



Turkish EFL teachers' perspectives on AI-generated feedback: Negotiating trust, control, and pedagogical adaptation in writing instruction

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ABSTRACT

This qualitative study explored how EFL teachers in Turkish higher education perceive, adapt to, and manage AI-generated feedback in writing instruction. Drawing on Teacher Cognition Theory and the Technology Acceptance Model, the research examined how thirty-six university instructors negotiated issues of pedagogical value, professional control, and trust in AI-mediated feedback. Data were gathered through an open-ended questionnaire during the second academic term of 2025 and were analysed thematically. Three major themes emerged: teachers' perceptions of the pedagogical value and reliability of AI feedback, their adaptation of feedback practices and instructional decisions, and the professional challenges arising from the integration of AI. The findings indicate that teachers regarded AI feedback as a valuable supplement for improving linguistic precision and efficiency, while maintaining scepticism about its interpretive reliability and ethical adequacy. Their adaptations included filtering AI-generated suggestions, refining assessment rubrics, and promoting reflective discussion to preserve pedagogical judgement. Concerns centred on student dependence, the erosion of teacher authority, and the need for structured professional preparation in the critical use of AI. The study advances the theoretical understanding of teacher cognition and technology acceptance in the context of intelligent feedback systems, offering practical implications for designing teacher-training programmes and institutional policies that sustain a reflective, responsible, and contextually grounded integration of AI in EFL writing pedagogy.

Keywords: AI-generated feedback; Turkish EFL teachers' perceptions; pedagogical adaptation; professional concerns; Teacher Cognition Theory; Technology Acceptance Model; writing instruction

1. Introduction

Artificial intelligence has become a transformative force in language teaching, changing how feedback and assessment are conducted in writing classrooms. Over the past decade, researchers have observed a shift from simple error detection to systems capable of providing contextualised, discourse-aware

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feedback (Huang et al., 2023). Early studies in intelligent tutoring systems demonstrated that AI can enhance language learning through adaptive correction and guided remediation (Dodigovic, 2007). More recent developments indicate tools such as Grammarly, ChatGPT, and Write & Improve offer detailed linguistic analysis that covers style, coherence, and organisation, providing immediacy that was previously unavailable to language learners (Schmidt & Strasser, 2022). These advances have fostered optimism among educators about their potential to enhance accuracy and support formative assessment (Oluwafemi Ayotunde et al., 2023). At the same time, scholars caution that such systems can misinterpret meaning, reflect algorithmic bias, and reduce the depth of interpretation that human feedback can provide (Hockly, 2023).

Teachers play a crucial role in shaping how these technologies are understood and used in classrooms. In EFL settings, the teacher's interpretation of AI feedback often influences how students interact with it during the writing process (Alharbi, 2023). In Turkey, where writing instruction usually combines both product- and process-oriented approaches, the advent of AI feedback tools has challenged traditional routines. Instructors are increasingly encountering students who pre-edit assignments using automated systems before submitting them, which changes the sequence and purpose of feedback exchange (Arslan, 2025). Some educators view AI feedback as a practical tool that enhances language accuracy and reduces their workload (Liang et al., 2023). Others view it as pedagogically intrusive, possibly undermining genuine teacher–student dialogue and discouraging reflective learning (Son et al., 2025). This range of opinions reflects broader debates on how AI-driven instruction reshapes teacher authority and professional identity.

Despite extensive research into automated writing evaluation, most studies have focused on learner attitudes, feedback accuracy, or technological design (Jiang et al., 2023). Much less is known about how teachers interpret, accept, or adapt AI-generated feedback within their own pedagogical frameworks (Can, 2025). The teacher's perspective is crucial because it determines whether AI feedback contributes to meaningful learning or remains an unexamined technological addition. Understanding this viewpoint is especially important in contexts where institutional expectations and cultural values influence pedagogical decision-making (Cong-Lem, 2021). Without insight into teachers' cognitive and emotional responses, efforts to integrate AI feedback risk overlooking the professional judgment that underpins effective language instruction (Hussain et al., 2022).

