

AI-POWERED MULTIMODAL FEEDBACK IN EFL WRITING

Pragmatic Functions and Classroom Implications

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Abstract – Feedback is a pragmatically complex aspect of English as a Foreign Language (EFL) pedagogy, as it includes various speech acts such as evaluating, giving advice, correcting errors, and balancing praise with criticism (Liu *et al.* 2021), which can significantly influence student motivation and progress (Kerr 2020). This study adopts an exploratory mixed-methods design that integrates three datasets to investigate multimodal feedback in EFL writing classes through the dual lenses of teachers’ pragmatic awareness and students’ perceptions. The research focuses on an experimental activity involving fifty secondary school students’ (B1–C1) use of Grammarly®, an AI-powered writing assistant. This tool offers automated written corrective feedback (AWCF) by providing scores, colour-coded suggestions, and visual cues related to grammar, spelling, style, and tone. By simultaneously evaluating, encouraging and correcting students, AWCF can help teachers blur the traditional lines between formative and summative feedback (Kerr 2020). The three datasets consist of: the classification of AWCF based on pragmatic functions (explanation, evaluation, suggestion, encouragement) (Liu *et al.* 2021) and realisation modes (linguistic, visual, interactive) (Herring 2019; Kress and van Leeuwen 2020); anonymous questionnaires assessing students’ perceptions before and after the activity; and a self-evaluation of EFL teachers’ awareness of multimodal feedback through an anonymous questionnaire. In addition to confirming its effectiveness and motivational potential, the research suggests that AWCF may serve as a multimodal, pragmatic partner for teachers: by offering more consistent, transparent, and interactive feedback s through the semiotic modes of text, visuals, and numerical scoring. The findings suggest that such tools may help instructors expand Classroom Interactional Competence (CIC) through integrative awareness and reflective adaptability to students’ needs.

Keywords: feedback; pragmatic awareness; multimodality; classroom interaction competence (CIC); EFL.

1. Introduction

Feedback is a crucial element in English as a Foreign Language (EFL) classes, significantly influencing student motivation and progress (Kerr 2020). By providing learners with information on their skills and proficiency, it helps them detect their progress, become aware of their strengths and weaknesses and identify strategies for improvement (Nava and Pedrazzini

2018). Generally, instructors provide summative feedback during evaluations, while also striving for formative outcomes aimed at enhancing students' skills and proficiency (Ajjawi *et al.* 2021). Nonetheless, students often perceive feedback as judgmental, interpreting it not only as an assessment of performance, but also as a reflection on themselves personally (Ismail *et al.* 2022). As a result, feedback may be viewed as discouraging, thus failing to support learner development and adversely affecting their motivation and self-efficacy (Carless and Winstone 2020).

Providing feedback is a complex task that requires effective pragmatic skills, as it involves various speech acts such as evaluating, giving advice, correcting errors, and balancing praise with criticism (Liu *et al.* 2021). Teachers need to consider form, intent, and tone in addition to learner language proficiency, cultural backgrounds, and emotional states (Darong and Guna 2023; El-Dakhs *et al.* 2019). This pragmatic competence draws on professional awareness and plays a crucial role in teachers' Classroom Interactional Competence (CIC). This term refers to the strategic use of interaction to foster understanding and engagement and enhance learning (Walsh 2014). The ways teachers align form – spoken, written, or multimodal – intent, and tone in their feedback directly shape student engagement, comprehension, motivation, and classroom climate (Ishihara 2011; Ekin and Damar 2013).

Whereas classroom discourse once relied on traditional, monomodal approaches (such as written or oral feedback), there is now a shift toward more dynamic and integrated practices that better align with 21st-century learning needs (Steiss *et al.* 2024). In addition to conventional means of providing feedback, educators can rely on technologically enhanced feedback, including digital and video-based feedback and multimodal annotations (Cunningham 2019). A growing body of research has examined AI as an automated generator of writing feedback, often referred to as Automated Written Feedback (AWF) (Huawei and Aryadoust 2024). Recently, AI-powered tools such as Grammarly® have been investigated as generators of automated written corrective feedback (AWCF), which provides advanced feedback on written text, surpassing traditional spelling and grammar checkers (Ranalli and Yamashita 2022). There is no clear consensus among researchers regarding the positive impact of AWCF on student learning outcomes. On the one hand, integrating AWCF into EFL writing instruction does not necessarily result in measurable improvements in student writing quality (Fan 2023). On the other hand, AWCF has proved as a significant element in teaching practices aimed at developing innovative teaching methods to improve student writing abilities (Youn *et al.* 2025). By providing multimodal feedback, AI-powered tools can help shift from a conventional result-oriented feedback model to more student-centred practices, allowing teachers to focus on higher-level writing concerns like

content and organisation (Bayat *et al.* 2020; Farnia *et al.* 2025). Although AI-generated feedback could represent a viable alternative or supplement to human-provided input, a blended approach of human and AI-generated feedback is recommended as the most effective approach, since it leverages the unique strengths of each (Escalante *et al.* 2023). However, despite the need for sharper digital interactional skills (Moorhouse *et al.* 2021), AI-generated multimodal feedback remains underrepresented in research on teacher feedback literacy (Fan 2023; Jiang *et al.* 2024)

To contribute to the body of knowledge on AI for educational purposes, this mixed methods research focuses on AWCF as a means of enhancing teacher pragmatic skills in EFL writing classes. It investigates AI-generated feedback on student writing from multimodal perspective and considers teacher pragmatic awareness and student perceptions. As outlined in the methodology section, below, the study focuses on an experimental activity involving two intact secondary school classes (N=50) who used Grammarly¹ as an AI-powered AWCF feedback tool. This commercial AWCF service was chosen because it is freely available, globally accessible, and widely used, which makes the findings applicable to a broad user base. The analysis explores how the multimodal features of AWCF can help teachers blur the traditional lines between formative and summative feedback. The findings discuss how AI-powered multimodal feedback can broaden teacher pragmatic competence while sustaining student motivation and improving writing skills.

2. Methodology

2.1. Logic of inquiry and methods of data collection

This exploratory study references previous research based on Austin's and Searle's speech act theory, which views teacher feedback as a series of illocutionary acts intended to correct, guide, praise, or criticise student work with the goal of enhancing comprehension and proficiency (Alimova *et al.* 2025; Hyland and Hyland 2001). Against the backdrop of the recent technological turn in education, the study investigates how AI tools like Grammarly can incorporate teacher pragmatic competence. Specifically, it examines:

¹ This study employed Grammarly version 14.1241.0, released in mid-June 2025, rather than the most recent version 14.1244.0, which became available on July 10, 2025, after data collection had been completed. This is not considered a limitation of the study, as the functions analysed align with those commonly referenced in the existing literature.

