

Article

Low-Proficiency Students' Cognitive and Affective Engagement with Combined Audio and Indirect Written Feedback in an EFL Writing Class

Listiani Listiani ^{1,2,*}, Ágnes Hódi ³ and Marianne Nikolov ⁴

¹ Department of Educational Sciences, Faculty of Humanities and Social Sciences, University of Szeged, 6722 Szeged, Hungary

² Department of English Language Education, Faculty of Teacher Training and Education, University of Muhammadiyah Purwokerto, Purwokerto 53182, Indonesia

³ Department of Kindergarten Education, Institute of Applied Pedagogy, Juhász Gyula Faculty of Education, University of Szeged, 6725 Szeged, Hungary; hodi.agnes@szte.hu

⁴ Institute of English Studies, Faculty of Humanities and Social Sciences, University of Pécs, 7624 Pécs, Hungary; nikolov.marianne@pte.hu

* Correspondence: listiani@edu.u-szeged.hu

Abstract

The importance of learners' cognitive and affective engagement with teachers' feedback has been recognized, but they remained underexplored. To bridge this gap, this qualitative research aims to understand the dynamics of low-proficiency English learners' cognitive and affective engagement with a teacher's combined modes of feedback (CMF) in an Indonesian EFL context. A class of first-semester learners, working individually and in pairs, wrote narrative and descriptive texts and revised their texts. Data was collected with an open-ended questionnaire and a retrospective interview. The results showed that students engaged with the teacher's CMF both cognitively and affectively but to varying degrees. Most of them were aware of the feedback by noticing and understanding the writing issues addressed by the feedback, and they used cognitive and meta-cognitive strategies that led them to have positive and negative emotional reactions and attitudinal responses. The last section discusses the pedagogical implications, limitations, and future directions for research.

Keywords: cognitive and affective engagement; writing; combined modes of feedback; low proficiency; EFL learners

Academic Editors: Lawrence Jun Zhang and Doris L. Watson

Received: 20 April 2026

Revised: 22 June 2026

Accepted: 7 July 2026

Published: 13 July 2026

Copyright: © 2026 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) license.

1. Introduction

Feedback on English as a second language and as a foreign language (L2/EFL) students' writing has been acknowledged as an integral part of curricula and to benefit learning (Dixon, 2015; Killingback et al., 2019; Sarcona et al., 2020). Feedback provides information on learners' abilities from teachers, peers, parents, themselves, and experiences (Hattie & Timperley, 2007) and from automated writing evaluation (AWE) such as Grammarly (Anastasia et al., 2024; Thi et al., 2023). It helps them understand their writing problems and improve their writing performance (T. Han & Sari, 2024; Panahi et al., 2013; Tan & Manochphinyo, 2017). For feedback to fulfill its role, students must engage with it by understanding and using it (Winstone et al., 2017), as student engagement with feedback

has a positive association with student learning outcomes; thus, student interactions with feedback are primary to learning (Z. V. Zhang & Hyland, 2022).

Teachers have played an important role in promoting student engagement with feedback (Z. V. Zhang & Hyland, 2022) by providing different modes of feedback, offering a supportive environment, and impacting students' attitudes (e.g., Handley et al., 2011; Lunt & Curran, 2010). Promoting students' cognitive and affective engagement makes an important contribution to their learning. Studies indicated that when students view their teachers' feedback positively, it strengthens their emotional connection to learning, resulting in a higher level of affective engagement (Gan & Wang, 2024; Wang et al., 2022; Z. V. Zhang & Hyland, 2022). Moreover, receiving detailed and understandable feedback often led students to positive emotional responses, which encouraged them to actively revise their work and engage more deeply with the feedback (Ene & Yao, 2021). Also, engaging students' groups as they write and revise their texts based on detailed feedback can enhance positive emotional engagement. This approach helps students feel connected and supported, which in turn improves their engagement with the feedback process (Z. Zhang, 2022).

The combined mode of feedback (CMF), combining audio feedback (AF) and indirect written feedback (WF), offers more detailed feedback that teachers can provide than relying on a single mode, such as audio-only or written-only feedback (Listiani et al., 2025). A single mode of feedback targets specific issues. The AF can address macro-level issues such as ideas, content, organization, and coherence, while the WF can address micro-level issues, including grammar, punctuation, vocabulary, capitalization, and spelling (Alharbi, 2022; Cavanaugh & Song, 2014; Morra & Asís, 2009). In contrast, CMF has the capability to handle a wider array of writing issues across both micro and macro levels (Listiani et al., 2025). Therefore, the mode of feedback, as an important contextual factor, is considered to influence student engagement (Mao & Lee, 2023; Shen & Chong, 2023). Research on students' engagement with a single mode of feedback has been of interest to L2 writing researchers (Alharbi, 2022; Alsahil et al., 2024), and they considered the individual difference factors, including students' proficiency (Zheng & Yu, 2018; Cheng & Liu, 2022). However, students' cognitive and affective engagement with teacher CMF has yet to be explored and has received limited attention (Listiani et al., 2025). Therefore, this study addresses this gap by investigating students' engagement with teacher CMF in an EFL writing class at an Indonesia university.

This study investigated the extent to which lower-proficiency (LP) L2 students engaged cognitively and emotionally with teacher-CMF in an EFL writing class in Indonesia. We address two research questions:

To what extent were LP L2 students cognitively engaged with their teacher's CMF?

To what extent were participants affectively engaged with their teacher's CMF?

2. Literature Review

2.1. The Construct of Engagement with Feedback

Student engagement has been acknowledged to play an important role in learning, as it mediates teacher feedback they receive and their learning outcomes. Student engagement is a multi-dimensional construct characterized by three dimensions: behavioral, affective, and cognitive engagement (Fredricks et al., 2004).

Although Fredricks et al. (2004) suggested a comprehensive, multidimensional construct of engagement, it does not specifically address students' engagement with feedback, the focus of this study. Derived from this construct, Ellis (2010) proposed a framework that is a widely used conceptualization of student engagement with feedback. It can be influenced by the types of feedback, individual difference factors, and contextual factors, concerning the manner in which students respond to the feedback they get (Ellis,

2010). These three perspectives are used to examine students' engagement with corrective feedback (CF). The cognitive perspective relates to how students attend to the feedback, whereas the behavioral perspective refers to the extent to which and how they use the feedback and revise their texts. Finally, the affective perspective refers to attitudinal responses to feedback.

Y. Han and Hyland (2015) expanded Ellis' (2010) framework to incorporate more ways that each dimension manifests itself to suit the complex nature of written CF provided after a delay and offline. They proposed a multi-dimensional framework of engagement. The cognitive dimension refers to the depth of processing the feedback, including awareness at the level of noticing and comprehending, meta-cognitive operations that control how much mental effort the students put into processing the feedback, and cognitive operations used to process the feedback and make revisions. The behavioral dimension pertains to revision operations in response to the feedback and observable strategies employed to enhance the accuracy of the drafts, future texts, and/or L2 competence. The affective dimension includes immediate emotional reactions upon receiving feedback, subsequent changes in feelings during revision process, and attitudinal responses toward the feedback.

