items focus on the speaker's internal experience and self-perception of their English ability, highlighting anxiety related to not being understood or failing to express oneself adequately. In contrast, questions three to eight, which also showed decreases (from scores of 4 or 3 to 2), pertain to external reactions and situations. These latter questions reflect anxiety concerning the reactions of listeners, including their understanding and potential for making mistakes.

The analysis indicates that the intervention had a more pronounced effect on alleviating the participant's internal struggles and self-perceptions (Questions 1 and 2), while also providing support in managing external responses and situational challenges during communication in the L2 (Questions 3 to 8). This differentiation between internal and external sources of anxiety may explain the varied changes in scores. Overall, both categories of anxiety, whether arising from self-imposed pressures or reactions from others, were reduced following the intervention.

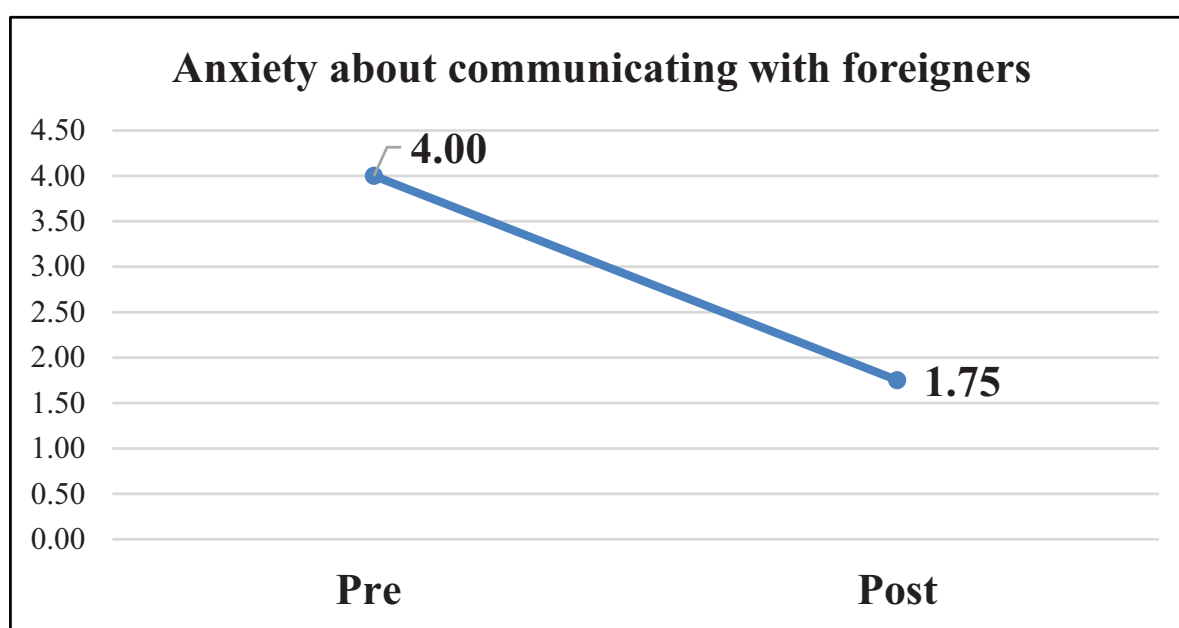


Figure 4 *Speaking Anxiety Results for the Pre- and Post-Questionnaires*

Qualitative Analysis

Development of Willingness to Communicate

To examine factors influencing speaking ability and decreased speaking anxiety, we consulted field notes, video recordings, and interview transcripts for data on changes in L2 self-perceived speaking ability and anxiety. Excerpts 1 to 3 reveal changes in the participant's attitude. In the first video lesson (Excerpt 1), she could not explain what she did not understand; even if she wanted to ask a question, she could not communicate this to the instructor. By the fourth video lesson (Excerpt 2), the participant could express her lack of understanding and request clarification, leading to input correction (Excerpt 3).

Excerpt 1: Implementation 11/25 (Step 3), video: 14 min 03 s

- 1 T: Did you get it?
- 2 S: Okay. (Responding with a smile while tilting her head to one side)
- 3 T: Do you have any questions?
- 4 S: Hmm. (In Japanese)
- 5 T: Any questions?
- 6 S: No.