- The multimodal and pragmatic features of Grammarly's AWCF (Research question 1)
- Students' perceptions of how AWCF affects their writing (Research Question 2)
- Teachers' reflections on their feedback practices, including pragmatic competence and familiarity with AI writing tools (Research Question 3)

As displayed in Table 1, this study adopts a convergent mixed methods design, concurrently collecting quantitative and qualitative data from three sources (Creswell and Creswell 2018). The data examined in this study include: 1) the classification of Grammarly's feedback based on pragmatic functions (evaluation, explanation, encouragement) (Liu *et al.* 2021) and realisation modes (linguistic, visual, interactive) (Herring 2019; Kress and van Leeuwen 2020); 2) anonymous questionnaires assessing students' perceptions of the activity's impact; and 3) a self-evaluation of teachers' awareness of multimodal feedback, collected through anonymous questionnaires administered to EFL teachers. This procedure generated both qualitative and quantitative data, yielding three complementary datasets, which were analysed separately and then compared to provide a deeper understanding of how AI-powered tools may enhance teachers' pragmatic effectiveness and students' writing skills.

Data for this study were collected from two intact secondary school writing classes taught by the same instructor, comprising a total of 50 students (60% reported a B1 level and 40% a C1 level of English proficiency). In Step 1, prior to the writing class, students wrote a 100-150-word text on a given prompt as a home assignment and submitted it via Google Forms. In Step 2, the teacher-researcher randomly selected 20 texts and processed them in Grammarly to observe the type of feedback provided. AWCF was obtained through the free version of Grammarly, with the interface language set to English and default settings applied for domain, tone, and writing goals. The "Insights" panel, displaying overall performance statistics and suggestions, was available to the user. AWCF relating to these texts was then classified for analysis, combining a multimodal and pragmatic perspective (Dataset 1, see 3.2). Step 3 refers to the writing class itself, where the participants used the AWCF provided by the AI-powered tool to edit the texts that they had previously written, under the teacher-researcher's supervision. At the end of the lesson (Step 4), students were given a link to an anonymous questionnaire designed to help them reflect on the type of feedback they received from the AI-powered tool. The questionnaire included 26 questions (a mix of open- and closed-ended questions) investigating students' needs regarding feedback and their experience with AWCF (Dataset 2). Finally, to gain a broader perspective, ten secondary school EFL teachers were invited to complete an anonymous questionnaire on their feedback

practices and their experiences with, and opinions of, AWCF (Dataset 3). All participants had over ten years of EFL teaching experience but displayed differing attitudes toward AWCF. Six reported having no experience with AWCF; three used it primarily to edit their own writing; and only one had introduced it to students. Despite the limited number of teacher participants, this group is relevant as it reflects the level of AI familiarity of secondary school teachers and lack of integration of AI into pedagogy, issues also reported in recent studies on teachers' readiness and attitudes toward AI integration in education (Moorhouse 2024; van den Berg 2025).

Step	Description	Dataset and data type	Research questions
1	Home assignment Students write and submit a 100–150-word text		
2	20 texts (10 from each group) are randomly selected and run through Grammarly	Dataset 1 QUAL+ QUANT for multimodal and pragmatic analysis of 20 students' texts	RQ1 What multimodal and pragmatic features of AWCF may students receive?
3	Writing class		
4	Perceptions of feedback tone, helpfulness, motivation	Dataset 2 QUAL+ QUANT for thematic analysis of student questionnaire responses	RQ2 How do students perceive AWCF?
	Views on pedagogical value, alignment with classroom feedback	Dataset 3 QUAL+ QUANT for thematic analysis of teacher questionnaire responses	RQ3 How do teachers perceive their skills regarding feedback and the use of AI?

Table 1
Logic of inquiry.

2.2. Methods of data analysis

2.2.1. Dataset 1: A pragmatic overview of AWCF

Dataset 1 consists of AWCF features available in Grammarly's free version to collect data on students' experiences in the writing class. For each sampled text, the researcher initiated an editing process using the AI-powered tool, documented and coded it, according to the multimodal and pragmatic dimensions of the AWCF. To ensure reliability, intra-rater consistency was established by having the researcher re-code 100% of the data after a two-week interval. The two rounds of coding were then compared, showing a high level of consistency across categories. This ensured full internal consistency and minimised potential bias in the categorisation process, addressing a potential limitation of this exploratory study.

This procedure enabled the researcher to collect quantitative data (e.g., the initial and final scores obtained following AWCF and the total number of

recommendations) and qualitative information (the type of feedback provided verbally and through visual cues such as colours and images) (Table 2).


Text no.	Initial image and message	Number of words	Initial score	Final score	Total number of suggestions	Suggestions available in the free version	Suggestions available in the premium versions
1		136	78	96	9	8	1

Table 2
Multimodal grid.

To gain a deeper understanding of the pragmatic strategies employed by the AI-powered tool, feedback was further classified in terms of its illocutionary force (Table 3). The evaluation category refers to how AWCF performs the illocutionary function of assessment through scores, visual elements and written comments. The explanation category investigates how AWCF seeks to enhance understanding by offering clarifications, elaborations, or rationales, functioning pragmatically as assertive or informative illocutionary acts. The suggestion category refers to proposals for changes to the text that serve as directives. The encouragement category includes motivational feedback that performs an illocutionary function of motivating or supporting the learner, typically aligned with directive or expressive speech acts (Liu 2017; Weimei *et al.* 2024).


Text no.	Feedback item	Modality (visual, written, both)	Evaluation (positive, negative)	Explanation (explicit rule, example)	Suggestion	Encouragement
Text 1		Both	-	-	-	Present

Table 3
Table for multimodal and pragmatic analysis of AWCF.