The conceptual foundation of this study draws on Teacher Cognition Theory and the Technology Acceptance Model (TAM). Teacher Cognition Theory explains how beliefs, experiences, and contextual realities shape classroom practice (Cong-Lem, 2021), while TAM accounts for how perceived usefulness and ease of use influence the adoption of new technologies (Dehghani & Mashhadi, 2024). Integrating these perspectives provides a lens through which to examine how teachers in EFL contexts negotiate trust, control, and adaptation when working with AI-generated feedback. Such integration aligns with recent calls to revisit the applicability of TAM in the era of generative AI, where human judgment and ethical considerations remain central (Mogaji et al., 2024).

This study addresses a clear gap in the literature. Although AI systems are becoming more common in writing instruction, empirical research on how teachers conceptualise and utilise AI-generated feedback remains scarce, especially in Turkish higher education (Arslan, 2025). The absence of such evidence limits the development of practical teacher training and institutional policies for informed integration. Therefore, this research investigates how EFL teachers perceive, interpret, and incorporate AI-generated feedback into their writing lessons. It aims to shed light on teachers' professional reasoning and adaptation strategies in the face of rapid technological growth.

To achieve this purpose, the study addresses three guiding questions:

1. How do EFL teachers perceive the pedagogical value and reliability of AI-generated feedback in writing instruction?
2. In what ways do EFL teachers adapt their feedback practices and classroom decisions when incorporating AI-generated feedback?

3. What challenges and professional concerns do EFL teachers experience when integrating AI-generated feedback into their teaching?

2. Literature Review and Theoretical Framework

2.1 AI-Generated Feedback in EFL Writing Instruction

Artificial intelligence has revolutionised the landscape of feedback in second-language writing. Recent years have seen rapid growth in AI-driven systems that deliver detailed and context-aware responses to student writing. According to Zhu et al. (2024), ChatGPT-based feedback now encompasses more than just grammar checking, including issues of cohesion and rhetorical structure. Such technologies operate during the drafting phase, providing learners with ongoing opportunities to review and improve their work, a practice that Wale and Kassahun (2024) recognise as central to learner self-regulation in digital writing environments. These advances are beginning to alter the traditional sequence of feedback, as learners engage simultaneously with human and automated evaluators, thereby reshaping the teacher's mediating role (Escalante et al., 2023).

Recent empirical evidence demonstrates that AI-generated feedback can enhance accuracy, coherence, and revision quality. Mekheimer (2025) reports that generative AI assistance boosts both revision frequency and overall proficiency, while Zhang (2025) identifies measurable improvements in critical writing outcomes when iterative AI comments are integrated into the revision process. Combined feedback models also appear beneficial: Tran (2025) found that alternating AI and teacher feedback supports deeper textual revision, and Asadi et al. (2025) observed enhancements in both grammatical accuracy and idea development when ChatGPT feedback was combined with instructor guidance. Quantitative analyses by Alnemrat et al. (2025) confirm that students appreciate the immediacy and clarity of AI feedback. In contrast, qualitative research by Muñoz et al. (2025) suggests that human commentary still offers interpretive and motivational depth. Teachers have reported utilising automated feedback to manage large cohorts and to refocus their efforts on argumentation and rhetorical organisation (Jiang et al., 2023). As Oluwafemi Ayotunde et al. (2023) note, integrating AI systems within institutional learning platforms has become a key feature of contemporary writing instruction.

However, despite its benefits, AI feedback continues to raise questions about reliability and contextual relevance. Algorithms may misinterpret rhetorical intent or overlook discourse-level cohesion, resulting in suggestions that are linguistically correct but pedagogically superficial (Ziqi et al., 2024). To maintain instructional coherence, teachers often need to filter or re-contextualise automated comments before sharing them with students (Banihashem et al., 2024). Comparative research indicates that teacher-generated feedback remains more effective in promoting content development and argument quality (Wang, 2024; Aljasser, 2025). These findings extend the discussion from technical performance to professional identity. As Xiao et al. (2025) observe, the expansion of generative-AI writing support prompts teachers to reconsider their pedagogical philosophies and the limits of instructional authority. In Turkey, where writing pedagogy has traditionally been dialogic and process-oriented, Arslan (2025) emphasises that effective integration depends on aligning AI-mediated feedback with established classroom practices and cultural expectations. Understanding how teachers achieve this balance is key to explaining how intelligent technologies are transforming feedback in EFL writing education.