Excerpt 2: Implementation 12/5 (Step 4), video: 28 min 12 s

- 1 T: Do you have any questions?
- 2 S: Hmm? (In Japanese) What? I can't understand "suffering."
- 3 T: Okay. "Suffering" is like you experience a bad situation. In this case, financial loss.

Excerpt 3: Implementation 12/5 (Step 5), video: 33 min 15 s

- 1 T: How are the people in the pictures cultivating vegetables?
- 2 S: Can you repeat that?
- 3 T: How do they prepare to grow vegetables? What does he do?
- 4 S: He has a vegetable. He is planting the vegetables.

Increasing Confidence in Asking Questions

These excerpts highlight the participant's changing attitude towards asking questions, possibly resulting from repeated practice. Initially passive, the participant gradually began to ask questions, make repetitive requests, and respond in two sentences instead of one, showing a positive shift in her attitude towards speaking.

There was an atmosphere where it was easy to ask questions, and it was the fourth time, so I thought I'd try to ask about the things that I couldn't do before ... rather than being totally passive. I'm no longer reluctant to speak by myself. (author's translation via interview transcript)

This suggests that repeated practice via online lessons alleviated her anxiety. The excerpt illustrates her changing attitude towards speaking English and gaining confidence in asking questions.

In the fifth video call (Excerpt 4), the participant asked the instructor to repeat questions she did not understand. In the sixth video call (Excerpt 5), she made another request. In the seventh video call (Excerpt 6), she negotiated meaning with the instructor due to difficulty expressing "show" to describe something on television.

Excerpt 4: Implementation 12/9 (Step 5), video: 13 min 35 s

1 T: How would you say the people in these pictures are different, personality-wise?

2 S: What does “personality-wise” mean?

3 T: The personality of each person.

Excerpt 5: Implementation 12/12 (Step 4), video: 18 min 10 s

1 T: Would you like me to give my own version of this story?

2 S: Yes. Type it and read it aloud.

Excerpt 6: Implementation 12/16 (Step 4), video: 6 min 08 s

1 S: There is a TV. Well. In the screen ... How can I say?

2 T: The TV shows a war video. There is a TV showing a video about war.

Requesting Specific Feedback and Clarifications

By the seventh video lesson (Excerpt 7), the participant was capable of requesting changes in feedback delivery. In Excerpt 8, she stopped the conversation to ask a question. Unlike in the first video lesson (Excerpt 1), she now requested clarifications, indicating a change in her attitude.

Excerpt 7: Implementation 12/16 (Step 4), video: 10 min 16 s

1 T: While watching the movie at home, he heard a doorbell, and it was a postman.

2 S: Sorry, excuse me, please type your feedback in the chat box.

Excerpt 8: Implementation 12/16 (Step 4), video: 18 min 40 s

1 T: Any questions? No questions?

2 S: Wait. Last picture. How can I say the last picture? (hand-holding gesture)

3 T: They are holding hands.

This change was not only in response to the instructor’s questions but also in her control of the conversation, attempting to proceed in a way that suited her.

Somehow, I was able to ask. Until now, I really didn’t understand and didn’t know what to do. I was silent and anxious, but I think I made progress by asking questions. I felt like I understood when I listened, but I wanted to understand things properly, so I asked. I was getting a lot of feedback, and the speed was quite fast. I didn’t think I would be able to remember things in that way and thought that it doesn’t make sense to get so much feedback, so I thought it would be better to let the instructor write ... the feedback as text. I was confident that I was able to ask what I wanted to ask, and I was happy to get the answers I was looking for. (author’s translation via interview transcript)

The participant became capable of making requests and asking about things that caught her attention, demonstrating a developing willingness to communicate. Comments from the stimulated recall also showed that she sensed her growth and accomplishments. Asking questions, receiving feedback, and using the chat box served as scaffolding, leading to a change in attitude, reduced anxiety, and a desire to understand correctly.