2.2.2. Datasets 2 and 3: students' and teachers' insights on AWCF

Datasets 2 (student questionnaire) and 3 (teacher questionnaire) contain both quantitative and qualitative data on AWCF, gathered from the perspectives of students and teachers (Table 4). As the focus was on describing patterns in the data, responses to closed-ended questions were examined using descriptive statistics, such as frequencies, percentages, and means, without performing inferential statistical analyses. Accordingly, open-ended question

responses are analysed qualitatively using thematic analysis to identify recurring patterns and themes (Flick 2018). Drawing on research on digital classroom discourse, the thematic analysis of students' answers examines multimodal feedback from technical, socio-emotional, and personal perspectives (Chong 2019). While considering technical aspects, the analysis focuses on features and usability of AWCF including clarity and specificity of comments, as well as visual markers such as highlighting, colour coding. Socio-emotional aspects of feedback are examined through the tone conveyed in the comments (supportive versus critical, judgmental or lacking warmth) and their effect on students. Finally, personal aspects of feedback are considered by analysing students' needs, beliefs, and individual preferences regarding feedback (Chong 2019).

Teachers' responses were examined in terms of their feedback habits, attitudes toward multimodality, and strategies for pragmatic effectiveness, which were interpreted as manifestations of their pragmatic competence contributing to their CIC (Classroom Interactional Competence). However, given the focus of the study and the teachers' limited familiarity with AI, the teacher questionnaires yielded only limited data on their experiences with such tools, shifting the discussion more toward their feedback practices. Consequently, while the teachers' insights are valuable, they occupy a relatively limited space in the data presentation and discussion. This is not considered a limitation of the study, as the primary aim was to explore broader patterns of feedback practices rather than to assess teachers' direct engagement with AI tools.

Dataset	Source of information	Description	Focus	Theoretical reference(s)
Dataset 1	AWCF	Feedback instances on student writing	Evaluation, explanation, suggestion and encouragement	Pragmatic and multimodal discourse analysis
Dataset 2	Student questionnaire	Perceptions of feedback tone, helpfulness, motivation	Technical, socio-emotional, and personal perspectives	Thematic analysis; Descriptive quantitative analysis
Dataset 3	Teacher questionnaire	Views on pedagogical value, alignment with classroom feedback	Technical, socio-emotional, and personal perspectives	Thematic analysis; Descriptive quantitative analysis

Table 4
Data analysis overview.

Despite being a small-scale study, the data collected for this study are reliable, valid and ethical. Reliability was ensured through the use of standardized instructions and procedures across contexts. For qualitative data, intra-rater reliability was established through a full re-coding of all data after

a two-week interval. Validity was supported through clear coding protocols and alignment with the study objectives. Moreover, to gain more comprehensive insights and reduce possible personal bias, data from the three datasets are triangulated. Ethical standards were observed throughout the study. Participants were informed of the purpose and procedures of the research and provided informed consent prior to participation; for minors, parental or guardian consent was also secured. Informants were briefed at the beginning and debriefed at the end of the study to ensure understanding and voluntary participation. Participants were assigned codes and any identifying information was removed to ensure anonymity and confidentiality in the following section. Participation was entirely voluntary and free, and participants were informed that they could withdraw at any time without penalty. Anonymity and confidentiality were ensured by assigning codes and removing all identifying information from the data.

3. Findings

3.1. Pre-editing phase: Encouragement starts before writing

After opening Grammarly's interface and clicking on the "New document" button, users land on a blank writing space where they can enter the text. This is where the pre-editing phase occurs, as the AI tool greets the user with a multimodal message. Data reported in Table 5 show that encouragement is the key illocutionary force of speech acts in the pre-editing phase. In 100% of the cases, the software encourages users to start the writing process with multimodal locutionary acts consisting of comic-style and playful icons such as a paper plane, or a quill accompanied by a motivational message in bold font like *you got this* and an explanatory message in plain font (*suggestions will appear here*). These speech acts can be classified into three types: 1) expressives (e.g., *Rooting for you*); 2) directives (e.g., *Let's get to work*) 3) assertives (*Nothing to see yet*). The message *Suggestions will appear here*, which is displayed in every initial multimodal encouragement, is a multifunctional speech act. It informs the user (assertive) and guides their attention to a specific area (directive) but it reassures them about the help they will receive (expressive). The cartoonish elements and informal expressions of these speech acts convey a light-hearted and approachable tone also in the case of assertives and directives. For example, in the case of the suggestion *Start writing to make the magic happen*, the directive tone is mitigated by the reference to "the magic", which focuses on the positive, possibly transformative outcomes that will result from that action suggested.










Locutionary act		Type
Initial icon	Initial message	
 <p>Rooting for you. Suggestions will appear here.</p> <p>Icon 1</p>	Rooting for you	Expressive
 <p>You got this. Suggestions will appear here.</p> <p>Icon 2</p>	You got this	Expressive/indirect directive
 <p>No pressure. Suggestions will appear here.</p> <p>Icon 3</p>	No pressure	Expressive/indirect directive
 <p>Let's get to work. Suggestions will appear here.</p> <p>Icon 4</p>	Let's get to work	Directive
 <p>Time to dig in. Suggestions will appear here.</p> <p>Icon 5</p>	Time to dig in	Directive
 <p>Start writing to make the magic happen. Suggestions will appear here.</p> <p>Icon 6</p>	Start writing to make the magic happen	Directive
 <p>Nothing to see yet. Suggestions will appear here.</p> <p>Icon 7</p>	Nothing to see yet	Assertive
 <p>The first word is the hardest. Suggestions will appear here.</p> <p>Icon 8</p>	The first word is the hardest	Assertive
 <p>All the world's a page. Suggestions will appear here.</p> <p>Icon 9</p>	All the world's a page	(Metaphorical) assertive

Table 5
Overview of visual encouragement at the beginning of the editing process.

Students' questionnaire responses (Dataset 2) confirm the socio-emotional value of multimodal messages received in the pre-editing phase (Figure 1), which ease emotional tension and foster a supportive communicative environment.

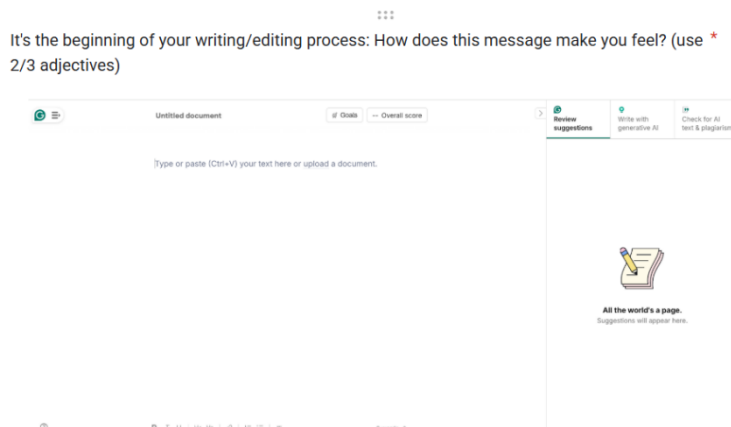


Figure 1

Example of a visual cue included by the researcher in the student questionnaire.