2.2. Teacher Trust and Professional Control in AI Feedback Integration

Trust remains crucial to teachers' engagement with AI-generated feedback. It reflects their perceptions of reliability, transparency, and pedagogical suitability (Al-Qadri & Al-Khresheh, 2025). As Qin et al. (2020) explain, trust influences whether educators see algorithmic outputs as credible within current teaching norms. Further research indicates that teachers often approach AI with cautious optimism, recognising its potential yet questioning the accuracy of automated comments (Nazaretsky et al., 2022). When systems are seen as transparent and consistent, acceptance rises (Wang et al., 2024); if their reasoning is opaque or linguistically inconsistent, teachers tend to reduce their use (Akman Yeşilel,

2025). Trust, therefore, involves both cognitive assessment and emotional confidence that AI feedback will support learning objectives without undermining professional expertise.

Professional control exists as a parallel dimension shaping how teachers utilise AI feedback in writing instruction. The advent of automated systems alters the balance of authority between human and technological evaluators, prompting educators to redefine their instructional roles. Jiménez (2024) notes that AI can reduce routine workload, enabling teachers to focus on rhetorical and conceptual aspects of writing. Conversely, Shi et al. (2024) highlight that excessive automation may lessen formative dialogue and diminish pedagogical agency. The level of oversight teachers maintain determines whether AI functions as an assistant or an intrusive intermediary. According to Lucas et al. (2024), digital competence significantly influences this balance: teachers with greater technological confidence incorporate AI more purposefully, whereas limited competence can lead to either dependence or avoidance. Evidence from professional development research indicates that structured AI-literacy programmes help teachers preserve evaluative authority and reflective control (Al-Khresheh et al., 2025; Ding et al., 2024; Dogan et al., 2025).

The relationship between trust and control is mutually reinforcing and context-dependent. Shen et al. (2025) demonstrate that psychological safety supports ongoing engagement with AI when teachers retain the right to reinterpret feedback. High levels of professional control foster trust, whereas imposed or opaque systems often elicit resistance. Studies on explainable AI have shown that domain-specific transparency increases confidence in algorithmic recommendations (Feldman-Maggor et al., 2025). Furthermore, research on pre-service teachers highlights that evolving identity and preparedness influence the development of trust over time (Guan et al., 2025). In the Turkish EFL context, where relational pedagogy and professional identity are critical, the negotiation between trust and control remains vital. Yildiz Durak and Onan (2025) note that teachers who act as interpreters rather than passive recipients of machine output experience greater pedagogical confidence and more consistent results. Understanding how educators maintain trust in technology while protecting instructional authority is, therefore, crucial in explaining the transformation of feedback practices in AI-mediated writing instruction.

2.3. Pedagogical Adaptation and Feedback Practices in Technology-Mediated Contexts

Integrating AI-generated feedback into writing instruction has prompted teachers to reassess their feedback methods and the underlying pedagogical assumptions. Ebadi and Rahimi (2024) note that technology-mediated feedback marks a shift from merely correcting to guiding learners through various forms of input. Earlier pedagogical discussions highlighted that technological innovation should support effective instructional design rather than dictate it (Oliver & Herrington, 2003; Thorpe, 2009; Webb, 2010). In university environments, teachers often arrange automated feedback either before or after classroom discussions, allowing students to analyse machine-generated comments prior to engaging in teacher-led conversations. Research in higher education indicates that this sequencing enhances revision planning (Peungharoenkun & Waluyo, 2024) and that portfolio-based feedback tasks promote ongoing reflective learning (Villares & Carciu, 2023). These approaches reflect a gradual transition towards layered feedback, where algorithmic and human insights collaborate rather than function separately.