Use of Fillers and Improved Conversation Flow

By the seventh video lesson (Excerpt 9), the participant’s transformation was evident as she began using fillers. Initially silent and unresponsive, she started using fillers like “well” and “let me see” from the sixth lesson onward. This progression facilitated the conversation and accelerated understanding.

Excerpt 9: Implementation 12/16 (Step 5), video: 22 min 35 s

- 1 T: In what ways are the people in the pictures serving their country?
2 S: Let me see.
3 T: What does the army do? Why do they fight?
4 S: To protect the people.
5 T: The army is serving their country by protecting its people.

Using fillers, the participant progressed in the conversation, and understanding of meanings was accelerated.

I couldn't say it the last time, and the silence was long, so I was conscious of using fillers this time. I'm glad I could say it. I thought that the conversation would go on and that the other person wouldn't wonder if there was something wrong. (author's translation via interview transcript)

Impact of Feedback and Scaffolding

Excerpts 10 to 12 described situations where the participant's anxiety was alleviated through learning after receiving feedback. In Excerpt 10, the instructor's corrective feedback and sentence starters functioned as scaffolding, contributing to the participant's learning.

Excerpt 10: Implementation 11/25 (Step 4), video: scene of 11 min 39 s

- 1 S: She trying to...(silence)
2 T: What is she doing? She is trying to...?
3 S: She is trying to keep money.
4 T: She is trying to save...?
5 S: She is trying to save money.
6 T: That's right. What is her dream? Her dream is to...?
7 S: To travel around the world.

The instructor's corrective feedback and sentence starters functioned as scaffolding in the form of a hint and contributed to the participant's learning. In this way, the sentence starters could be interpreted as reducing anxiety during the silence.

If there's a first hint, it's easier to say what I want, and it's helpful. I feel relieved if I get a hint and if the instructor says "Okay" when I give an answer confidently. (author's translation via interview transcript)

In Excerpt 11, negotiation of meaning increased. Incomprehensible questioning at the beginning transformed into comprehensible questioning through input modification.

Excerpt 11: Implementation 11/28 (Step 4), video: scene of 14 min 15 s

- 1 S: He is not good.
2 T: In what way is he not good?
3 S: Hmm? (In Japanese)
4 T: Not good when it comes to appearance? Or not good when it comes to behavior?
5 S: He look ... (silence)
6 T: He is not nice. Does the man look like he is angry?
7 S: Yes. He look, I think he look angry.
8 T: Okay. You can describe him with the picture.

9 S: He look at his smartphone. He don't talk to her.

10 T: He doesn't. He doesn't talk to her.

11 S: He doesn't talk to her.

12 T: So, she is bored.

13 S: She is boring.

14 T: Bored.

15 S: She is bored.

Comprehensible input in the form of an A or B question, paraphrased questions, and recasting may have encouraged the participant to speak and promoted understanding. Simple feedback could aid understanding, make her feel at ease, and reduce anxiety.

I was relaxed and had fun. Words were pointed out, and it was easy to understand. I was able to have a smooth conversation because the feedback was short and was said in simple words. Last time, the instructor talked for a long time, and I just listened instead of having a back-and-forth conversation. (author's translation via interview transcript)

In Excerpt 12, the chat box helped the participant grasp expressions she could not understand orally, serving as a scaffold and reducing anxiety.

Excerpt 12: Implementation 11/28 (Step 4), video: scene 21 min 40 s

1 T: Are dating apps common in Japan? Dating app?

2 S: Dating app?

3 T: Are dating applications common in Japan? (Reading aloud while typing)

4 S: Ah. Yes, yes, yes. (Response while looking at the English text in the chat box)

The chat box may have helped the participant grasp expressions she could not understand orally. Therefore, it likely served as a scaffold, reducing her anxiety.

Things are easy to understand when the instructor can teach me with words. I was less worried, and it was good that sentences were written in the chat box. (author's translation via interview transcript)

The personalized teaching style helped the participant overcome her inability to express herself and promoted output through meaning negotiation. Feeling psychologically safe allowed her to take risks, demonstrating significant progress and reduced anxiety.

