

L2 Spanish and Indonesian Learners' Engagement with ChatGPT Written Corrective Feedback

Ms Alicia Ximena Gazmuri Sanhueza¹ ,
Ms Franciele Spinelli¹  and Dr David Wijaya² 

¹The University of Queensland, Australia

²The University of Sydney, Australia

Abstract

Written corrective feedback (WCF) plays a crucial role in second language (L2) writing by helping learners address local (grammar) and global (content) errors (Crosthwaite et al., 2021). The rise of Generative Artificial Intelligence (GenAI) has increased interest in its role in WCF; Tools such as ChatGPT can provide personalised feedback by explaining grammar, defining words and translating between languages (Kohnke et al., 2023). However, studies have focused exclusively on English (Lin & Crosthwaite, 2024), limiting the linguistic inclusivity in the research. In addition, despite the recognised importance of learner engagement for the effectiveness of WCF, only a few studies (Koltovskaia et al., 2024; Zhang & Hyland, 2022) have examined learners' engagement with WCF; however, little is known about the follow-up questions students may ask regarding the feedback they receive.

This study applies a multidimensional framework of learner engagement (Zhang & Hyland, 2018) to analyse how 13 intermediate L2 learners of Spanish and Indonesian engaged cognitively, behaviorally and attitudinally with ChatGPT's feedback. Participants wrote a short L2 essay on their reasons for learning a L2 and then used a pre-prepared prompt to seek WCF from ChatGPT. A semi-structured interview followed this. Students' drafts, revisions and follow-up questions were coded for behavioural and cognitive engagement. The interview data were analysed thematically for cognitive and attitudinal engagement.

E-mail: a.gazmuri sanhueza@uq.edu.au, f.spinelli@uq.edu.au & david.wijaya@sydney.edu.au

Spanish and Indonesian students noticed most WCF at local and global levels, but relied more on ChatGPT for the former. While participants found ChatGPT's feedback mostly useful, they remained critical of its relevance and accuracy. These findings highlight that while ChatGPT could offer accessible WCF, its effectiveness depends on learners' ability to critically evaluate it. The study shows the opportunities and challenges of integrating GenAI for WCF, broadening the understanding of how diverse linguistic communities engage with technology for L2 writing.

Keywords: Written Corrective Feedback, Cognitive engagement, Behavioural Engagement, Attitudinal Engagement, GenAI, ChatGPT, Languages other than English

Introduction

Written corrective feedback (WCF) refers to corrections or comments on writing to improve global (e.g., content, organisation) and local (e.g., grammar, vocabulary) linguistic issues (Lin & Crosthwaite, 2024). Although widely implemented in L2 classrooms, its effectiveness remains debatable, with research indicating learners' engagement as a key mediating role (Papi et al., 2024).

Generative AI (GenAI) tools (e.g., ChatGPT) have reshaped WCF in L2 learning by offering specific, actionable, and personalised insights (Guo & Wang, 2024) and allowing learners to ask follow-up questions (Kohnke et al., 2023). However, GenAI's feedback may also be inaccurate or redundant (Lin & Crosthwaite, 2024; Yoon et al., 2023), particularly for languages other than English (LOTEs) (Kohnke et al., 2023), which may impact different aspects of learner engagement (e.g., reducing trust, being more cautious and/or critical about the feedback, etc). This highlights the need to critically evaluate the role of GenAI in providing WCF for L2 learners of LOTEs.

To investigate learner engagement with WCF, Zhang and Hyland (2018) used a tridimensional framework comprising behavioural (revision actions and time), cognitive (attention and revision strategies) and attitudinal (attitudes towards WCF) engagement. Building on this framework, Zhang and Hyland (2018) emphasise that engagement with WCF varies considerably among learners, shaping the extent and quality of their writing revisions. Studies applying this framework to GenAI-generated WCF (Koltovskaia et al., 2024; Zhang & Hyland, 2022) have been conducted primarily in English, limiting the linguistic inclusivity. Moreover, while the studies showed that learners critically evaluated GenAI's feedback and prioritised local over global-level corrections,

these lacked insight into how learners engage with GenAI feedback through follow-up questions.

This study addresses these gaps by examining how L2 learners of Spanish and Indonesian, two widely spoken and taught LOTES but under-researched, engage with ChatGPT's WCF. Employing the tri-dimensional engagement framework, the study is guided by the following research question:

How do Spanish and Indonesian L2 learners engage behaviourally, cognitively and attitudinally with ChatGPT's WCF as they revise essays written in their L2?

Methodology

Following ethical approval (ID: 2024/HE001234), thirteen undergraduate L2 students from two major Australian universities ($n = 7$ Spanish, $n = 6$ Indonesian) participated in the study. Based on university placement, their L2 proficiency is B1 ($n = 4$) or B2 ($n = 9$) (Council of Europe, 2001). The research design and instruments for data collection are summarised in Figure 1.