Adaptation involves sustained professional reasoning as teachers evaluate which automated suggestions are linguistically reliable and pedagogically relevant. Automated comments may be accurate in form but superficial in communicative scope. Teachers filter and reframe this information so that it supports learning objectives rather than merely correcting errors. Karimpour et al. (2025) demonstrate that digitised feedback promotes grammar awareness when it is interpreted within explicit instructional frameworks, while Wood (2021, 2022) describes feedback uptake as a dialogic process requiring teacher mediation. Research by Franke et al. (2024) demonstrates that structured prompts and strategy guidance enhance teachers' ability to manage such mediation effectively. The methodological discipline underlying technology-mediated tasks determines the quality of adaptation; Kim and Namkung (2024) argue that pedagogical coherence depends on a clear correspondence between technological function

and communicative objectives. Evidence from McLellan et al. (2021) confirms that blended learning environments can sustain this correspondence when instructional control remains with the teacher.

Adapting to AI-driven feedback presents practical and ethical challenges that extend beyond technical skills. Teachers report mental fatigue when interpreting large volumes of automated comments or reconciling discrepancies between human and algorithmic judgements (Sauchelli et al., 2024). Concerns about transparency and cultural bias persist in influencing attitudes toward automated feedback (Han et al., 2022). Analyses of technology-supported instruction suggest that over-reliance on machine correction may diminish students' motivation for deeper engagement and reduce opportunities for self-monitoring (Bhandari et al., 2025; González-Lloret & Rock, 2022). Research indicates that synchronous and collaborative feedback settings can help counteract this by maintaining learner attention and reflection (Kim et al., 2025). In higher education, Peungcharoenkun and Waluyo (2024) emphasise that technology-mediated feedback can encourage more reflective revisions when viewed as a complement to teacher guidance. Preserving pedagogical independence while integrating technological input enables teachers to retain the formative and interpersonal aspects vital to effective writing instruction.

2.4. Theoretical Integration: Teacher Cognition Theory and the Technology Acceptance Model

Teacher Cognition Theory provides a conceptual framework for understanding how teachers' internal beliefs and professional experiences shape their classroom practices. It considers teachers as active thinkers who interpret and respond to educational change through personal reasoning rather than simply following external policies. Çetin (2023) explains that teachers' professional decisions are shaped by the mental frameworks they develop through experience, while Tao and Gao (2021) describe these frameworks as reflections of lasting ideas about pedagogy and learning. In technology-mediated settings, cognition affects how teachers evaluate the credibility and pedagogical relevance of innovations. Granić (2022) observes that such evaluations depend on prior digital experience and whether technology aligns with teachers' professional goals. Ursavaş (2022) adds that cognition mediates the connection between institutional expectations and individual classroom realities, influencing how teachers incorporate technological feedback. Within EFL writing instruction, cognition determines whether AI-generated feedback is perceived as an aid to formative practice or as an intrusion on professional authority, influencing how teachers evaluate its value and reliability.

The TAM complements this cognitive perspective by examining the evaluative and behavioural processes that underpin technology adoption. According to Al-Nuaimi and Al-Emran (2021), teachers' willingness to adopt innovation depends on perceived usefulness and ease of use, which predict behavioural intention. Ursavaş (2022) identifies these perceptions as central to understanding educators' acceptance of digital systems, while Granić (2022) links them to environmental and institutional factors that either promote or hinder the adoption of technology. Empirical studies also show that emotional and social factors influence adoption. Almogren and Aljammaz (2022) report that teachers' confidence increases when systems are transparent and aligned with pedagogical goals. In contrast, Şimşek and Ateş (2022) find that well-structured Web 2.0 tools enhance perceptions of usefulness. In EFL and higher education contexts, perceived control and interpretability are vital for sustained engagement with AI-mediated feedback (Zou & Huang, 2023; Ma et al., 2025). Research on the adoption of generative AI further confirms that trust, transparency, and professional confidence are essential for long-term acceptance.