Discussion

This descriptive case study focused on a single participant to explore changes in L2 speaking skills and anxiety based on two guiding questions (GQ). We concentrated on an individual case rather than a broader population, aligning with the descriptive and exploratory approach of a case study.

GQ1:

How does feedback from one-on-one English conversation online lessons influence L2 speaking skills (e.g., fluency, complexity, and accuracy) in lower-level language learners?

This study found that repeated individual practice and feedback through the lessons potentially enhanced fluency, complexity, and accuracy for a beginner, low-proficiency English learner.

As the intervention progressed and target language interactions increased, the participant had more opportunities to test hypotheses and negotiate meanings, leading to more successful target language speaking experiences. The participant's output became comprehensible to the instructor, which seemed to increase her perceived L2 ability. The lessons allowed her to make requests and solve problems in a threat-free environment, and the immediate and personalized instructor feedback appeared to enhance her ability to use the target language, promoting more frequent and confident language use.

The data revealed that the one-on-one online conversation lessons provided psychological safety, allowing the participant to interact more freely in the target language. Initially, the participant was anxious about being silent due to an inability to express herself or understand feedback. However, short oral corrective feedback and input modification using the chat box promoted meaning comprehension and reduced anxiety. These results suggest that beginner or low-proficiency learners may benefit from one-on-one interaction in a stress-free environment, becoming accustomed to speaking spontaneously and receiving scaffolding to increase successful communication experiences.

GQ2:

How does feedback from one-on-one English conversation online lessons influence L2 speaking anxiety in lower-level language learners?

Our data indicated a significant reduction in the participant's speaking anxiety over the course of the intervention. The computer-mediated learning environment provided the participant with the psychological safety to interact more in the target language. She was able to make requests and solve problems in a threat-free environment, reducing her speaking anxiety. The immediate and personal feedback from the instructor gave her a sense of accomplishment and regular successes, which are crucial factors in reducing anxiety in foreign language learning (Matsuda & Goble, 2004; Dörnyei, 2001).

Furthermore, the participant's anxiety was mitigated by the structured and supportive environment of the one-on-one online lessons. Short corrective feedback and the use of a chat box for clarification helped her to understand and respond to feedback without feeling overwhelmed. This scaffolding approach enabled her to utilize her knowledge of the target language more effectively and increased her willingness to communicate. The participant seemed to acquire new linguistic knowledge through instructor feedback and modeling, which might have enhanced her willingness to communicate, leading to clearer and more successful language use.

The intervention lasted only one month, demonstrating that even a few sessions in a computer-mediated language learning environment may alleviate issues faced by L2 language learners and teachers. Analyses of lesson and interview transcripts illustrated that scaffolds helped the participant utilize her knowledge of the target language to communicate. Instructor motivation, speaking prompts, and a sense of safety were essential in helping the participant express herself. Her speaking skills developed through attempts to produce comprehensible output in a supportive environment, reducing the natural tension of interacting with a native or advanced speaker.

In sum, this study found that computer-mediated learning, such as one-on-one online conversation lessons with individual CF, may reduce speaking anxiety and enhance speaking skills in lower-level language learners. Scaffolded experiences of interacting in the target language may help develop speaking skills while reducing speaking anxiety. These findings are consistent with previous studies suggesting the positive influence of providing learners with a sense of accomplishment and regular successes in reducing anxiety in foreign language learning.

Conclusion

This study is the first to explore how one-on-one online English conversation lessons influence L2 speaking skills and speaking anxiety in lower-level language learners. It revealed that these online lessons, conducted in a threat-free environment, potentially enhance L2 speaking skills and decrease speaking anxiety by providing learners with more opportunities to interact in the target language, sufficient time to consider meaning, and immediate, individualized feedback that scaffolds comprehension. Notably, the study illuminated the psychological changes experienced by the learner over time, demonstrating how speaking skills were developed and speaking anxiety reduced over a relatively short period (i.e., eight 25-minute sessions over four weeks).

However, this study had several limitations. As a case study, its generalizability is limited, involving only one participant whose speaking ability was assessed solely through picture descriptions. Future studies should employ a variety of assessment methods and analyze larger and more diverse samples to enhance the validity and applicability of the findings. Additionally, it is possible that reflection, rather than the intervention lesson itself, may have played a significant role in alleviating anxiety and increasing confidence in English language skills.