Based on the conceptualization of engagement, the framework is relevant to the complex nature of the combined modes of feedback (CMF), combining audio feedback (AF) and indirect written feedback (WF). CMF encompasses a broader construct than only oral and written CF; it can incorporate instances where teachers offer corrections of mistakes, presented asynchronously and online. Additionally, CMF addresses more intricate writing issues and could include less direct correction and more indirect guidance (Listiani et al., 2025). Y. Han and Hyland's (2015) framework of engagement with feedback can be adopted in this study, as it includes more ways of how students respond to feedback cognitively, behaviourally, and affectively. Although originally developed in the context of corrective feedback, the framework focuses on learners' engagement with feedback processes rather than on a specific feedback type. Therefore, it is applicable to CMF despite the differences in its construct, delivery modes, and feedback characteristics. Through the concept of cognitive engagement (Y. Han & Hyland, 2015), the two modes of feedback in CMF provided students with more information and prompted them to spend more time processing it to understand the feedback and respond to it. The concept of behavioural engagement can include the manner in which students revise their text and their overall responses (or lack thereof) to feedback, which encompasses the aspect to which they respond (Alharbi, 2022) and the learning strategies they use to process feedback and improve their writing (Ryan et al., 2020). Students' emotional reactions during feedback acceptance, subsequent changes in their feelings during revisions, and attitudinal responses are included in the affective engagement (Y. Han & Hyland, 2015). Therefore, this study followed Y. Han and Hyland's (2015) framework and was not narrowly focused on corrective feedback.

2.2. The Potentials of Teacher-CMF from Previous Studies

Although research comparing two or more feedback modes demonstrates the potential benefits of combining audio feedback and written feedback, studies on the integration of these two modes remain limited. By combining these feedback modes, the strengths of each mode can offer students enhanced opportunities to engage with the feedback, while also revealing their respective limitations.

Studies examining the effects of AF and WF in EFL classrooms demonstrated that AF had a positive impact compared to WF. Students receiving AF (Alharbi, 2022; Bakla, 2020; M. A. Saeed et al., 2022) or corrective AF (Tabrizi & Ranjbaran, 2021) outperformed those receiving WF (Alharbi, 2022; Bakla, 2020; M. A. Saeed et al., 2022), metalinguistic correc-

tive WF (Solhi & Eğinli, 2020), or corrective WF (Tabrizi & Ranjbaran, 2021) in their writing performance (Alharbi, 2022; M. A. Saeed et al., 2022). This included achieving the highest number of correct revisions in their essay writing assignments (Bakla, 2020), demonstrating better content and organization (Solhi & Eğinli, 2020), and exhibiting better writing accuracy (Tabrizi & Ranjbaran, 2021). Although AF exerted a positive effect on students' writing performance, their perceptions and preferences varied. Bakla (2020) and Mohammed (2021) found that students did not uniformly prefer and perceive one feedback mode more positively than another one, but they emphasized the affordances and limitations of each feedback mode. Students perceived AF as more effective in providing details, clarifications, and personalization compared to WF, which was regarded as clearer and more comprehensible (Alharbi, 2021). Students expressed a preference for WF over AF for its clarity, ease of use, accessibility, and focus on specific issues (Alharbi & Alghammas, 2021). Furthermore, while AF provided fewer comments, it offered more language functions compared to WF (Alharbi & Alghammas, 2021). Studies also indicated that students incorporated AF into their revisions more frequently than WF (Alharbi, 2022).

Despite the opportunities and limitations that AF and WF may present, earlier studies comparing various feedback modes have suggested integrating these feedback modes. Earlier studies investigating students' preference towards feedback modes found that the majority of students preferred the combination of AF and WF over audio-only and written-only (Ice et al., 2010; Lees & Carpenter, 2012), and students' preference towards this feedback combination also appeared after audio-only (Merry & Orsmond, 2008) and written-only (Roy & Vetter, 2023). This combined or dual method of AF and WF could provide more detailed comments and more opportunities for students to engage with the feedback considering the number of students and the availability of time and resources (Hennessy & Forrester, 2014).

Earlier studies also indicated students' expectations of feedback modes in their future writing assignments. Rasi and Vuojärvi (2018), who gathered students' perceptions on the development of asynchronous formative AF practices for mobile learning in higher education, found that students expected the integration of AF and WF. Sarcona et al. (2020), who investigated how students perceived and utilized AF and WF, revealed that students perceived each feedback mode according to their benefits and drawbacks, and they preferred both feedback modes in future assignments over audio-only.

In summary, evidence in studies suggests that the combination of AF and WF offers the benefits of both modes for students and teachers. Students' perception and preference showed acceptance of teacher CMF. Therefore, CMF can offer students with helpful opportunities to engage with the feedback.

2.3. Empirical Studies on Student Feedback Engagement

Research on student engagement with teacher feedback has been a primary research area in both first language (L1) and L2 writing studies. Researchers have investigated students' engagement with different feedback modes and considered factors influencing learners' engagement. Studies have focused on limited research areas and yielded various findings.

A few studies focused on learners' feedback engagement with a single mode of feedback. Brearley and Cullen (2012) looked at how undergraduate students engaged with a teacher's formative AF on a written assignment; they found that their engagement was impacted by how well-organized they turned in finished drafts. The completion of the first draft impacted the extent of writing problems addressed in the feedback. The students who turned in finished drafts devoted more time to engaging with the feedback and responding to it. As a result, they got higher grades on their final drafts than those who submitted partially completed drafts. Another study investigated university learners' per-

ceptions and their affective engagement with Chinese-speaking teachers' and native English-speaking (NES) teachers' WF (Ene & Yao, 2021). Students received detailed feedback without overwhelming corrections from their NES teacher, which made them feel positive and encouraged them to revise their texts.

Researchers have compared students' engagement with different modes of teachers' feedback. Alharbi (2022) examined how many and how well they incorporated a teacher's feedback from four modes (oral, text, audio, and audio-visual) in their text revisions. The amount and quality of integration varied between the four feedback modalities. The most successful integration in revised texts was audio-visual, while the least successful integration was textual. Alsahil et al. (2024), who compared oral, audio-recorded, and automated writing evaluation (AWE), investigated learners' affective, behavioral, and cognitive engagement with the feedback modes. They found an inconsistency across three dimensions of feedback engagement, resulting from alignment and misalignment between learners' needs and the modes of feedback.

Another line of studies focused on in-depth descriptions of learners' engagement by considering their individual difference factors. Zheng and Yu (2018) studied LP L2 students' cognitive, affective, and behavioral engagement with a teacher's written CF. They revealed that despite students' positive emotional engagement, their behavioral and cognitive engagement did not result in better language accuracy due to their low proficiency. As a result, there was an imbalance among the three dimensions of feedback. In another study, Cheng and Liu (2022) investigated high-proficiency (HP) and LP L2 students' engagement with WF. Their engagement was influenced by their language proficiency and feedback focus. Both HP and LP students engaged similarly with feedback on global issues (i.e., content and organization) but differently with feedback on local issues (i.e., vocabulary and grammar). They found a complex non-linear relationship among the three dimensions of engagement.

In summary, the above studies showed that students engaged with the feedback to various degrees. Their level of language proficiency, the scope of writing issues addressed in the feedback, and the type of feedback mode influenced the extent to which students engaged with the feedback. Although the studies have added new insights into students' engagement with AF and WF, more studies are needed on LP L2 university students' engagement with teacher-CMF, especially in Indonesia, where no such inquiry has been conducted.

3. Materials and Methods

3.1. Research Design

The present study explored low-proficiency students' cognitive and affective engagement with their teacher's CMF in an EFL writing class at an Indonesian university. A qualitative approach (Creswell, 2015) was used to analyze students' responses to get insights into how they engaged cognitively and affectively with their teacher's CMF, involving their ways in which they processed the feedback, revised their texts, and they reacted emotionally and responded attitudinally. How they engaged behaviorally as another engagement dimension was presented in another paper (Listiani et al., 2025).