Integrating these two perspectives provides a clear framework for analysing teachers' engagement with AI-generated feedback. Teacher Cognition Theory explains how belief structures shape interpretation and professional judgement, while TAM considers the evaluative and behavioural processes guiding technology use (Almogren & Aljammaz, 2022). Within this framework, trust relates to the confidence element identified in TAM, whereas professional control corresponds to the agency central to Teacher Cognition Theory. Al-Abdullatif (2023) suggests that such integration clarifies the relationship between pedagogical confidence and technology assessment in language learning environments. Furthermore, Chocarro et al. (2023) demonstrate that educators' acceptance of conversational agents depends on the perceived alignment between system behaviour and instructional norms. This combined perspective is

particularly relevant to Turkish EFL contexts, where teaching practices are heavily influenced by institutional policy and individual pedagogical philosophy (Almogren & Aljammaz, 2022; Şimşek & Ateş, 2022). It offers a conceptual lens for understanding how instructors adapt to technological innovations while maintaining coherence with their feedback values, professional identity, and classroom culture.

Although AI-generated feedback has attracted increasing empirical attention, most research still concentrates on learners' perceptions, revision behaviours, or the linguistic accuracy of automated systems (Mekheimer, 2025; Zhang, 2025; Zhu et al., 2024). Significantly less is known about how teachers interpret and manage such feedback within their instructional frameworks. Existing studies rarely examine how educators evaluate the reliability of AI comments, uphold pedagogical control, or align technological input with professional principles and contextual demands (Alharbi, 2023; Can, 2025; Son et al., 2025). Research on the relationships between teachers and technology has also overlooked the roles of trust, transparency, and identity when algorithmic feedback influences decision-making in the classroom (Nazaretsky et al., 2022; Shen et al., 2025). This gap is particularly notable in EFL settings such as Turkish higher education, where feedback practices are influenced by dialogic and institutionally regulated traditions (Arslan, 2025; Cong-Lem, 2021).

In response to this conceptual and empirical gap, the present study investigates how EFL teachers conceptualise, interpret, and adapt AI-generated feedback in writing instruction. It aims to elucidate the interconnected roles of trust, professional control, and pedagogical adaptation through the combined theoretical frameworks of Teacher Cognition Theory and the TAM.

3. Research Methods

3.1 Research Design

This study employed a qualitative approach within an interpretive framework to investigate how EFL teachers perceive and integrate AI-generated feedback into writing instruction. The method was appropriate for examining teachers' beliefs, reasoning, and instructional choices, providing insight into their professional thinking as they navigated the use of automated feedback tools (Ellis & Hart, 2023). An open-ended questionnaire collected detailed written reflections from a diverse group of instructors across multiple institutions, enabling broad participation while maintaining depth of individual responses. The instrument focused on the core concepts of trust, professional control, and pedagogical adaptation, as outlined in the theoretical framework. This design enabled a systematic investigation into how teachers perceive AI feedback in relation to their pedagogical values, institutional context, and professional agency, providing a grounded understanding of their interpretive engagement with emerging educational technologies.

3.2 Participants

The study involved 36 EFL instructors selected from various Turkish higher education institutions. The participants represented a broad spectrum of the EFL teaching workforce, encompassing various academic ranks, qualifications, and levels of experience in writing instruction. As shown in Table 1, the sample consisted of 25 female (69.4%) and 11 male (30.6%) instructors, a distribution typical of gender patterns seen in Turkish language education faculties. Most participants fell within the 35–44 age group (38.9%), followed by those aged 25–34 (33.3%) and those 45 years or older (27.8%), indicating a cohort that includes both early-career and senior academics.

Regarding qualifications, 11 participants (30.6%) held a doctoral degree, 22 (61.1%) a master's degree, and 3 (8.3%) a bachelor's degree. The distribution of academic ranks closely reflected these qualifications, with 25 lecturers (69.4%), six assistant professors (16.7%), three associate professors (8.3%), and two full professors (5.6%). All individuals with doctoral degrees occupied higher academic positions, aligning logically with their academic achievements. The teaching experience of the participants varied: 10 instructors (27.8%) had 1–5 years of experience, 14 (38.9%) had 6–10 years,

and 12 (33.3%) had more than 10 years of teaching experience, demonstrating a balanced range of junior and senior educators.