To address these limitations, future research should include a larger number of participants and incorporate a diverse sample in terms of gender and nationality. Employing different assessment methods, such as role-plays, interviews, or real-life conversation tasks, could provide a more comprehensive evaluation of speaking skills and anxiety. Further exploration into the role of reflection in reducing anxiety and boosting confidence would also be valuable in understanding the mechanisms underlying these changes.

The study's findings suggest several pedagogical implications for educators and practitioners. Providing a one-on-one ICT-based online environment whenever possible can be beneficial. It is important to encourage learners to speak using available scaffolding tools, such as screen-sharing and chat boxes, and to reassure them by visibly acknowledging their output, which can foster a sense of security. Creating an environment for pushed output, where students can practice speaking in real-world contexts without the fear of being judged, is crucial. Finally, educators should strive to understand learners' psychological states during spontaneous speaking activities to better support their language development and confidence.

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References

- Ajabshir, Z. F. (2019). The effect of synchronous and asynchronous computer-mediated communication (CMC) on EFL learners' pragmatic competence. *Computers in Human Behavior*, 92, 169–177. <https://doi.org/10.1016/j.chb.2018.11.015>
- Almusharraf, N. M., & Bailey, D. (2021). Online engagement during COVID-19: Role of agency on collaborative learning orientation and learning expectations. *Journal of Computer Assisted Learning*, 37(5), 1285–1295. <https://doi.org/10.1111/jcal.12569>

- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom videoconferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods*, 18, 1–8. <https://doi.org/10.1177/1609406919874596>
- Bashori, M., van Hout, R., Strik, H., & Cucchiaroni, C. (2020). Web-based language learning and speaking anxiety. *Computer Assisted Language Learning*, 35(5–6), 1058–1089. <https://doi.org/10.1080/09588221.2020.1770293>
- Bayode, B. (2020). *Online education: An innovative approach and success in the virtual classroom*. Bowker.
- Behforouz, B., Gallema, M. C., Waga, R. M. A., & Al Weshahi, S. (2022). English language learning anxiety in online and face-to-face classes. *The Journal of Asia TEFL*, 19, 398–739. <http://doi.org/10.18823/asiatefl.2022.19.2.5.469>
- Botes, E., Dewaele, J.-M., & Greiff, S. (2020). The Foreign Language Classroom Anxiety Scale and academic achievement: An overview of the prevailing literature and a meta-analysis. *Journal for the Psychology of Language Learning*, 2, 26–56. <https://doi.org/10.52598/jpll/2/1/3>
- Chen, C.-M., & Lee, T.-H. (2011). Emotion recognition and communication for reducing second-language speaking anxiety in a web-based one-to-one synchronous learning environment. *British Journal of Educational Technology*, 42(3), 417–440.
- Cheung, A. (2021). Language teaching during a pandemic: A case study of zoom use by a secondary ESL teacher in Hong Kong. *REL C Journal*, 54(1), <https://doi.org/10.1177/0033688220981784>
- Chew, S. Y., & Ng, L. L. (2021). The influence of personality and language proficiency on ESL learners' word contributions in face-to-face and synchronous online forums. *Journal of Nusantara Studies*, 6(1), 199–221. <https://doi.org/10.24200/jonus.vol6iss1pp199-221>
- Chuang, C. (2020). Causes of English majors' EFL anxiety: Tertiary teachers' perceptions. *Asian EFL Journal*, 24(3), 50–72.
- Creswell, J. W. (2020). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed., Global ed.). Pearson Education Limited.
- Crookall, D., & Oxford, R. (1991). Dealing with anxiety: Some practical activities for language learners and teacher trainees. In E. K. Horwitz & D. J. Young (Eds.), *Language anxiety: From theory and research to classroom implications* (pp. 141–150). Prentice-Hall.
- Dharma, H. R. C., Asmarani, D., & Dewi, U. P. (2017). Basic Japanese grammar and conversation e-learning through Skype and Zoom online application. *Procedia Computer Science*, 116, 267–273. <https://doi.org/10.1016/j.procs.2017.10.055>
- DMM English Conversation Division. (n.d.). English conversation picture description (Advanced). https://app.eikaiwa.dmm.com/lessons/jobs/_7tHTk0oEeeTHdOqq07ISg
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge University Press.
- Fauzi, I., Hartono, R., Rukmini, D., & Pratama, H. (2022). Web-based language learning: Benefits for enhancing EFL learners' speaking skill. *International Conference on Science, Education, and Technology*, 8(1), 192–196.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245.
- Freiermuth, M. R. (2001). Native speakers or non-native speakers: Who has the floor? Online and face-to-face interaction in culturally mixed small groups. *Computer Assisted Language Learning*, 14(2), 169–199. <https://doi.org/10.1076/call.14.2.169.5780>
- Gass, S. M., & Mackey, A. (2000). *Stimulated recall methodology in second language research*. Lawrence Erlbaum Associates Publishers.
- Gass, S. M., & Mackey, A. (2007). *Data elicitation for second and foreign language research*. Lawrence Erlbaum Associates Publishers.
- Gurzynski-Weiss, L., & Baralt, M. (2014). Exploring learner perception and use of task-based interactional feedback in FTF and CMC modes. *Studies in Second Language Acquisition*, 36, 1–37.