83% appreciate this page as it makes them feel *confident, encouraged, ready to write, motivated, free, relaxed/calm, taken care of* and *hopeful*. It reassures and empowers users to know that constructive feedback will be offered, and they will have the opportunity to enhance their writing (Comment 1).

(1) It makes me feel secure, because by this message i know that if i will get something wrong, the improvement/suggestion will appear here.²

Only a minority of respondents do not feel positively impacted by this multimodal message (10%) or reported negative emotions such as *confusion* or *sense of emptiness* (7%) (Comment 2).

(2) It makes me feel empty because I don't know where to start.

In addition to the AI-related risks reported in UNESCO (2021), such as over-reliance, misinterpretation of feedback, and ethical considerations, student feedback in this study revealed another concern. Consistent with Fan (2023), our findings indicate that AWCF may lead to experiencing emptiness, which may reduce motivation and foster a sense of inadequacy. AI should be used under teacher supervision or after student training sessions to address AI-

² While all identifying information has been removed to maintain anonymity, students' open-ended comments are reported verbatim to preserve the authenticity of participants' voices. To preserve authenticity (Morgan 2022), they have not been edited and may contain errors.

related risks, increase students' motivation and improve their attitude towards writing. However, Dataset 3 indicates that this is not a common teaching strategy among our informants. Eight teachers indicated they are not familiar with AI-powered editing tools such as Grammarly, while two reported using these tools to edit their own texts rather than as a teaching tool. When asked about strategies to encourage and motivate learners to write, they mentioned practices such as choosing relatable topics (N=7), collaborative work (N=5), and praise and evaluation (N=3). While teachers' feedback is varied, it does not appear to fully utilise the illocutionary potential of visual cues and supportive language to effectively accomplish the speech act of encouragement. This indicates that aspects of CIC, particularly those related to the strategic use of multimodal and affective resources, may not be fully realised in our informants' feedback practices. Moreover, this misaligns with students' appraisal of playful multimodal messages as fostering a nurturing environment for student motivation and empowerment, which is highly beneficial for enhancing learners' writing skills (Ducca 2014).

To delimit the scope of the present study, differences in the impact of written and visual components of multimodal messages were not analysed. While such distinctions may yield finer-grained insights, they fall outside the methodological focus of this paper and will be addressed in future research.

3.2. The editing phase: AWCF to improve student writing

3.2.1. AWCF evaluation and its perlocutionary impact

After pasting their texts through the AI-powered feedback generator, student participants receive multimodal feedback, including quantitative and qualitative insights. As the page layout shows, the focus shifts from the writer to the text (Figure 2). In this stage, AWCF performs the illocutionary function of evaluation and explanation while also providing suggestions. The former is expressed numerically, which in Searle's taxonomy (1979) can be classified as an assertive, since it presents the score as an objective assessment of textual quality (Hyland and Hyland 2001).

When I was waiting for my English teacher, I was laughing and talking with one of my friends. I don't think that is completely inappropriate because I do it most of the time. But in this case, I wasn't doing what I was supposed to do, because I know that this can also damage the class, which may also contribute to the increase in noise. For the next time when the bell rings, I must go to sit so as not to increase the noise

Correctness	Clarity	Engagement	Delivery
<div style="width: 100%; height: 10px; background-color: red;"></div>	<div style="width: 100%; height: 10px; background-color: blue;"></div>	<div style="width: 100%; height: 10px; background-color: green;"></div>	<div style="width: 100%; height: 10px; background-color: purple;"></div>
★ Pro suggestions 3			
<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <p>Improve your text</p> <p>I don't think that is completely inappropriate...</p> </div> <div style="border: 1px solid #ccc; padding: 5px;"> <p>Improve your text</p> <p>But in this case, I wasn't doing what I was supposed...</p> </div>			

Figure 2
Example of editing page.



Despite its assertive tone, students clearly prefer numerical feedback to other types of feedback. Most of them rank it as the most useful and provide various reasons, ranging from practical aspects to the impact on them as learners. As shown in Comment 3, the score is *clear* and *easy* to understand; it *immediately* gives an idea of their level, the quality of their writing and their performance; it is the *closest thing to what a teacher would do*. AWCF makes them feel *focused* and *proud* and *helps them improve*. Moreover, as reported in Comment 4, numbers are straightforward, whereas the softening tone of some suggestions may lack clarity (Comment 4).

(3) I think it (*numerical feedback*)'s important, though not essential. It's important to understand your level roughly, but not essential because it doesn't fully determine your abilities. Anyway, it's the closest thing to what a teacher would do.

(4) I think it (*numerical feedback*) helps me more than just some simple suggestions because it helps me better understand and actually aim for 100.

This aligns with concerns raised in a previous study that shows how learners may find it difficult to gain a clear idea of their mistakes and the quality of their writing because of the softening strategies used to convey feedback (Hyland and Hyland 2001). However, a few comments point out critical aspects of numerical feedback. One student reports *negative feelings* as a consequence of the score received, whereas two other students think that it makes *you feel [like] a number* and *fails to acknowledge learners' general abilities*. In Comment 5, one person expresses confusion and disbelief after consistently receiving lower scores than expected, without understanding the underlying criteria of evaluation.

(5) I don't know, maybe I don't understand why my rating is like this and which criteria AI used to rank it.

Another aspect to consider regarding the perlocutionary effect of AWCF is personalisation: students appreciate Grammarly's interactive score, which updates dynamically as they revise their text. Comment 6 shows that although scores are primarily assertives, they may simulate or carry expressive force when personalised and increase motivation.

(6) The score changes and it helps me understand my progress I loved how the feedbacks were interactive and helped me reach a perfect score. I believe that Ai is a powerful tool and this is a good way to use it to improve yourself.

While students may find AWCF straightforward, it is important to caution them that this tool can create misleading expectations about how their writing

will be assessed, as it may not evaluate task requirements in the same way a teacher's expert assessment does. Table 6 displays the average trends in text length, initial score attributed by the AI-powered tool, and the total number of suggestions provided.