Regarding technological exposure, a significant proportion (55.6%) had used AI-based feedback tools for 1–3 years, while 16.7% reported having less than one year of experience, and 27.7% had more than three years of experience. This distribution indicates an emerging yet steadily growing engagement with AI technologies in language education. Institutional representation was similarly skewed towards the public sector, with 28 instructors (77.8%) working in public universities and 8 (22.2%) in private institutions. Overall, the demographic profile of the participants reflects the broader composition of the Turkish EFL academic community, providing an informed basis for examining teachers' interpretations and pedagogical negotiations of AI-generated feedback in writing instruction.

Table 1. Demographic Characteristics of Participants ($N = 36$)

Category	Subcategory	Frequency (n)	Percentage (%)
Gender	Male	11	30.6
	Female	25	69.4
Age Group	25–34	12	33.3
	35–44	14	38.9
	45 or above	10	27.8
Highest Educational Qualification	Bachelor's	3	8.3
	Master's	22	61.1
	PhD	11	30.6
Academic Rank	Lecturer	25	69.4
	Assistant Professor	6	16.7
	Associate Professor	3	8.3
	Professor	2	5.6
Years of Teaching Experience	1–5 years	10	27.8
	6–10 years	14	38.9
	More than 10 years	12	33.3
Experience with AI Feedback Tools	Less than 1 year	6	16.7
	1–3 years	20	55.6
	More than 3 years	10	27.7
Type of Institution	Public	28	77.8
	Private	8	22.2

3.3 Instruments

The study used a semi-structured, open-ended questionnaire to gather detailed insights into EFL teachers' perceptions, professional judgments, and classroom use of AI-generated feedback in writing instruction. The instrument consisted of two main sections. The first section collected demographic and professional background information, including gender, age group, highest educational qualification, academic rank, years of teaching experience, familiarity with AI feedback tools, and type of institution. This section provided contextual information for interpreting the qualitative data and understanding differences across teacher profiles.

The second section included six open-ended questions designed to explore participants' reflective perspectives and practical experiences with AI-mediated feedback. The questions were carefully aligned with the study's three research questions. Specifically, each pair of questions addressed a distinct research question: the first pair examined teachers' perceptions of the pedagogical value and reliability of AI-generated feedback, the second pair looked at instructional adaptation and feedback practices, and the final pair considered professional challenges and concerns associated with integrating AI feedback into classroom instruction.

The questionnaire was conceptually grounded in Teacher Cognition Theory and the TAM, providing a theoretical foundation for exploring how teachers' beliefs, experiences, and evaluative judgments influence their responses to technological innovation in writing pedagogy. The open-ended format

enabled participants to articulate their reasoning in detail, offering a qualitative insight into how trust, professional control, and pedagogical adaptation operate within real teaching contexts (see Appendix 1).

3.4 Validation

The questionnaire's validation was carried out through several phases aimed at ensuring conceptual accuracy and practical consistency. An initial set of fifteen open-ended questions was created after a thorough review of existing research on teacher cognition, technology acceptance, and AI-generated feedback in language education. The questions were designed to measure three primary constructs: trust, professional control, and pedagogical adaptation. Each construct was represented by multiple prompts intended to encourage thoughtful and detailed responses from participants.

The initial draft was reviewed by three university specialists with expertise in applied linguistics, educational technology, and assessment. They assessed the content for conceptual clarity, theoretical consistency, and linguistic precision. Their feedback led to the refinement of item phrasing, the elimination of overlapping questions, and the consolidation of items that addressed similar aspects of teacher perception. After these revisions, the questionnaire was reduced to six questions that directly corresponded to the three guiding research questions. The revised version was sent back to the same experts for further evaluation, confirming that the items maintained both theoretical integrity and clarity of expression.