3.2. Context

This research took place in an undergraduate program at an English language education department in Indonesia during the fall semester of the 2022/2023 academic year. The academic calendar consists of 14-week meetings with weekly hundred-minute sessions, followed by two weeks of mid- and final-term examinations. As the program offers students courses in language and non-language knowledge and skills, students are re-

quired to attend a basic writing course in the first semester, preparing them for more advanced writing courses in subsequent semesters. They are expected to graduate with good academic writing skills after completing the writing courses.

The department assessed all students' English proficiency before starting the program. This evaluation is conducted periodically during their studies using the TOEFL ITP (Test of English as a Foreign Language—Institutional Testing Program). The results are used by the department to define their proficiency and group them to classes with similar proficiency levels based on the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2020). Basic users (A2-A1) were placed in regular classes, and students with scores of 430 or above (about B1 or higher) were placed in an international class. They are expected to achieve a minimum score of 500, that is above B1/lower intermediate level, to graduate.

3.3. Participants

The study involved 23 first-year BA students (5 males and 18 females) from a regular class. As their responses to a demographic questionnaire showed, their ages ranged from 18 to 20 ($M = 18.22$, $SD = 0.60$). They all enrolled in a basic writing course in the first semester. They were native Indonesian-speaking students and started learning EFL in schools around the age of nine. The English proficiency test found that 90% of students in this class were rated as basic users (A1), whereas 10% failed to reach A1. They varied significantly in their understanding of instructions, vocabulary, and grammatical structures and their ability to express and connect ideas, use cohesive devices in writing.

We invited their teacher, a female native Indonesian-speaking speaker, in her 30s to participate. She was in her third year of teaching this writing course. She holds a master's degree in English language education from a university in Indonesia and attended a workplace training for improving novice lecturers' pedagogical competency, namely Pengembangan Ketrampilan Teknik Instruksional/PEKERTI (The development of instructional technique skills) regulated by the Indonesian government under Kementerian Pendidikan Tinggi, Sains, dan Teknologi Indonesia (Kementerian Pendidikan Tinggi, Sains, dan Teknologi Indonesia, n.d.) and organized at a university in the country.

3.4. Data Collection Instruments

Based on a framework of engagement and several empirical studies (e.g., Alharbi, 2022; Cheng & Liu, 2022; Z. V. Zhang & Hyland, 2022; Zheng et al., 2020), we found that learners' cognitive and affective engagement with feedback can be examined with reflective open-ended questionnaires and semi-structured retrospective interviews.

The open-ended reflective questionnaire (Q) and retrospective interview (I) comprised nine open-question items aiming to elicit in-depth information on learners' cognitive and affective engagement with feedback (Appendix A). Cognitive engagement, collected in question one (Q/I 1), gathered data on learners' awareness of noticing and understanding the feedback, and in questions two to four (Q/I 2, Q/I 3, & Q/I 4), gathered data on learners' cognitive and meta-cognitive strategies for processing the feedback and revising the texts. While for affective engagement, question five (Q/I 5) collected their emotional reactions, and questions six to nine (Q/I 6, Q/I 7, Q/I 8, & Q/I 9) collected their attitudinal responses. The question items were adapted from previous studies (i.e., Ene & Yao, 2021; Cheng & Liu, 2022; Zheng & Yu, 2018). Demographic information of all students was collected by a short questionnaire.

3.5. Procedure

A naturalistic classroom-based approach was used to examine the students' cognitive and affective engagement with their teacher's CMF from different sources in an EFL writing class. We distributed a questionnaire to collect their demographic information, and we obtained the students' language proficiency levels from the department. Students were given a questionnaire and interviewed, and their responses were analyzed to gather information about their cognitive and affective engagement with their teacher's feedback.

Before collecting data, we obtained the approval of the ethical board at the University of Szeged, Hungary (Date: 16 August 2022; #10/2022). We shared the ethical approval with the department of a university in Indonesia where the study took place. The department gathered written informed consent forms for this study from the teacher and her intact class of students. Additionally, we also informed participants about the confidentiality of this project. The research was approved by all parties.

Data was collected over a 14-week semester from September to December 2022 (Table 1). In accordance with a weekly syllabus, a descriptive writing task was given during weeks 6 to 8. Students worked on these individually. A narrative task was given during weeks 11 to 12; students worked in pairs. During these weeks, they produced their first draft of each writing task; then the teacher gave them CMF, and they revised the drafts to produce final drafts. The writing class syllabus promoted a CMF mediated by technology, multiple drafts, revisions, and individual and collaborative work, and addressed various aspects of writing issues related to the research questions. Students stored their first drafts in a Google Drive. It gave the teacher and students access to texts and feedback online. The teacher provided indirect WF to students' texts by highlighting words or phrases using color codes to indicate errors electronically (Ellis, 2009; Ene & Upton, 2014). Another mode of feedback was also provided by inserting an online link to downloadable recorded oral feedback on Vocaroo (<https://vocaroo.com/>). The oral recorded feedback included explanations about the highlighted errors. The teacher gave the first researcher permission to access the texts and her feedback. The students' first and final drafts of two different tasks, along with their teacher's CMF practices, were analyzed to show how the students engaged behaviorally with their teacher's CMF in their EFL writing class, and the results were presented in a separate paper (Listiani et al., 2025).

Table 1. Short syllabus of the writing course.

Week	Activities
Weeks 1–3	Introduction to the Writing I course Paragraph and essay writing fundamentals
Weeks 4–5	Introduction to descriptive writing & evaluation aspects, Brainstorming
Week 6	Writing draft I
Week 7	Draft I returned with teacher CMF
Week 8	Revising & writing draft II
Weeks 9–10	Introduction to narrative writing & evaluation aspects, Brainstorming
Week 11	Writing draft I
Week 12	Draft I returned with teacher CMF
Week 13	Revising & writing draft II
Week 14	Portfolio submission

At the end of the course, we distributed the questionnaire to 23 students. Two students were excluded from data analysis for their incomplete datasets. After administering the questionnaire, we conducted an interview with seven students who volunteered to

participate. These students expressed their willingness to take part in the interview by completing the interview participant section of the questionnaire. Additionally, they reaffirmed their readiness to participate before the interview commenced. The first researcher spent about thirty minutes conducting one-on-one interviews with the seven students through the Zoom platform. The interviews were conducted in L1 Indonesian to create a comfortable environment for the students and to encourage them to express themselves clearly. The interviews were recorded in audio format, transcribed and translated into English by the first researcher, subsequently reviewed by an experienced translator, and reviewed by the other researchers. The data collected from questionnaire and interviews were analyzed to reflect their participation in writing and revising their drafts, and their emotional reactions and attitudinal responses. The results were used in this present study to indicate their cognitive and affective engagement with their teacher's CMF in an EFL writing class.