The data was analysed in two stages. First, similar to Koltovskaia et. al (2024), students' writing tasks (before and after the revisions) and ChatGPT's WCF were analysed to explore participants' behavioural engagement. Using a spreadsheet, the researchers counted and categorised:

- ChatGPT's WCF type (i.e., global or local)
- Whether students accepted or rejected the WCF
- How they revised their essay (e.g., copying from ChatGPT, retyping)
- Length spent on revisions
- Follow-up questions after receiving the WCF

Second, following Saldaña's (2016) guidelines for thematic analysis, the interview transcripts were analysed for cognitive and attitudinal engagement.

Findings

Participants showed different behavioural engagement with ChatGPT's WCF. Out of the 95 WCF instances received by Spanish learners (64% local, 36% global), 56% were accepted, with a higher acceptance of local feedback (77%). Indonesian learners received 66 WCF instances, mostly language-focused (80%), with a high acceptance of 89%. All participants reviewed the WCF

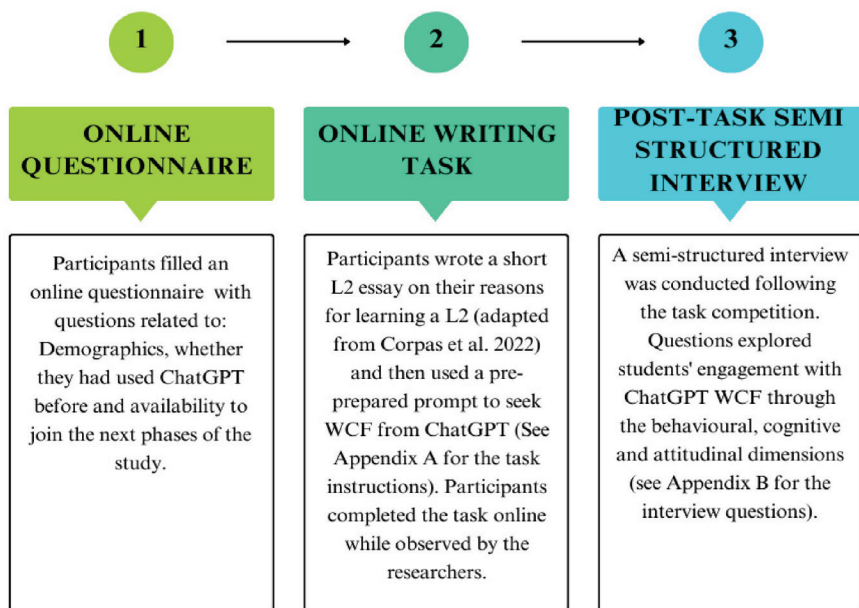


Figure 1. Research design and instruments for data collection

before revising their essays. While all Spanish learners typed the suggestions into their revisions, some Indonesian learners translated the WCF into English and then copied and pasted ChatGPT's suggestions into their revisions. On average, Spanish learners spent 15 minutes revising their essays, compared to 21 minutes for Indonesian learners. All Indonesian learners asked follow-up questions, but only 2 Spanish learners did the same.

In the interviews, participants explained how they engaged cognitively with ChatGPT's WCF. They explained that they accepted and incorporated most of ChatGPT's WCF into their writing, especially regarding grammar, vocabulary and punctuation. Similarly, WCF on global aspects, such as writing a clear introduction, were widely accepted to enhance the essay's coherence. However, some grammar-related feedback was rejected because students acknowledged that the suggested structures were beyond their current knowledge, thus preferring to use more familiar forms. Students also approached WCF about content (e.g., adding more examples) selectively, as they believed they were unnecessary or exceeded the scope of a short essay (see Appendix C for sample quotes related to cognitive engagement).

Attitudinally, participants valued the detailed WCF ChatGPT provided, explaining that it helped them notice aspects to improve the accuracy and coherence of their essays. Those who asked follow-up questions appreciated

being able to do so without fear of judgment. However, they noted that the WFC was at times overly wordy, poorly organised, generic, misaligned with their L2 proficiency, and occasionally contained errors. Despite the challenges, all students plan to continue using ChatGPT for language support but would appreciate clearer university policies and guidelines (see Appendix C for sample quotes related to attitudinal engagement).

Discussion and Conclusion

Using the tri-dimensional framework of learner engagement (Zhang & Hyland, 2018), the study explored how L2 learners of Spanish and Indonesian engaged with ChatGPT-generated WFC. Overall, the findings partially align with those of Koltovskaia et al. (2024), who demonstrated that students engaged actively with ChatGPT's feedback by accepting and rejecting comments. Behaviourally, participants actively revised their text using ChatGPT suggestions and asked follow-up questions, with a primary focus on language accuracy (Zhang & Hyland, 2022), as they perceived them as more relevant than global-related comments. While time spent on revisions may indicate a high level of engagement (Koltovskaia et al., 2024), our results showed that remaining on task revising from feedback is an indicator of sustained engagement.