Word count range	Number of texts	Average Grammarly score	Average Number of Suggestions
Under 100 words	5 texts	74	12
100-200 words	8 texts	60	16
Over 200 words	7 texts	59	21

Table 6

Trends of average text length, average scores and suggestions provided by AWCF.

Shorter texts, particularly those under 100 words, achieve an average score of about 74 points. Texts containing 100-200 words average 60.8 points, whereas those over 200 words average approximately 59 points. This suggests that AWCF assesses shorter texts more favourably, this may be because longer texts provide more opportunities for grammatical or stylistic issues to appear. In line with this trend, longer texts receive more suggestions for improvement than shorter ones, which may give the impression that they are more inaccurate. This type of AWCF does not consider text length as a relevant feature of writing quality, which on the contrary may be relevant in task evaluation. In this regard, a potential concern arises that AWCF may mislead students who have not fully met the task's length requirement but still receive a high score with few suggestions for improvement, leading them to believe that they have successfully completed the task. Consequently, without teacher guidance, AWCF could have a limited perlocutionary effect and negatively impact students' learning.

3.2.2. *The perlocutionary force of multimodal suggestions for improvement*

AWCF integrates numerical scores with a combination of multimodal directive and assertive illocutionary acts to provide suggestions and explanations. While processing their texts, users receive an overview of the total number of suggestions for improvement, categorised according to different aspects (*correctness, clarity, engagement and delivery*) (Figure 3). This analysis focuses on the correctness category, specifically addressing red-underlined inaccuracies in AWCF for which automated suggestions are provided. Features related to clarity, delivery, and engagement are available only in the programme's premium version, which was beyond the scope of this study.

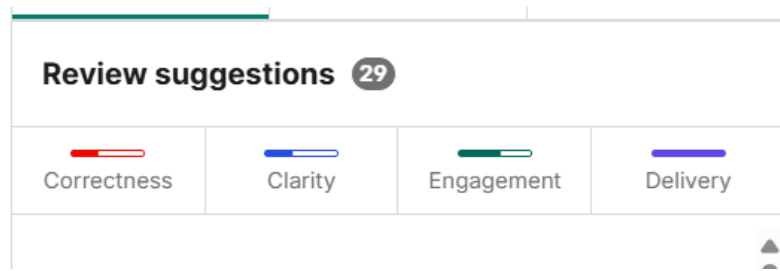


Figure 3
Overview of suggestions in AWCF.

Suggestions regarding correctness function as corrective directives that address clear-cut rules (e.g., grammar, agreement, typos) and require low cognitive demand. The combination of the visual mode of underlining inaccuracies in different colours (Figure 4) with clickable free suggestions for improvement in the sidebar (Figure 5) can be seen as a multimodal directive.

I was standing but near to my desk. I realize we were disturbing nearby classes and were a bit loud.

Figure 4
Example of free suggestion for improvement.

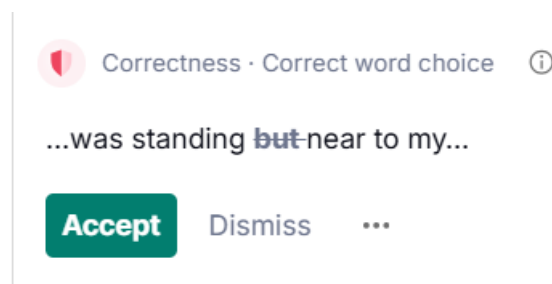


Figure 5
Example of text with visual cues.

However, the possibility to accept or dismiss the suggestion mitigates the directive tone of the suggestion (e.g., *fix capitalisation*, *check wording*, *add a comma*, etc.) while enhancing student agency. Student respondents do not mention the directive tone in their comments; instead, they focus on the positive aspects of multimodal AWCF, which they see as systematic, immediate, and *always available*. (e.g., Comments 7). Moreover, they appreciate the quality of the feedback they receive (Comment 8).

(7) The thing that I like the most is the fact that I have the feedback immediately

(8) (I like) The difference between the suggestion. They are very clear and

easy

This is confirmed by students' suggestions to improve teacher feedback, which recall AWCF. They think that feedback should include numerical information, written and oral (as in Comment 9). Moreover, students would value receiving feedback with colour categorisation (Comment 10) or a list with areas needing improvement (Comment 11).

(9) Feedback should be at the same time

- 1- Numerical, the grade to make a conclusion of the test/essay
- 2- Written, explanations of the mistakes
- 3- Oral, a further explanation of how to get over the mistakes

(10) (I would suggest) using different colours for grammar, vocabulary etc

(11) I would suggest to put at the end of the writing a list of the aspects you should improve, such as Grammar, Vocabulary etc... it gives a clear idea to the student of the weak points of his writing

In this regard, a discrepancy emerges between students' expectations for more varied and multimodal feedback and the extent of teachers' CIC in delivering it. Only two teacher respondents utilise coloured markings to indicate error severity, with most preferring to underline mistakes in red. Besides assigning numerical scores, these respondents frequently include written comments on students' work or offer direct sentence revisions to model appropriate language use. Seven respondents report using rubrics presented before tests to clarify evaluation criteria, help students understand how their grades are determined, and identify weaknesses and areas for improvement. However, while beneficial, teachers report that students often perceive this practice as summative rather than formative, limiting its potential to support learning. Interestingly, both student and teacher respondents are generally satisfied with teacher-generated feedback: none of the students express negative opinions about the feedback they receive, and the teacher participants report having never received complaints. Nonetheless, all our teacher respondents describe providing feedback as a *challenging, demanding* and *time-consuming* task, even though they acknowledge its fundamental role in learning. Providing regular feedback beyond formal assessment and offering personalised advice appear to be the aspects of feedback they struggle with most. Despite these challenges, none of our respondents has ever considered integrating AWCF into their teaching practice, indicating that the possibility of employing AI as a feedback partner has not yet been explored by the participants.

3.2.3. Explanations in AWCF and their perlocutionary effect

AWCF provides explanatory utterances, but only when requested by the user. If they require further clarification, users can click the information icon (① in Figure 5), which opens a window with grammatical explanations and sample sentences (Figure 6). The examples show that the explanations in AWCF combine directives (use this version, correct, improve your text) and assertives (Conjunctions are words like but, etc.).