3.6. Data Analysis

For data analysis, we applied an inductive approach. The analysis of qualitative datasets started by reading and rereading them. Then, we coded students' answers to the open-ended reflective questionnaire and retrospective interview on their cognitive and affective engagement. The datasets from questionnaire and interview were entered into MAXQDA® 2020 and analyzed separately. We used open coding, eclectic coding, and pattern coding (Saldaña, 2013). In the first cycle, each data point was read and re-read, and the identified excerpts were labeled with codes and assigned to different categories. These code and category choices were refined and grouped into themes in the second cycle. The three researchers revised the datasets multiple times and agreed on the codes associated with themes. Subsequently, the refined items were assigned as cognitive and affective engagement. The emerging themes from students' responses to the questionnaire and interview were also coded by an iterative process. Examples of cognitive engagements were coded as awareness (noticing and understanding) of feedback points and meta-cognitive and cognitive strategies. Affective engagement examples were coded as positive or negative emotional reactions and attitudinal responses towards the teacher's feedback. The coding process was conducted by the researchers through online discussion. An iterative process was employed to refine the codes generated from the data. The coding cycles were repeated multiple times. The initial codes were created by the first researcher and subsequently shared with the other researchers. After reviewing the codes, revisions were made, and the updated codes were reviewed again until consensus was reached among all researchers on the final codes. Although disagreements occurred, they were resolved through discussion.

4. Results

4.1. Low-Proficiency L2 Students' Cognitive Engagement with Their Teacher's CMF

The first research question investigated students' cognitive engagement with their teacher's CMF. In terms of their awareness, the findings indicated that all students responded to Q1 and I1 were aware of the teacher's feedback. They did not have difficulties identifying and understanding feedback points in the CMF in their texts. They noticed micro-level issues, such as grammar, punctuation, word choice, spelling, and capitalization, and macro-level points related to ideas, content, organization, and coherence. They were also aware of their teacher's suggestions on correcting mistakes and improving their writing. The points were identified in the teacher's audio files, and she also highlighted them in their texts. The following excerpts are the responses of student one (S1) and student seven (S7).

My lecturer's comments were about transition words and the reasons why characters did what they did. I also got comments on the use of capital letters and tenses. (S4 in Q1)

[The feedback] was about [how to] improve the narrative text that my group submitted. For example, I made a mistake in capital letters, and [teacher's name] explained through her audio feedback that this part was incorrect. The grammar was also wrong. Then, she said, "For narrative text, the tense is simple past tense." ...I made a mistake. I still used the present tense. The errors were also highlighted by her. The other problems were related to the content of the narrative text, the structure of the text, the plot of the story, the reason why the characters did this, and the ending that should have moral value. (S7 in I1)

Findings of students' cognitive and meta-cognitive strategies showed that several strategies were mentioned by 19 students in response to Q2 and all students in Q3 and Q4, and by all students in response to I2, I3, and I4. They reported that while they received the feedback, they tried to understand the problems, looked at them in their draft, and wrote them down. They also analyzed the feedback, thought about ways in which they could improve their texts, corrected their mistakes, and used an online platform to help them revise their texts. The interviews showed similar strategies: they reported that after listening to the feedback, they discussed problems with their partners, read their texts, and revised them. They also reread and revisited problems, evaluated their drafts, identified the problems, and determined the solution. The following examples are the students' responses.

I looked for the location of errors that I needed to correct by seeing highlighted words in orange and yellow. Then, I analyzed the mistakes and corrected them. I also used Grammarly to help me revise grammar mistakes. (S8 in Q4)

We listened to the audio and revised together with my partner. Of course, I listened to it well. Then, I thought, "How can the text be better than the previous one?" Then, we immediately revised it. ... We also evaluated the comments and texts about what else needed to be replaced or what else needed to be added. When we first created narrative text, we looked at the examples of narrative texts on Google. However, after we got feedback, we found out that the examples ... were wrong. I also looked for other sources, but they were only used as references. All comments and suggestions were followed. We improved [our work] and added the content of our text. Then, we made the plot and ending of the story clearer. There was no total change. Some were deleted, but we did not completely change our text. (S3 in I4)

Accordingly, findings showed that the cognitive strategies included understanding of the problems, revisiting and rereading the draft, taking notes on key points, analyzing and discussing the mistakes, looking for references before revising, and finally, correcting mistakes. Some meta-cognitive strategies were also used, for example, they thought about ways to improve their writing, reread and revised drafts multiple times, and used information technology on online platforms to help them revise the problems. Therefore, they implemented learning strategies, planned, monitored their progress, varied and adjusted their strategies, used self-evaluation and critical reflection to facilitate their revision practices and regulate their mental efforts while processing feedback.

In addition to strategies, they also demonstrated learning autonomy because they knew how to find help, and they were able to determine what tools to select and use for revising their texts. They used Grammarly and Google to get external help with internet support. These steps showed that the students had good information technology literacy skills and knew how to apply them.

Therefore, these findings documented how students engaged cognitively in the teacher's CMF. They noticed and understood micro and macro problems that the CMF addressed in their drafts through listening to audio files and checking the highlighted sections. They applied cognitive and meta-cognitive strategies efficiently and autonomously to support their learning process. Their awareness of the CMF and their use of cognitive and meta-cognitive strategies regulated their learning and facilitated their processing of feedback and revisions of their texts.

4.2. Low-Proficiency L2 Students' Affective Engagement with Their Teacher's CMF

To answer the second research question, we analyzed students' affective engagement with the teacher's feedback to explore how they reacted emotionally and responded attitudinally.

The findings of Q5 and I5 showed students' emotional reactions to the teacher's feedback practices. The Q5 indicated that students' emotions occurred before they received and after they processed the feedback. Twenty students reported positive emotional reactions: they felt happy, grateful, interested, and curious. A negative emotional reaction was also found: a respondent worried about making mistakes. The following excerpt is an example of a student's emotional reactions:

I felt anxious because I was afraid that there would be too many mistakes in writing. (S14 in Q5)

The data elicited in I5 indicated that students did not report any immediate emotional reactions upon receiving the feedback; however, they occurred before receiving feedback and after they processed the feedback. The students mostly reported more than one emotional reaction towards their teacher's feedback. A range of positive emotional reactions included feeling happy, close to the teacher, feeling cared for, confident, enthusiastic, comfortable, helped, crystal clear, and motivated. Emotion shifts were also found from one reaction to another. Their emotions changed from being worried and scared before receiving the teacher's feedback to feeling relieved after receiving the feedback. The following is an example of a student's excerpts.

I felt scared. I was afraid that everything would go wrong, and I was afraid of being heavily criticized. However, when I was praised, my thoughts were like "Oh it turns out it wasn't that bad", so I felt relieved. At first, I was really scared, but after listening to the criticism and suggestions from the audio, I felt very relieved. (S6/I5)

The overall emotional reactions indicated that students' emotions toward the teacher's CMF varied. Some feelings found in the questionnaire also emerged in the interviews, but others emerged only in the interviews. Students' responses were different before and after receiving and processing feedback. Although before receiving it, some students were anxious about the quality of their texts due to their low English proficiency level, all students reacted positively to the teacher's CMF after they had received it. These outcomes indicated that they expected their teacher to give helpful CMF to their texts, and once they had access to their teacher's comments, they appreciated it overwhelmingly.

Students' attitudinal responses were also elicited to explore their attitudes towards the benefits (Q&I 6) and drawbacks (Q&I 7) of feedback, what they recommended as improvements (Q&I 8), and their preference for feedback modes (Q&I 9), collected from both instruments.

Regarding how useful students perceived feedback, all respondents in both instruments highly valued it for easy and unlimited access, and clear, detailed, and understandable content. They also pointed out that feedback helped them identify problems, improve

their draft, interact with the teacher personally and indirectly, learn how to write, and save time.