- Higuchi, Y., Sasaki, M., & Nakamuro, M. (2020). Impacts of an information and communication technology-assisted program on attitudes and English communication abilities: An experiment in a Japanese high school. *Asian Development Review*, 37(2), 100–133. https://doi.org/10.1162/adev_a_00151
- 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>
- Ha, X. V., & Nguyen, L. T. (2021). Targets and sources of oral corrective feedback in English as a foreign language classrooms: Are students' and teachers' Beliefs aligned? *Frontiers in Psychology*, 12, 1–10. <https://doi.org/10.3389/fpsyg.2021.697160>
- Holloway I. & Wheeler S. (1996). *Qualitative research for nurses*. Wiley Blackwell.
- Iino, A., & Yabuta, Y. (2016). Effects of task cycle including videoconferencing on EFL speaking ability. *The Chubu English Language Education Society Journal*, 45, 37–44. https://doi.org/10.20713/celes.45.0_37
- Inada, T. (2022). The causes of anxiety in highly anxious students in Japanese communicative EFL classes. *English Language Teaching*, 15(2), 1–8. <https://doi.org/10.5539/elt.v15n2p1>
- Ishikawa, S., & Ishikawa, Y. (2008). L2 proficiency and word perception: An fMRI-based study. *Annual Review of English Language Education in Japan*, 19, 131–140.
- Kamiya, N. (2014). The relationship between stated beliefs and classroom practices of oral corrective feedback. *Innovation in Language Learning and Teaching*, 10(3), 206–219. <https://doi.org/10.1080/17501229.2014.939656>
- Kamiya, N. (2022). Speaking no gakushu [Learning speaking]. In T. Nakata & Y. Suzuki (Eds.), *Eigogakushu no kagaku [Science of English learning]*. (pp. 113–130). Kenkyusha.
- Kawashima, H. (2019). Effects of pre-task planning on speaking anxiety of Japanese EFL learners. *Annual Review of English Language Education in Japan*, 30, 145–160. https://doi.org/10.20581/arele.30.0_145
- Kitamura K., Yamauchi T., Nagayama T., & Saito S. (2007). Possibilities for qualitative research in educational informatics. *Educational Informatic Research*, 5, 19–32.
- Lee, L. (2007a). One-to-one desktop videoconferencing for developing oral skills: Prospects in perspective. In R. O'Dowd (Ed.), *Online intercultural exchange: An introduction for foreign language teachers* (pp. 281–286). Multilingual Matters. <https://doi.org/10.21832/9781847690104-020>
- Lee, L. (2007b). Fostering second language oral communication through constructivist interaction in desktop videoconferencing. *Foreign Language Annals*, 40, 635–649. <https://doi.org/10.1111/j.1944-9720.2007.tb02885.x>
- Li, S. (2010). The effectiveness of corrective feedback in SLA: A meta-analysis. *Language Learning*, 60(2), 309–365. <https://doi.org/10.1111/j.1467-9922.2010.00561.x>
- Li, S. (2021). Oral corrective feedback. In H. Mohebbi, & C. Coombe (Eds.), *Research questions in language education and applied linguistics: A reference guide* (pp. 353–357). Springer. https://doi.org/10.1007/978-3-030-79143-8_63
- Liu, N., & Littlewood, W. (1997). Why do many students appear reluctant to participate in classroom learning discourse? *System*, 25(3), 371–384. [https://doi.org/10.1016/S0346-251X\(97\)00029-8](https://doi.org/10.1016/S0346-251X(97)00029-8)
- Liu, G. Z., Fathi, J., & Rahimi, M. (2023). Enhancing EFL learners' intercultural communicative effectiveness through telecollaboration with native and non-native speakers of English. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2022.2164778>
- Long, M. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). Cambridge: Academic Press.
- Lyster, R., & Saito, K. (2010). Oral feedback in classroom SLA: a meta-analysis'. *Studies in Second Language Acquisition*, 32(2), 265–302. <https://doi.org/10.1017/S0272263109990520>