A pilot version was then distributed to six EFL instructors working in similar institutional settings. Their comments focused on the clarity, flow, and relevance of the questions. Feedback from this stage indicated that the items were accessible, reflected classroom realities, and could elicit detailed responses. Minor wording adjustments were made to improve tone and progression.

The final instrument demonstrated a clear connection between the theoretical framework and the pedagogical context. Each question related to one of the study's constructs based on Teacher Cognition Theory and the TAM. The combination of expert review, iterative revision, and pilot testing confirmed the questionnaire as a reliable tool for examining teachers' reasoning and professional judgments regarding the use of AI-generated feedback in EFL writing instruction.

3.5 Data Collection Procedures and Ethical Considerations

The study was conducted during the second academic term of 2025, spanning the final three weeks of the semester. Ethical approval was granted by the Firat University Ethics Committee, confirming adherence to institutional research standards and ethical conventions in the field of applied linguistics. Prior to data collection, official authorisation was obtained from the participating institutions, and instructors were contacted via departmental mailing lists and professional networks. The invitation message explained the study's purpose, voluntary nature, and expected duration. Participants provided informed consent electronically prior to participating.

The open-ended questionnaire was distributed online via a secure Qualtrics form. This approach was chosen to accommodate teachers' workloads and facilitate reflective, text-based responses. The online format encouraged detailed accounts of instructional experiences and enabled participation from multiple universities. Respondents completed the questionnaire at their convenience, offering written reflections on their perceptions of AI-generated feedback and its pedagogical implications for writing instruction.

Ethical principles guided every stage of the research. Participation was voluntary and confidential, and no personal identifiers were collected beyond general demographic information such as gender, academic rank, and years of experience. Data were stored in encrypted files accessible only to the researcher, and participants were informed that they could withdraw from the study without

consequence. The procedures adhered to the ethical standards expected of educational research, maintaining respect for professional integrity, participant autonomy, and data confidentiality throughout the process.

3.4 Data Analysis Procedures

The qualitative data were analysed through a systematic, inductive process focused on identifying patterns in teachers' written reflections. All responses were read multiple times to become familiar with the content and to maintain the contextual integrity of participants' statements. The dataset was then imported into NVivo 14 to support open coding and thematic organisation.

An initial set of seventy-four open codes was derived from participants' own words, representing discrete ideas about trust, instructional judgement, and professional experience with AI-generated feedback. Through a process of constant comparison, related codes were merged, refined, and grouped into higher-order categories. This iterative process yielded twelve focused categories, which were subsequently condensed into three overarching themes aligned with the study's research questions.

1. Perceived pedagogical value and reliability of AI-generated feedback – addressing how teachers judge the educational usefulness, trustworthiness, and linguistic adequacy of automated feedback in writing instruction.
2. Adaptation of feedback practices and instructional decision-making – examining how teachers modify classroom feedback routines and reconcile automated input with their professional judgment.
3. Challenges and professional concerns in AI-supported writing instruction – encompassing issues of workload, ethical responsibility, and the preservation of pedagogical authority when using AI tools.

Throughout the process, analytic memos were kept to record reflections and the rationale behind coding decisions. To strengthen credibility, two independent researchers with experience in qualitative analysis and EFL pedagogy reviewed the coding framework. Their evaluations led to minor revisions and confirmed the coherence of the thematic structure.

The resulting thematic framework represents an empirically grounded interpretation of how EFL teachers perceive and integrate AI-generated feedback in writing instruction. These three themes provide the foundation for the findings discussed in the next section.

4 Findings

4.1 Perceived Pedagogical Value and Reliability of AI-Generated Feedback

Participants shared a variety of opinions regarding the pedagogical usefulness and dependability of AI-generated feedback in writing teaching. While many educators described these tools as saving time and being linguistically accurate, others questioned their interpretive quality and their potential to undermine teacher judgment. Acceptance levels appeared to be connected to academic status, experience, and prior familiarity with AI tools.