Additionally, responses to the questionnaire also showed that feedback helped students locate, know, and correct their mistakes, understand their weaknesses, learn about the quality of their texts and their writing abilities, improve their concentration, and get suggestions for revising their work. Its benefits also emerged in the interviews. Students highly appreciated feedback because it benefitted them with slow-paced, clear, and understandable language, they got insights from a reader's point of view, information about how to write, and what to do next, and they learned about their strengths and weaknesses. The following examples are the students' excerpts.

The usefulness of [the teacher's feedback] could help me understand the teacher's explanation because it [felt like she] spoke to me directly, so that it was easier to understand (S8 in Q6)

...[the feedback language] was English and Indonesian. ... Because our lecturer understood us, she ... mixed [her languages], so that the feedback was easier to understand. If it was pure English, maybe I'm still trying to understand the feedback now. (S6 in I6)

Although most participants valued feedback, 13 respondents in the questionnaire and six students in the interview pointed out some drawbacks. They included references to poor sound quality, content-related problems, and accessibility. The quality of the audio file was unclear, noisy, broken, and low; the content had few critical points and provided hints only. Some difficulties were noted concerning access to the feedback due to a poor internet connection. They also addressed a problem related to feedback language: the teacher used more English than the students' native language. These are excerpts from the responses.

[Teacher's CMF] was quite difficult to access when I did not have an internet data package. (S6 in Q7)

Several explanations used Indonesian, but more explanations were in English. ... because I was still studying in semester 1, there were some words that I didn't know yet. ... (S4 in I7)

Due to the disadvantages that the CMF participants experienced, 12 students in the questionnaire and four students in the interview suggested some improvements to the feedback. They suggested making the sound clearer and louder, making the scripts of the AF available, making the access to the application easier, and making its comments more specific and critical. Additionally, students also suggested improvements by sequencing the comments and by improving or changing the application's sound recording quality. These are samples of students' excerpts.

I was very grateful for receiving feedback from my lecturer. Everything was very stable and easy to access and understand. However, I need it to give me criticism without hesitation or feeling bad because criticism, input, and suggestions are very important in my learning process as a student. (S13 in Q8)

Perhaps the media ... should not be Vocaroo. Vocaroo often has technical errors. ... The sound was not clear, and suddenly the volume increased by itself.... The sound was like having trouble getting [an internet connection]. (S7 in I8)

The findings also showed students' preference for familiar feedback modes. All students, gathered in both instruments, preferred their teacher's CMF to other forms of feedback they had experienced. The CMF was considered more detailed, understandable, accessible, and personal than written and verbal feedback. Here are some examples of students' quotes.

In my opinion, marking and audio are enough. (S6 in Q9)

I once got verbal feedback. The feedback was addressed to all students because there were a large number of students... [However], if it was the teacher's feedback [CMF], the text was really scrutinized from the beginning of the text to the end. Therefore, in my opinion, the feedback was better. I prefer the feedback because it was more detailed, and its audio could be listened to repeatedly. So, if I still didn't understand what it meant, I could replay the file again until I really understood it. The feedback was also quite helpful because there were marks in the text where parts needed to be revised. [They] were highlighted by [teacher's name], so they [marks] helped me revise the sentences that needed to be corrected. The marks were blue and yellow highlights. The blue color was for punctuation, and the yellow one was for grammar. (S2 in I9)

Therefore, students' attitudinal responses showed that they valued the feedback highly. However, they perceived the feedback negatively for some aspects, and they offered their ideas for fixing the shortcomings. Overall, despite some issues, they clearly preferred their teacher's CMF to written and spoken feedback alone.

In conclusion, the findings documented students' affective engagement with the teacher's CMF. They showed emotional reactions before and after receiving the teacher's CMF, reflecting changes in their attitudes. They expressed both positive and negative emotions towards the new practice of getting feedback. Despite the shortcomings they pinpointed, their suggestions for improvement and their overall answers indicated that they highly appreciated CMF for its usefulness and showed their preference for it. Their answers indicated a good working relationship with their instructor, and they were clearly supportive of her ways of using CMF.

5. Discussion

The findings of the study indicated that the teacher's combined modes of feedback (CMF), combining audio feedback (AF) and highlighting, was perceived by the participants as a helpful and motivating way of scaffolding their writing abilities in English, encouraging meaningful engagement with the feedback.

The first research question focused on the students' cognitive engagement with their teacher's CMF. Students cognitively engaged with it in multiple ways, in line with findings of other studies (Cheng & Liu, 2022; Y. Han & Hyland, 2015; Pohl, 2020; Z. V. Zhang & Hyland, 2018). They were aware of their teacher's feedback and used cognitive and meta-cognitive strategies. These forms of cognitive engagement facilitated their revision practices and regulated their mental efforts to process the feedback.

In terms of awareness of the feedback, the findings showed that all participants were aware of and could recognize and comprehend problems in their texts. They could find ways to correct their mistakes to improve their texts based on the audio file and the highlighted sections. These findings provide further evidence to previous studies investigating low-proficiency (LP) Second language (L2) students' engagement with AF or written feedback (WF), particularly indirect WF. AF scaffolded LP L2 learners understanding and reviewing the issues (Alsahil et al., 2024). However, they found WF easy to notice but difficult to understand (Cheng & Liu, 2022; Zheng & Yu, 2018).

As for another sub-dimension of cognitive engagement, we found that most students argued that they used certain cognitive and meta-cognitive strategies to respond to the CMF. They demonstrated self-efficacy, a sense of ability to improve their texts, as they argued for using the necessary learning strategies to revise their drafts. They regulated their own learning by planning, monitoring their own progress, varying and adjusting strategies, self-monitoring, evaluating, and reflecting their revisions, and seeking another

help independently. The strategies they used indicated that students could take responsibility for their own learning (Holec, 1981). Autonomous learning can be fostered by utilizing automated writing evaluation programs, such as Grammarly (Barrot, 2021; Cavaleri & Dianati, 2016). However, limited cognitive and metacognitive strategies were adopted by LP L2 students who engaged with AF-only and WF-only (Alsahil et al., 2024; Cheng & Liu, 2022; Zheng & Yu, 2018).

Accordingly, an adequate level of noticing and understanding of CMF could be attributed to the way their feedback mode worked as it did. Although they lacked linguistic competence as required by Chandler (2003) to interpret indirect WF, the explanations in the teacher's audio feedback were a viable support to understand the message. As they received adequate assistance for processing the CMF and revising their texts, they were aware of their teacher's CMF. They also used more cognitive and meta-cognitive strategies. Thus, they engaged cognitively with the teacher's CMF in different ways than students in other studies.

The second research question concerned the students' affective engagement with the feedback, including both positive and negative emotional reactions, changes in feelings, and attitudinal responses towards the teacher's feedback (Y. Han & Hyland, 2015; Z. V. Zhang & Hyland, 2018). We found a temporal reference to their emotional reactions: they gave accounts of both positive and negative feelings as they anticipated feedback, whereas they experienced only positive emotional reactions after processing it. However, they did not report any emotional reactions immediately after receiving the feedback. Overall, participants appreciated the feedback, which resonated with earlier studies investigating LP L2 students (Alsahil et al., 2024; Anastasia et al., 2024; Cheng & Liu, 2022; Zheng & Yu, 2018; Zheng et al., 2020). However, negative emotions emerged following LP L2 students' use of WF-only (Cheng & Liu, 2022; Zheng et al., 2020; Zheng & Yu, 2018).