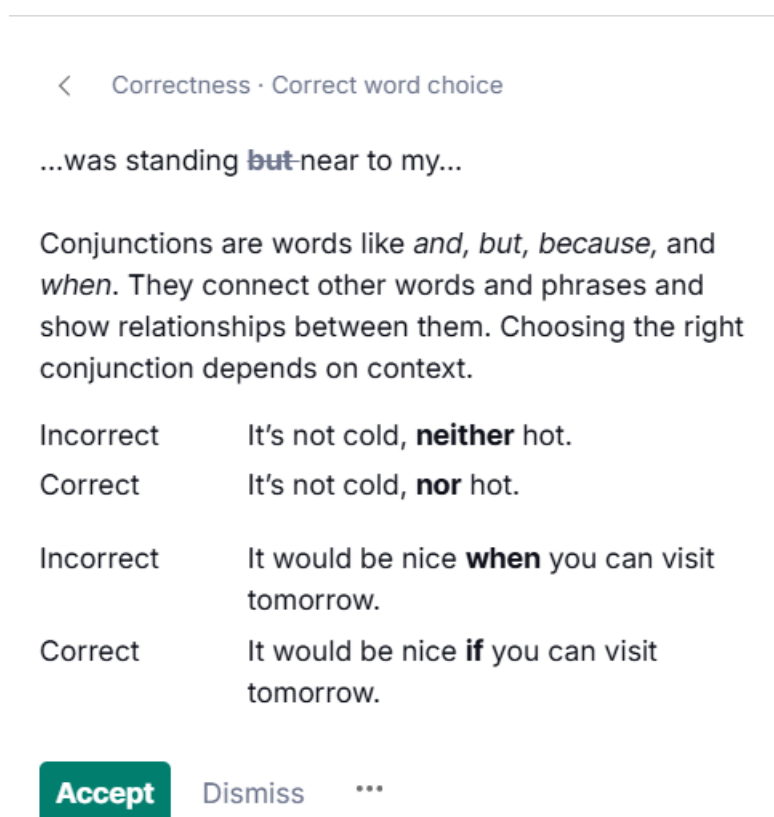


Figure 6
Example of window with grammatical explanations.

Based on our teacher respondents' experience, explanations are typically given orally when returning tests; however, they are not formally included as part of the provided feedback. Consequently, students who require additional clarification either approach the teacher individually or consult their textbooks or online resources. Teachers note that many students hesitate to request explanations in front of their peers, which often results in lingering questions and an ongoing need for clarification. This pattern points to areas of teacher CIC that could be strengthened by employing AWCF, particularly in fostering an environment that encourages open interaction and responsive clarification during whole-class exchanges. This need is confirmed by our student respondents, who value the opportunity to actively interact with

AWCF, either by immediately accepting suggestions or by requesting additional clarification, thereby retaining final authority over text editing (Comment 12).

(12) Not only that, the Ai didn't do everything by itself but, instead, it helped the writer in the process.

This finding demonstrates that students actively engage with AWCF, which contrasts with a common concern in the literature: the risk that students may become overly reliant on AI as a substitute for their own effort (Koltovskaia 2020). However, it also highlights a potential drawback of AWCF, as illustrated in the passage from Figures 4 and 5 to Figure 6. On the one hand, Figures 4 and 5 further illustrate how AWCF suggestions are personalised, referring point by point to words in the text. In the sentence *I was standing but near to my desk*, the word *but* is correctly underlined in red and removed in the suggested correction. On the other hand, the explanation in Figure 6 may mislead students, as it emphasises conjunction choice instead of indicating that a conjunction is unnecessary in this case. This discrepancy shows that although AWCF is generally helpful, it may provide unrelated explanations that confuse and frustrate students. The potential shortcomings of AWCF may impact its perlocutionary effect, making it important for both teachers and students to be attentive and aware.

3.3. Editing completion and praise through AWCF

Even with the free version of Grammarly, students showed a marked improvement in the quality of their written production, as evidenced by the difference between pre-editing and final scores. As shown in Figure 7, all texts increased from the initial to the final score. For example, Text 9 increased by 3%, from an initial score of 95 to a final score of 98, while Text 4 increased by 176%, from an initial score of 34 to a final score of 94.³

³ Percentage increases were calculated as $[(\text{final score} - \text{initial score}) \div \text{initial score} \times 100]$.

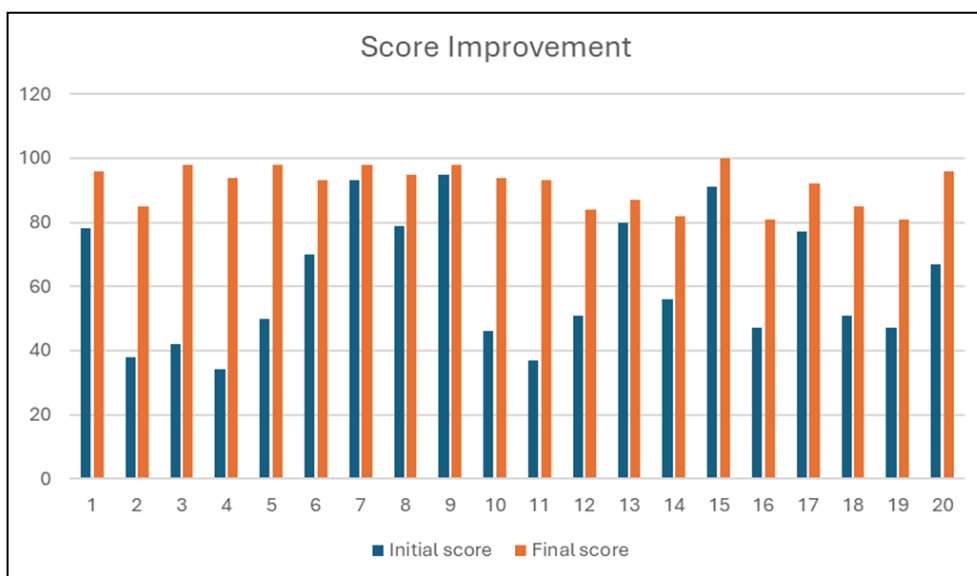


Figure 7
Overview of score improvements.

This suggests that the editing or intervention process consistently had a positive impact on text quality and perceived improvement. Even if improved text quality does not automatically translate into better writing skills, it seems relevant that AWCF can help students feel empowered. This could positively influence students' self-esteem, self-efficacy, and overall learning, particularly among less proficient learners. Texts with lower initial scores (e.g., Texts 2, 3, 4, 10, 11), which had more room for improvement, showed significant increases, often exceeding a 100% increase. By contrast, texts that started with already high scores (e.g., Texts 7, 9, 13, 15) showed small percentage increases, typically under 10%. This suggests that AWCF can make a difference, especially for students who need to improve their writing skills and need encouragement and scaffolding.