- Lyster, R., Saito, K., & Sato, M. (2013). Oral corrective feedback in second language classrooms. *Language Teaching*, 46(1), 1–40. <https://doi.org/10.1017/S0261444812000365>
- Marzec–Stawiarska, M. (2015). Investigating foreign language speaking anxiety among advanced learners of English. In M. Pawlak & E. Klimczak (Eds.), *Issues in teaching, learning, and testing speaking in a second language* (pp.103–120). Springer.
- Masutani, Y. (2021). The foreign language anxiety of Japanese EFL learners focusing on anxiety when speaking English. *LET Kansai Chapter Collected Papers*, 19, 1–14. https://doi.org/10.50924/letkansai.19.0_1
- Matsuda, S., & Goble, P. (2004). Anxiety and predictors of performance in the foreign language classroom. *System*, 32(1), 21–36. <https://doi.org/10.1016/j.system.2003.08.002>
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Ministry of Education, Culture, Sports, Science and Technology. (2013). Sankoushiryo 1–2 Korekarano Daigakukyoikutou no Arikata nituite Daisanji Teigen [Reference materials 1–2: Ideal state of university education in the future (3rd proposal)]. http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo4/004/gijiroku/attach/1338229.htm
- Moroishi, M. (2002). Recasts, noticing, and error types: Japanese learners' perception of corrective feedback. *Acquisition of Japanese as a Second Language*, 5, 24–41.
- Motoda, S. (2000). Measurement of second language anxiety in the target language environment: The Japanese Language Anxiety scale – test construction, reliability, and validity. *The Japanese Journal of Educational Psychology*, 48(4), 422–432. https://doi.org/10.5926/jjep1953.48.4_422
- Rahimi, M., & Fathi, J. (2022). Employing e-tandem language learning method to enhance speaking skills and willingness to communicate: The case of EFL learners. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2022.2064512>
- Rassaei, E. (2015). Oral corrective feedback, foreign language anxiety and L2 development. *System*, 49, 98–109. <https://doi.org/10.1016/j.system.2015.01.002>
- Roothoof, H., & Breeze, R. (2016). A comparison of EFL teachers' and students' attitudes to oral corrective feedback. *Language Awareness*, 25(4), 318–335. <https://doi.org/10.1080/09658416.2016.1235580>
- Saito, K., & Akiyama, Y. (2017). Video-based interaction, negotiation for comprehensibility, and second language speech learning: A longitudinal study. *Language Learning*, 67(1), 43–74. <https://doi.org/10.1111/lang.12184>
- Saito, K., Suzuki, S., Oyama, T., & Akiyama, Y. (2021). How does longitudinal interaction promote second language speech learning? Roles of learner experience and proficiency levels. *Second Language Research*, 37(4), 547–571. <https://doi.org/10.1177/0267658319884981>
- Santos, M. E., Cunanan, W. Q., & Mandap, A. B. (2021). English speaking anxiety, stressors, and coping techniques of college student researchers. *TESOL International Journal*, 16(4.4), 33–39.
- Satake, Y., Yamamoto, S., & Obari, H. (2023). Effects of English-speaking lessons in virtual reality on EFL learners' confidence and anxiety. In *Frontiers in Technology Mediated Language Learning* (pp. 26–40). Routledge. <https://doi.org/10.4324/9781003395218>
- Satar, H. M., & Ozdenar, N. (2008). The effects of synchronous SCMC on speaking proficiency and anxiety: Text versus voice chat. *The Modern Language Journal*, 92, 595–613. <https://doi.org/10.1111/j.1540-4781.2008.00789.x>
- Savaşçı, M. (2014). Why are some students reluctant to use L2 in EFL speaking classes? An action research at tertiary level. *Procedia—Social and Behavioral Sciences*, 116, 2682–2686. <https://doi.org/10.1016/j.sbspro.2014.01.635>
- Shahi, M. A. J. (2016). The impact of e-learning on improving Iranian EFL learners' language skills: Decreasing learning anxiety. *Journal of Fundamental and Applied Sciences*, 8(3), 261–275. <https://doi.org/10.4314/jfas.v8i3s.180>
- Shintani, N., & Aubrey, S. (2016). The effectiveness of synchronous and asynchronous written corrective feedback on grammatical accuracy in a computer-mediated environment. *The Modern Language Journal*, 100(1), 296–319. <https://doi.org/10.1111/modl.12317>