Cognitively, participants noticed and understood the feedback, an important predictor of revision quality (Papi et al., 2024). All students compared ChatGPT's suggestions with their original text, deciding to accept or reject the WFC based on their language styles and proficiency. Local-level feedback was generally prioritised, helping them notice correct forms, while global suggestions were often dismissed as unclear or unnecessary. Indonesian learners asked more follow-up questions to fill knowledge gaps, whereas Spanish learners chose not to ask when feedback was clear, revealing a deeper cognitive engagement in their learning.

Attitudinally, participants expressed high satisfaction with ChatGPT's suggestions regarding L2 accuracy, coherence, and depth, as well as a reduction in anxiety when asking follow-up questions (Lo et al., 2024). However, concerns about inaccuracies (Steiss et al., 2024), processing lengthy feedback (Guo & Wang, 2024), and prompting effectively (Lin & Crosthwaite, 2024), reflect a critical stance and active engagement. These responses highlight the potential and challenges of integrating GenAI for WFC practices for LOTEs.

Despite the small sample size and the use of a structured prompt, which may not reflect real-world uses of GenAI, these findings underscore the importance of critically engaging in writing revisions following feedback. To maximise the effectiveness of integrating GenAI tools, training teachers and

students to use detailed prompts tailored to the specific goal of the writing may facilitate deeper engagement (Liang et al., 2023; Crosthwaite et al., 2024) as these are more effective than generic ones (Koltovskaia et al., 2024; Yoon et al., 2023). Teachers should encourage learners to critically evaluate ChatGPT's feedback, viewing it as a writing assistant rather than a definitive authority (Teng, 2024). Further research could investigate learner engagement with GenAI-generated WCF across proficiency levels, the use of learner-designed prompts independently, and expand the scope to other LOTEs.

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Appendices

Appendix A

Online writing task instructions

1. In the space below, write an essay of at least 150 words in Spanish OR Indonesian explaining why you chose to study a foreign language at university, including your personal motivations, specific experiences or influences and the anticipated future benefits. Do not use dictionaries or machine translators, such as Google Translate or DeepL. You have 25 minutes to complete the task.

2. Use ChatGPT to revise your text, pasting the following prompt:
“You are a Spanish OR Indonesian language teacher. I am a second language learner of Spanish OR Indonesian. I have written this essay and would like you to provide specific, actionable feedback on its content, organisation, language and mechanics in Spanish. If needed, provide examples of how I could improve the essay. Do not provide a revised version of the essay.” Once you have received the feedback from ChatGPT, you may like to ask for clarification of the feedback. Please revise your essay accordingly in the space below.

Note: Unless specifically told otherwise by your Course Coordinator and the Course Electronic Profile (ECP), the use of Generative Artificial Intelligence technologies, such as ChatGPT, to complete any university assessment is strictly prohibited and may constitute student misconduct under the Student Code of Conduct.

Appendix B

Interview questions

1. In which aspect did ChatGPT provide you with feedback, e.g., vocabulary, grammar, formality, etc?
2. Do you think the suggestions provided by ChatGPT are correct? If so, how? If not, why?
3. Did you find the suggestions from ChatGPT useful? If so, how? If not, why?
4. Which suggestions provided by ChatGPT did you decide to accept? Why?
5. Which suggestions provided by ChatGPT did you decide to reject? Why?
6. Were there any suggestions provided by ChatGPT that you did not know whether to accept or reject? If so, which one?
7. What is the most difficult part of using ChatGPT as a feedback tool?
8. What is the most beneficial part of using ChatGPT as a feedback tool?
9. How is it different from the teacher's feedback?
10. What other questions did you have to ask ChatGPT to complete/revise your essay? And how useful was the feedback from those questions?
11. Do you think your revised essay version is better than the original? How? In what ways?
12. Would you use ChatGPT again in future written language practices? Why? Why not?
13. Do you think teachers should guide students on how to use ChatGPT for feedback in language classes? Why? Why not? If so, how?

Appendix C

Participants' Sample Quotes

1. Cognitive engagement

At the end of the first paragraph, I had written “be desarrollado”. But then it said, to change it to “desarrollé”. I think between those two past tenses, I can be confused about when I should use one or the other. So then, it was like that past tense and not the other one. (Isabella, Spanish learner)

However, I did think that it was important to include a paragraph, just because having a really big chunk of information isn't digestible. So then I split it up like suggested by ChatGPT. (Mawar, Indonesian learner)

2. Attitudinal engagement

I was expecting it [feedback] to be more generic. But it gave a lot of examples from the essay on where I could improve (Taylor, Spanish learner).

A positive way that it's different is that it's immediately responsive in any situation. If you're at home, you can get immediate feedback, which is really helpful, especially for weekly tasks. And it is able to highlight the reasons behind the changes it makes, which makes it more helpful. [...] there are certain contexts when you don't really have the time, or, you know, the place to be able to converse with a teacher. So a tool like this is still helpful, even if it is slightly less ideal in certain aspects, I still think that it's valuable. (Nuri, Indonesian learner)

The very first thing I didn't really understand was ‘you've mentioned that you studied Spanish for 6 years’, and it just told me what I had done. It wasn't helpful. (Luke, Spanish learner)