In this regard, the use of praise and encouragement is particularly important. Positive feedback can reinforce effort, boost confidence, and help students engage more actively with the learning process (Ducca 2014). For most students, the editing process end with a final evaluation; notably, 85% of respondents achieve scores exceeding 90%. Dataset 2 shows that only one student attains a perfect score of 100%. The multimodal praise obtained for scoring 100 is included in the student questionnaire to gather students' insights into the end of the editing process (Figure 8⁴).

⁴ This figure refers to the end of the editing process performed by the researcher to compile Dataset 1 resulting in a 100% score. To re-create the same conditions in which the students worked, the researcher limited herself to following the suggestions provided in Grammarly's free version.

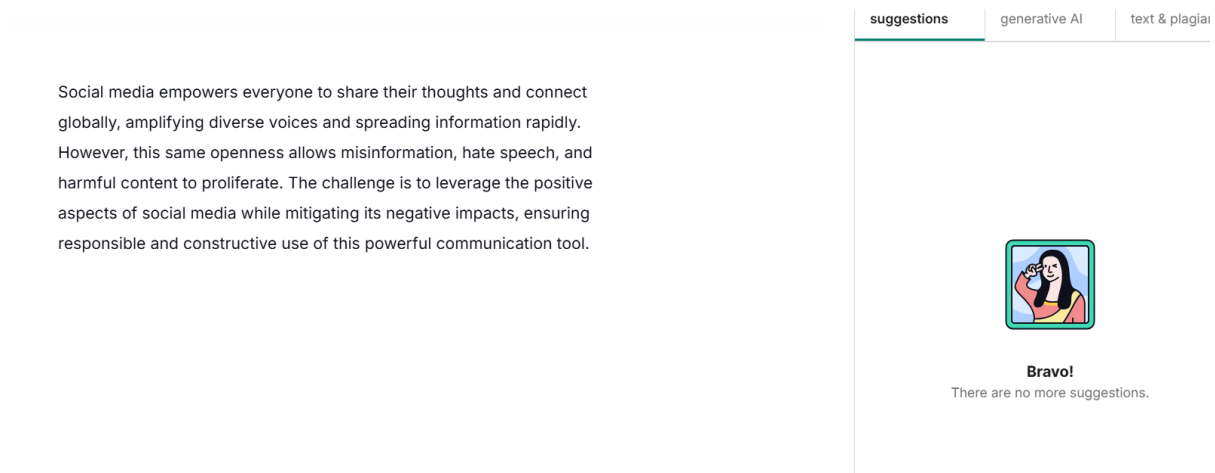


Figure 8
Example of multimodal feedback for successful editing.

In addition to evaluating the text, AWCF performs a multimodal expressive illocutionary act combining process praise (the reference to Mona Lisa values the writing product as a masterpiece) with an expressive form of person praise (*Bravo*) and assertive comment (*there are no more suggestions*). Interestingly, this multimodal speech act overcomes the traditional separation between praise targeting the person (e.g., *you are clever*) and praise focusing on the process (e.g., *you worked hard*), by integrating affective and instructional dimensions into a single communicative act (Skipper, Douglas 2012). It acknowledges the learner as a person (*Bravo*) while praising the outcome of their effort, with a score and a comment about the lack of further suggestions. This seems to reinforce both self-efficacy and a growth-oriented mindset. Moreover, the message displayed in Figure 8 is gained after following the suggestions which impact the personal score; this may lead learners to perceive it as personalised and well-deserved praise. This seems particularly valuable given the benefits of personalised feedback in contrast with general feedback, perceived as insincere (Skipper and Douglas 2012). The survey results indicate a positive perlocutionary effect of this speech act. Students respond favourably to the use of a numerical score (100%) combined with an icon and a positive message. Participants describe the message as clear (Comment 13), and one respondent indicates that AWCF has a positive effect by conveying a sense of achievement (Comment 14).

(13) It's pretty clear it tells me that I've done a good job and my text was clear and perfect.

(14) It makes me feel completed when I score 100.

When asked to define how rewarding the multimodal message in Figure 8 is, 83 % of the students (albeit in different percentages) report it as *rewarding*.

Although the “100 score” is an interesting combination of affective and instructional dimensions, it seems to carry potential risks. Because the praise is directly tied to the score, learners may internalise it as an evaluation of themselves rather than their performance. Moreover, the perlocutionary effect of such messages could create differences between high- and low-scoring students, thereby mitigating the positive impact of AWCF. As already pointed out in 3.2.1 and 3.2.3, although effective, AWCF may be problematic when used by students without adequate training.

Regarding the potential benefits of multimodal praise, students and teachers express differing views, reflecting a gap in their perceptions of its value. While students value the delivery of praise in AWCF, teachers demonstrate greater caution, suggesting limited confidence in the pedagogical potential of multimodal feedback and its integration within their classroom interactional competence. Although four teacher respondents acknowledge that the message in Figure 8 can be motivating, none would use it with their students for various reasons. This type of feedback is *suitable for younger students* (N=8), *it adds little value to feedback* (N=4) or can even feel *impersonal and automatically attributed* (N=4). Teachers prefer expressing their praise verbally in written (N=8) or oral mode (N=2). Eight of them use positive, process-oriented feedback (well done! Good job!) and prefer to praise the writing process rather than the final product. They adapt their praise to the students’ profiles to make it more effective (Comment 15).

(15) If I know a student has a low self-esteem I try to make the mistakes clear but at the same time I focus on what he/he did well to encourage them

4. Conclusions, limitations and implications

Given the rapid and widespread expansion of AI, educators have an important opportunity to lead the conversation on how to meaningfully integrate it into the teaching and learning process. This case study explores AI-powered multimodal feedback as a potential extended pragmatic partner that can integrate teacher CIC to foster students’ writing proficiency. To this end, the study integrates data from a pragmatic analysis of Grammarly-generated multimodal feedback on student texts with insights from teachers and students.