- Stake, R. E. (1995). *The art of case study research*. Sage Publications.
- Su, F., & Zou, D. (2022). Technology-enhanced collaborative language learning: Theoretical foundations, technologies, and implications. *Computer Assisted Language Learning*, 35(8), 1754–1788. <https://doi.org/10.1080/09588221.2020.1831545>
- Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 471–483). Lawrence Erlbaum.
- Takeuchi, O., & Mizumoto, A. (Eds.). (2023). *Gaikokugo kyouiku kenkyuu handobukku: Kenkyuu shuuhou no yori yoi rikai no tame ni [Handbook of foreign language education research: For a better understanding of research methods]* (Zouhohan). Shohakusha.
- Teimouri, Y., Goetze, J., & Plonsky, L. (2019). Second language anxiety and achievement: A meta-analysis. *Studies in Second Language Acquisition*, 41(2), 363–387. doi:10.1017/S0272263118000311
- Turner, S., & Harder, N. (2018). Psychological safe environment: A concept analysis. *Clinical Simulation in Nursing*, 18, 47–55. <https://doi.org/10.1016/j.ecns.2018.02.004>
- Vygotsky, L. S. (1986). *Thought and language* (rev. ed.). MIT Press.
- Yamada, M. (2009). The role of social presence in learner-centered communicative language learning using synchronous computer-mediated communication: Experimental study. *Computers & Education*, 52(4), 820–833. <https://doi.org/10.1016/j.compedu.2008.12.007>
- Yang, J. (2016). Learners' oral corrective feedback preferences in relation to their cultural background, proficiency level and types of error. *System*, 61, 75–86. <https://doi.org/10.1016/j.system.2016.08.004>
- Yang, Y. T. C., Gamble, J., & Tang, S. Y. S. (2012). Voice over instant messaging as a tool for enhancing the oral proficiency and motivation of English-as-a-foreign-language learners. *British Journal of Educational Technology*, 43(3), 448–464. <https://doi.org/10.1111/j.1467-8535.2011.01204.x>
- Yaniafari, R. P., & Rihardini, A. A. (2021). Face-to-face or online speaking practice? A comparison of students' foreign language classroom anxiety level. *Journal of English Education and Linguistics Studies*, 8(1), 49–67. <https://doi.org/10.30762/jeels.v8i1.3>
- Yilmaz, Y. (2012). The relative effects of explicit correction and recasts on two target structures via two communication modes. *Language Learning*, 62, 1–36.
- Yin, R. K. (2018). *Case study research and applications: Design and methods*. Sage Publications.