As far as their attitudes were concerned, all students valued CMF highly, but they also identified its drawbacks and suggested some improvements for it, which provided evidence for previous studies investigating AF and WF. In terms of accessibility, students found that the feedback could be accessed easily and unlimitedly (Alsahil et al., 2024; Zhan, 2023), but accessing it required an internet connection (Kiymaz, 2023). Furthermore, although they valued the clarity of the feedback content (Ice et al., 2010), they pointed to its complexity, so they suggested providing stages in delivering comments, audio script provision, and direct comments. They also needed more critical comments (Sipple, 2007).

Additionally, they valued the clarity of feedback language highly. However, they argued that the teacher did not adapt to their language ability levels, as the adaptation was important to match students' needs and expectations (Neupane Bastola & Hu, 2021). Another problem identified was sound quality (Zhan, 2023), so they suggested changing the audio-recorded application for improved sound clarity. This was an unexpected outcome, as in Rasi and Vuojärvi's (2018) study, the application was found adequate with minor problems. Feeling connected to the teacher, saving time, and support to develop draft quality, writing ability, and concentration were also highly appreciated by students, and these valued characteristics of CMF were consistent with previous studies (e.g., Anastasia et al., 2024; Cheng & Liu, 2022; Dixon, 2015; Hennessy & Forrester, 2014; Killingback et al., 2019; Kirwan et al., 2023; N. Saeed & Mohamedali, 2022; Zheng et al., 2020).

Despite the drawbacks of the feedback, all students preferred the teacher's CMF. They felt very close to the teacher, and they appreciated her extra work. The fact that students were aware of a pedagogical innovation and found it helpful was seen as motivating. These results partially resonate with previous findings on students' preference towards CMF for the potential of combining AF and WF (Ice et al., 2010; Lees & Carpenter, 2012; Merry & Orsmond, 2008; Rasi & Vuojärvi, 2018; Sarcona et al., 2020). Other studies

investigating teacher feedback across different modes depicted students' mixed perceptions and preferences for each mode (Alharbi, 2022; Alsahil et al., 2024; Bakla, 2020).

Therefore, framed along the three dimensions of learner engagement (Ellis, 2010; Y. Han & Hyland, 2015), the present study revealed the multifaceted nature of EFL undergraduates' cognitive and affective engagement with their teacher's CMF while revising their texts in a basic writing class. The teacher's CMF made students aware of feedback points in the audio file and color-coded texts. She encouraged her students to apply learning strategies as they responded to and processed the feedback during revisions. Most students experienced positive emotional reactions and attitudinal responses after receiving the feedback. Although students demonstrated extensive cognitive engagement and positive affective engagement with the feedback collected from two instruments, this does not suggest a reciprocal relationship between cognitive and affective engagement for their complex relationship. This complex non-linear relationship among engagement dimensions is in line with the results of previous studies (Cheng & Liu, 2022; Zheng & Yu, 2018). Therefore, the present study provided preliminary results, indicating how their cognitive engagement related to their affective dimensions of engagement to a varying degree and how their low proficiency level contributed to their engagement with the feedback.

Although this study offers valuable insights into students' cognitive and affective engagement with teacher CMF, some limitations should be acknowledged. First, students' engagement with the teacher's CMF did not indicate the overall success of students' engagement with the feedback. Connecting the results of the present study with the students' behavioral engagement can provide new insights into L2 feedback practices. Second, as participants were at a low level of English proficiency, further studies should involve students with better English proficiency to find out how they respond to CMF. Third, findings cannot be generalized to other students, teachers, or contexts, as this was a case study involving only one group of learners with their teacher.

The pedagogical implications are important for improving not only students' engagement with feedback but also for their overall motivation, self-efficacy, and autonomy. First, the learners' language proficiency level indicates their ability to notice, understand, interpret, and use the feedback appropriately (Cheng & Liu, 2022; Listiani et al., 2025; Zheng & Yu, 2018). Being aware of their level of English proficiency guides teachers to choose and apply an appropriate feedback mode. Second, teachers should consider the features of each feedback mode that suit their students' needs. Different categories of issues can be effectively addressed through well-articulated comments (Alharbi, 2022). The combination of feedback modes can provide beneficial practices for helping LP L2 students' writing (Listiani et al., 2025). Third, teachers should use more advanced technology that provides free access for teachers and students to address the poor quality of sound and difficult access. Finally, based on the findings of our small-scale study, some unique features of CMF stand out. The teacher's recorded voice combined with visual information added to the students' texts proved to be conducive to the students' engagement with their writings. Both types of feedback were contextualized, and integrated oral and written information. Students could go back and listen to each comment as many times as necessary, whereas unrecorded oral feedback can be heard only once. The students felt that their teacher cared about their development and trusted them that they could revise their texts with her carefully designed and implemented scaffolding techniques. Also, using CMF was an innovation on part of their teacher, and their active involvement in the process motivated them. They appreciated their teacher's extra work and the way she involved them in this innovative project. These outcomes have important implications for writing instruction. At the time when writing instructors worry about students using AI for writing assignments instead of engaging with their tasks, CMF can serve as a helpful

way forward, involving students in developing their writing abilities instead of using shortcuts.

6. Conclusions

Despite the recognition of the significance of students' engagement with their teachers' feedback, studying combined modes of feedback (CMF) is limited. To the best of our knowledge, this study fills a gap in the literature by providing the first empirical evidence on a group of low-proficiency (LP) Second language (L2) learners' engagement with their teacher's CMF. The CMF encouraged LP L2 students to deeply engage with the feedback. It demonstrated their cognitive and affective engagement with their teacher's CMF, although their engagement varied. Overall, students had a positive learning experience with their teacher's innovative use of feedback in their EFL writing class. Although this study was conducted in a limited context, the results offer a glimpse into how participants' engagement could enhance their self-efficacy, self-regulation, and motivation, as well as their writing abilities in English and their relationship with their teacher. More innovative studies, employing various instruments, are needed to strengthen the results of this study.

Author Contributions: Conceptualization, L.L. and M.N.; Methodology, L.L. and M.N.; Software, L.L.; Validation, L.L., Á.H. and M.N.; Formal analysis, L.L.; Investigation, L.L.; Resources, L.L.; Data curation, L.L.; Writing—original draft, L.L.; Writing—review & editing, L.L., Á.H. and M.N.; Visualization, L.L.; Supervision, Á.H. and M.N.; Project administration, L.L.; Funding acquisition, Á.H. All authors have read and agreed to the published version of the manuscript.

Funding: The APC was funded by University of Szeged Open Access Fund, grant number (8634).

Institutional Review Board Statement: The study was approved by the University of Szeged Institutional Review Board (IRB) of the Doctoral School of Education (08/16/2022; #10/2022).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. (the data are not publicly available due to privacy or ethical restrictions).

Acknowledgments: We express our gratitude to all participants who participated in this study. During the preparation of this manuscript/study, the authors used MAXQDA® 2020 for the purposes of data analysis. The authors have reviewed and edited the output and take full responsibility for the content of this publication.

Conflicts of Interest: The authors declare no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript:

CMF	Combined mode of feedback
AF	Audio feedback
WF	Written feedback
CF	Corrective feedback
BA	Bachelor of Arts
S	Student
Q	Questionnaire question item
I	Interview question item
LP	Low proficiency
HP	High proficiency
EFL	English as a foreign language
L1	First language

L2 Second language

Appendix A

Question items of the questionnaire and interview:

1. What comments did you receive from your teacher on your first draft?
2. What did you do when you received the feedback?
3. What did you do when you revised your writing?
4. To what extent did you use the feedback?
5. What did you feel when you received teacher feedback?
6. What do you think of the feedback benefits?
7. What do you think of the feedback drawbacks?
8. What improvements do you wish for the feedback?
9. What mode of feedback (e.g., combined audio and highlight feedback, spoken feedback only, or written feedback only) do you prefer?