The analysis indicates that AWCF is capable of performing illocutionary acts related to feedback, such as providing evaluations, suggestions, explanations, and encouragement. Interestingly, encouragement comes first when editing texts with the AI-powered tool. As discussed in 3.1, visual cues such as cartoonish icons and encouraging messages are used to create a supportive and motivating environment, which is appreciated by

students. Encouragement in AWCF uses expressives, directives and assertives to motivate learners. The playful tone set by the combination of icons and informal language mitigates the force of expressives and directives, making them less face-threatening, which students appreciate. In comparison, teachers tend to view this strategy as particularly suitable for younger learners, which may reflect the current focus of their CIC on conventional feedback practices rather than on the full illocutionary potential of multimodal messages that combine visual cues and supportive language. For older students, our teacher informants tend to use alternative approaches that focus on extrinsic and intrinsic motivation, rather than relying on visual elements or a playful tone. Although this study does not recommend that teachers adopt playful elements such as cartoonish icons or emojis, it aims to highlight the role of multimodal encouragement as a powerful perlocutionary act that motivates learners and enhances their sense of achievement. More specifically, students' appreciation of this aspect of AWCF suggests that incorporating AI-powered feedback into teaching practices may broaden teachers' pragmatic competence, even when they do not directly use these multimodal messages. This could help teachers create a pressure-free environment in their EFL writing classes, allowing students to enjoy the experience and appreciate the learning process, thus overcoming the limits of an assessment-focused approach.

The limited familiarity of our teacher respondents with AWCF restricts the extent of analysis dedicated to their insights. Nevertheless, teachers' answers provide valuable qualitative perspectives on feedback practices. Their comments highlight process-oriented praise, personalisation, and the balance between encouragement and critique, which complements the AWCF findings by illustrating how human feedback supports motivation and creativity. Thus, although discussed concisely, teachers' perspectives remain integral to understanding the broader pedagogical value of feedback in writing classes. Our findings suggest that students could benefit from AWCF, as it can address needs that are not always fully met by traditional feedback. At the same time, AWCF could serve as a pragmatic extension for teachers, integrating and enhancing their feedback practices while alleviating some of their workload and enhancing their CIC. AWCF analysis in 3.2 and 3.3 reveals that AI-powered tools systematically provide feedback while performing illocutionary acts like evaluation, suggestion and praise, which are typically separated or less prominent in teacher feedback. Due to time constraints and heavy workloads, teachers frequently face challenges in providing personalised, timely feedback independent of assessment activities. Research shows that this is not beneficial to learning as it shifts the focus from the process to the result, thus encouraging an assessment-oriented perspective. Additionally, recommendations for improvement and detailed explanations are typically delivered orally, as preparing such feedback is a

time-intensive responsibility for educators. By contrast, AI-powered tools provide multimodal interactive feedback, including evaluation (numerical scores and visual cues), suggestions for improvement and explanations, while giving students the possibility to monitor their progress. Moreover, students report that AWCF's numerical scores are clear and motivating, encouraging them to refine their writing in order to achieve a higher score. From a pragmatic perspective, AWCF can integrate teacher-assigned scores—assertive acts that may be face-threatening—while mitigating their potential discouraging effects through supportive, multimodal feedback. Therefore, this study argues that AWCF should be integrated into teaching strategies, as it can both expand and empower teacher feedback, thus enhancing instructors' pragmatic skills to maximise learning potential.

Our learner informants value AI-generated feedback as systematic, easily accessible, and partially personalised. The findings show that it meets students' needs from a technical, socio-emotional and personal perspective. Moreover, the possibility to monitor their progress is, *per se*, empowering for students and transforms the editing process into a rewarding experience. This indicates that AWCF can also serve as a standalone tool for students' self-study and autonomous writing development, though it still requires appropriate teacher supervision and student training to ensure effective use. Students should be aware that, while Grammarly can be effective and helpful, it is not designed as an educational tool. As such, it does not guarantee academic success and does not prioritise student understanding and development in the way teachers do. The analysis points out possible AWCF's shortcomings, which lessen its perlocutionary value. For example, AWCF may be inaccurate, offer unrelated suggestions, and mislead students in evaluating their text quality, as it cannot be tailored to specific requirements, such as text length. Moreover, AWCF's lack of context awareness and longitudinal tracking limits its illocutionary relevance and may weaken its perlocutionary effect on student motivation and understanding.

The present study has several limitations. First, it is an exploratory small-scale study, and its results cannot be generalised. The participation of only ten teachers may limit the range of experiences and perspectives represented in this study. Consequently, the findings should be regarded as illustrative examples rather than broadly representative conclusions. Moreover, the student participants reportedly had proficiency levels ranging from B1 to C1, which limits the applicability of the findings to less proficient learners, who may require more scaffolding. Consequently, aspects such as the difficulties arising from the fact that AWCF is delivered in English were not considered in the analysis or discussion. Second, the teacher informants had limited experience with AWCF, which prevented a detailed point-by-point comparison between teachers' and students' insights. Third,

establishing a correlation between AWCF use and students' development of writing skills was neither feasible nor within the scope of this study.

Although this study cannot demonstrate that integrating AWCF into EFL writing instruction directly improves students' writing quality, it provides valuable insights into its potential pedagogical implications. Amid the ongoing debate over AWCF's impact on student writing, this study supports its use within a blended model of human and AI-generated feedback, emphasising that implementation should occur under teacher supervision or after student training. Students' appreciation of AWCF indicates that it can serve as a complement to teacher feedback, helping improve instructional effectiveness and further develop teacher CIC. In supporting students' editing through Grammarly, teachers can benefit from the affordances of AI-powered tools to expand and diversify the feedback they provide. At the same time, teachers should offer guidance to help students deal with inaccurate, unclear and confusing AWCF. In addition to that, they can integrate AI-provided feedback with their knowledge of individual student's situations and put it into a perspective that accounts for students' improvements over time. So, AWCF can serve as a significant element in teaching practices aimed at developing innovative teaching methods to improve learner writing abilities. However, the findings also indicate that teachers may still be developing their own familiarity with AI for pedagogical purposes, highlighting a need for targeted professional development.

Given the rapid and ongoing technological advancements, further research is needed. Possible research strands could investigate the effects on other writing-related factors such as self-efficacy, self-regulated strategies, and factors that influence perception, use, or engagement with AWCF. It might be relevant to study how AI-powered tools can support learning based on students' age, proficiency level, and individual learning preferences or needs, including cognitive style, learning pace, and neurodiversity. Ultimately, integrating AI-powered multimodal feedback into EFL writing classrooms may strengthen teachers' professional pragmatic skills and contribute to more effective pedagogy. To maximise AI's potential as an extended pragmatic partner for teachers, the research directions identified in this study should be incorporated into teacher training programs, enabling educators to make informed, pedagogically sound use of AI tools.

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