References

- Alharbi, M. A. (2021). Impact of teacher written vs. audio feedback on EFL undergraduates' writing. *Cypriot Journal of Educational Sciences*, 16(3), 1141–1153. <https://doi.org/10.18844/CJES.V16I3.5836>
- Alharbi, M. A. (2022). Exploring the impact of teacher feedback modes and features on students' text revisions in writing. *Assessing Writing*, 52, 100610. <https://doi.org/10.1016/j.asw.2022.100610>.
- Alharbi, M. A., & Alghammas, A. (2021). Teacher written vs. audio feedback on undergraduates' written assignments. *Theory and Practice in Language Studies*, 11(12), 1562–1570. <https://doi.org/10.17507/tpls.1112.08>
- Alsahil, A., Abdel Latif, M. M., & Alsuhaibani, Z. (2024). Exploring EFL learner engagement with different teacher feedback modes. *Computer Assisted Language Learning*, 39, 336–363. <https://doi.org/10.1080/09588221.2024.2374785>.
- Anastasia, W., Murtisari, E., & Isharyanti, N. (2024). Lower-proficiency EFL students' use of Grammarly in writing: Behavior, cognition, and affect. *The JALT CALL Journal*, 20(1), 1–25. <https://doi.org/10.29140/jaltcall.v20n1.1089>.
- Bakla, A. (2020). A mixed-methods study of feedback modes in EFL writing. *Language Learning & Technology*, 24(1), 107–128. <https://doi.org/10.125/44712>.
- Barrot, J. S. (2021). Using automated written corrective feedback in the writing classrooms: Effects on L2 writing accuracy. *Computer Assisted Language Learning*, 36(4), 584–607. <https://doi.org/10.1080/09588221.2021.1936071>.
- Brearley, F. Q., & Cullen, W. R. (2012). Providing students with formative audio feedback. *Bioscience Education*, 20(1), 22–36. <https://doi.org/10.11120/beej.2012.20000022>.
- Cavaleri, M., & Dianati, S. (2016). You want me to check your grammar again? The usefulness of an online grammar checker as perceived by students. *Journal of Academic Language and Learning*, 10(1), 223–236.
- Cavanaugh, A. J., & Song, L. (2014). Audio feedback versus written feedback: Instructors' and students' perspectives. *Journal of Online Learning and Teaching*, 10(1), 122.
- Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing*, 12(3), 267–296. [https://doi.org/10.1016/S1060-3743\(03\)00038-9](https://doi.org/10.1016/S1060-3743(03)00038-9).
- Cheng, X., & Liu, Y. (2022). Student engagement with teacher written feedback: Insights from low-proficiency and high-proficiency L2 learners. *System*, 109, 102880. <https://doi.org/10.1016/j.system.2022.102880>.
- Council of Europe. (2020). *Common European framework of reference for languages: Learning, teaching, assessment—Companion volume*. Council of Europe Publishing. Available online: <https://rm.coe.int/common-european-framework-of-reference-for-languages-learning-teaching/16809ea0d4> (accessed on 1 January 2024).
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Dixon, S. (2015). The pastoral potential of audio feedback: A review of the literature. *Pastoral Care in Education*, 33(2), 96–104. <https://doi.org/10.1080/02643944.2015.1035317>.
- Ellis, R. (2009). A typology of written corrective feedback types. *ELT Journal*, 63(2), 97–107. <https://doi.org/10.1093/elt/ccn023>.
- Ellis, R. (2010). Epilogue: A framework for investigating oral and written corrective feedback. *Studies in Second Language Acquisition*, 32(2), 335–349. <https://doi.org/10.1017/S0272263109990544>.

- Ene, E., & Upton, T. A. (2014). Learner uptake of teacher electronic feedback in ESL composition. *System*, 46, 80–95. <https://doi.org/10.1016/j.system.2014.07.011>.
- Ene, E., & Yao, J. (2021). How does that make you feel: Students' affective engagement with feedback. *Language Teaching Research Quarterly*, 25, 66–83. <https://doi.org/10.32038/ltrq.2021.25.04>.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>.
- Gan, Z., & Wang, X. (2024). Perceived teacher feedback practices, student feedback motivation and engagement in English learning: A survey of Chinese university students. *Applied Linguistics Review*, 16(1), 455–476. <https://doi.org/10.1515/applirev-2023-0136>.
- Han, T., & Sari, E. (2024). An investigation on the use of automated feedback in Turkish EFL students' writing classes. *Computer Assisted Language Learning*, 37(4), 961–985. <https://doi.org/10.1080/09588221.2022.2067179>.
- Han, Y., & Hyland, F. (2015). Exploring learner engagement with written corrective feedback in a Chinese tertiary EFL classroom. *Journal of Second Language Writing*, 30, 31–44. <https://doi.org/10.1016/j.jslw.2015.08.002>.
- Handley, K., Price, M., & Millar, J. (2011). Beyond 'doing time': Investigating the concept of student engagement with feedback. *Oxford Review of Education*, 37(4), 543–560. <https://doi.org/10.1080/03054985.2011.604951>.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112. <https://doi.org/10.3102/003465430298487>.
- Hennessy, C., & Forrester, G. (2014). Developing a framework for effective audio feedback: A case study. *Assessment & Evaluation in Higher Education*, 39(7), 777–789. <https://doi.org/10.1080/02602938.2013.870530>.
- Holec, H. (1981). *Autonomy and foreign language learning*. Oxford.
- Ice, P., Swan, K., Diaz, S., Kupczynski, L., & Swan-Dagen, A. (2010). An analysis of students' perceptions of the value and efficacy of instructors' auditory and text-based feedback modalities across multiple conceptual levels. *Journal of Educational Computing Research*, 43(1), 113–134. <https://doi.org/10.2190/EC.43.1.g>.
- Kementerian Pendidikan Tinggi, Sains, dan Teknologi Indonesia. (n.d.). Available online: <https://kemdiktisaintek.go.id/> (accessed on 1 January 2024).
- Killingback, C., Ahmed, O., & Williams, J. (2019). 'It was all in your voice'-Tertiary student perceptions of alternative feedback modes (audio, video, podcast, and screencast): A qualitative literature review. *Nurse Education Today*, 72, 32–39. <https://doi.org/10.1016/j.nedt.2018.10.012>.
- Kirwan, A., Raftery, S., & Gormley, C. (2023). Sounds good to me: A qualitative study to explore the use of audio to potentiate the student feedback experience. *Journal of Professional Nursing*, 47, 25–30. <https://doi.org/10.1016/j.profnurs.2023.03.020>.
- Kiyamaz, M. (2023). Pedagogically sound: Audio feedback as an alternative to written feedback in distance education: EFL/ESL students' and teachers' perceptions and its effectiveness. In G. Yangın-Ekşi, S. Akayoglu, & L. Anyango (Eds.), *New directions in technology for writing instruction* (pp. 81–105). Springer International Publishing. https://doi.org/10.1007/978-3-031-13540-8_5.
- Lees, D., & Carpenter, V. (2012). A qualitative assessment of providing quality electronically mediated feedback for students in higher education. *International Journal of Learning Technology*, 7(1), 95–110. <https://doi.org/10.1504/ijlt.2012.046868>.
- Listiani, L., Hódi, Á., & Nikolov, M. (2025). Low-proficiency students' engagement with combined text and audio feedback in an EFL writing class. *Educational Technology & Society*, 28(4), 116–132. [https://doi.org/10.30191/ETS.202510_28\(4\).RP07](https://doi.org/10.30191/ETS.202510_28(4).RP07).
- Lunt, T., & Curran, J. (2010). 'Are you listening please?' The advantages of electronic audio feedback compared to written feedback. *Assessment & Evaluation in Higher Education*, 35(7), 759–769. <https://doi.org/10.1080/02602930902977772>.
- Mao, Z., & Lee, I. (2023). Student engagement with written feedback: Critical issues and way forward. *RELC Journal*. Advance online publication. <https://doi.org/10.1177/00336882221150811>
- Merry, S., & Orsmond, P. (2008). Students' attitudes to and usage of academic feedback provided via audio files. *Bioscience Education*, 11(1), 1–11. <https://doi.org/10.3108/beej.11.3>.
- Mohammed, M. A. S. (2021). Does teacher feedback mode matter for language students? *Asian EFL Journal*, 28(11), 202–227.
- Morra, A. M., & Asís, M. I. (2009). The effect of audio and written teacher responses on EFL student revision. *Journal of College Reading and Learning*, 39(2), 68–81. <https://doi.org/10.1080/10790195.2009.10850319>.
- Neupane Bastola, M., & Hu, G. (2021). Supervisory feedback across disciplines: Does it meet students' expectations? *Assessment & Evaluation in Higher Education*, 46(3), 407–423. <https://doi.org/10.1080/02602938.2020.1780562>.
- Panahi, P., Birjandi, P., & Azabdaftari, B. (2013). Toward a sociocultural approach to feedback provision in L2 writing classrooms: The alignment of dynamic assessment and teacher error feedback. *Language Testing in Asia*, 3, 13. <https://doi.org/10.1186/2229-0443-3-13>.

- Pohl, A. J. (2020). Strategies and interventions for promoting cognitive engagement. In A. Reschly, A. Pohl, & S. Christenson (Eds.), *Student engagement: Effective academic, behavioral, cognitive, and affective interventions at school* (pp. 253–280). Springer International Publishing. https://doi.org/10.1007/978-3-030-37285-9_14.
- Rasi, P., & Vuojärvi, H. (2018). Toward personal and emotional connectivity in mobile higher education through asynchronous formative audio feedback. *British Journal of Educational Technology*, 49(2), 292–304. <https://doi.org/10.1111/bjet.12587>.
- Roy, S., & Vetter, M. A. (2023). Audio versus written feedback: Multilingual students' perspective in a US composition class. *Feedback Research in Second Language*, 1(1), 149–174. <https://doi.org/10.32038/frsl.2023.01.09>.
- Ryan, T., Henderson, M., & Phillips, M. (2020). Digitally recorded assessment feedback in a secondary school context: student engagement, perception and impact. *Technology, Pedagogy and Education*, 29(3), 311–325. <https://doi.org/10.1080/1475939X.2020.1744479>
- Saeed, M. A., AbuSa'aleek, A. O., & RahmtAllah, E. A. E. (2022). The impact of feedback modes on learners' performance in paragraph writing. In K. Arai (Ed.), *Proceedings of the future technologies conference (FTC 2022, Vol. 3. FTC 2022 2022)*. Springer. https://doi.org/10.1007/978-3-031-18344-7_55.
- Saeed, N., & Mohamedali, F. (2022). A study to evaluate students' performance, engagement, and progression in higher education based on feedforward teaching approach. *Education Sciences*, 12(1), 56. <https://doi.org/10.3390/educsci12010056>.
- Saldaña, J. (2013). *The coding manual for qualitative researchers*. Sage Publication Ltd.
- Sarcona, A., Dirhan, D., & Davidson, P. (2020). An overview of audio and written feedback from students' and instructors' perspective. *Educational Media International*, 57(1), 47–60. <https://doi.org/10.1080/09523987.2020.1744853>.
- Shen, R., & Chong, S. W. (2023). Learner engagement with written corrective feedback in ESL and EFL contexts: A qualitative research synthesis using a perception-based framework. *Assessment & Evaluation in Higher Education*, 48(3), 276–290. <https://doi.org/10.1080/02602938.2022.2072468>
- Sipple, S. (2007). Ideas in practice: Developmental writers' attitudes toward audio and written feedback. *Journal of Developmental Education*, 30(3), 22–31.
- Solhi, M., & Eginli, I. (2020). The effect of recorded oral feedback on EFL learners' writing. *Journal of Language and Linguistic Studies*, 16(1), 1–13. <https://doi.org/10.17263/jlls.712628>
- Tabrizi, A. N., & Ranjbaran, M. M. (2021). The effect of computer-mediated text-based and audio-based corrective feedback on the development of writing accuracy of Iranian EFL learners. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(13), 4675–4692.
- Tan, K. E., & Manochphinyo, A. (2017). Improving grammatical accuracy in Thai learners' writing: Comparing direct and indirect written corrective feedback. *Journal of Asia TEFL*, 14(3), 430. <http://doi.org/10.18823/asiatefl.2017.14.3.4.430>.
- Thi, N. K., Nikolov, M., & Simon, K. (2023). Higher-proficiency students' engagement with and uptake of teacher and Grammarly feedback in an EFL writing course. *Innovation in Language Learning and Teaching*, 17(3), 690–705. <https://doi.org/10.1080/17501229.2022.2122476>.
- Wang, B., Yu, S., Zheng, Y., & Teo, T. (2022). Student engagement with teacher oral feedback in EFL university classrooms. *Language Teaching Research*, 29(5), 1994–2018. <https://doi.org/10.1177/13621688221105772>.
- Winstone, N. E., Nash, R. A., Parker, M., & Rowntree, J. (2017). Supporting learners' agentic engagement with feedback: A systematic review and a taxonomy of recipience processes. *Educational Psychologist*, 52(1), 17–37. <https://doi.org/10.1080/00461520.2016.1207538>.
- Zhan, Y. (2023). Beyond technology: Factors influencing the effects of teachers' audio feedback on students' project-based learning. *Technology, Pedagogy and Education*, 32(1), 91–103. <https://doi.org/10.1080/1475939X.2022.2093965>.
- Zhang, Z. (2022). Promoting student engagement with feedback insights from collaborative pedagogy and teacher feedback. *Assessment & Evaluation in Higher Education*, 47(4), 540–555. <https://doi.org/10.1080/02602938.2021.1933900>.
- Zhang, Z. V., & Hyland, K. (2018). Student engagement with teacher and automated feedback on L2 writing. *Assessing Writing*, 36, 90–102. <https://doi.org/10.1016/j.asw.2018.02.004>.
- Zhang, Z. V., & Hyland, K. (2022). Fostering student engagement with feedback: An integrated approach. *Assessing Writing*, 51, 100586. <https://doi.org/10.1016/j.asw.2021.100586>.

- Zheng, Y., & Yu, S. (2018). Student engagement with teacher written corrective feedback in EFL writing: A case study of Chinese lower-proficiency students. *Assessing Writing*, 37, 13–24. <https://doi.org/10.1016/j.asw.2018.03.001>.
- Zheng, Y., Yu, S., & Liu, Z. (2020). Understanding individual differences in lower-proficiency students' engagement with teacher written corrective feedback. *Teaching in Higher Education*, 28(2), 301–321. <https://doi.org/10.1080/13562517.2020.1806225>.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.