Among early-career lecturers, primarily female and aged 25–34, teaching in public universities, the dominant perspective was one of pragmatic optimism. One lecturer with three years of experience explained: *“When I reflect on my experiences with receiving feedback from artificial intelligence, I realise that I approach it from a pragmatic perspective because AI often highlights elements that I might not have noticed before. It helps me work more efficiently in terms of time and energy, and since I feel less fatigued, I can make fairer and more comprehensive evaluations.”* Her observation illustrates how AI was framed as a functional assistant that alleviates workload and promotes consistency in marking.

A colleague in the same demographic echoed this sense of practical benefit, noting that *“these tools are invaluable in providing quick and detailed feedback, saving time and supporting students’ self-correction skills.”* Both accounts suggest that immediacy and precision were central to their perceived usefulness.

Even within this group, reservations surfaced. One lecturer warned that *“using AI without critical thinking may result in the dulling of our minds,”* reflecting anxiety that convenience might discourage deeper cognitive engagement. Another lecturer who had recently incorporated AI feedback into her teaching acknowledged its efficiency but stressed, *“I am careful about being critical towards the feedback it produces.”* Such statements reveal the tension early-career educators face between appreciating AI’s practical benefits and defending reflective professionalism.

Mid-career and senior academics conveyed more pronounced scepticism. A male assistant professor aged 35–44 stated: *“AI performs exceptionally well in evaluating the technical aspects of writing, but it may overlook the elements that give a text its unique identity. When writing involves emotions, opinions, and cultural elements, it can fall short, as it cannot think like a human.”* His view underscores persistent doubts about interpretive reliability and humanistic sensitivity. Similarly, a female associate professor with a PhD observed that *“AI feedback gives precision but lacks empathy. It recognises grammar and structure but not the communicative intent that underlies effective writing.”* For experienced academics, professional credibility depended on the ability to provide contextually grounded, personalised feedback that AI could not replicate.

Teachers who had used AI systems for one to three years tended to express conditional trust rather than outright approval or rejection. One lecturer explained that *“it is reliable for surface-level mistakes, but its suggestions for idea development or organisation need human checking,”* adding that she deliberately asked students to compare machine and teacher feedback to cultivate evaluative awareness. Another participant emphasised the need for verification, stating, *“We cannot trust it 100%; when accuracy matters, we always double-check.”* Their remarks reveal an adaptive stance: recognising AI’s utility for preliminary correction while insisting on human oversight for conceptual depth.

Participants viewed AI-generated feedback as an additional pedagogical tool that enhanced efficiency and aided revision, although its perceived reliability was still limited by professional judgement. Acceptance depended on experience, confidence, and institutional expectations. Across all levels, teachers aimed to incorporate AI feedback while maintaining the interpretative authority central to effective writing pedagogy.

4.2 Adaptation of Feedback Practices and Instructional Decisions

Participants reported that using AI-generated feedback led them to reconsider how they provided, interpreted, and discussed written feedback with their students. These adaptations varied according to experience, academic rank, and familiarity with AI tools, indicating that technology integration was mediated by professional judgement rather than uniform adoption.

Early-career lecturers, most of whom were female and aged between 25 and 34, described how AI tools helped them strike a balance between efficiency and reflection. One lecturer commented: *“Instead of correcting every mistake myself, AI helps me to analyse critically. Furthermore, I also think that AI paves the way for me to discover perspectives.”* For teachers with limited experience, AI feedback has become a valuable resource for sharpening analysis, rather than a replacement for human evaluation. Another participant with a similar profile explained: *“Since these tools help me give feedback in a shorter period of time, I become more effective in reflecting on the writings of the learners.”* Such reflections suggest that younger educators approach AI feedback as an assistant for managing their workload while maintaining a pedagogical focus.

Assistant and associate professors, all holding doctoral degrees and with more than ten years of teaching experience, tended to describe adaptation as a selective process involving the filtration and sequencing of AI input. A male assistant professor stated: *“If you reflect AI-generated feedback directly to your students without filtering it through your own judgment, you are undermining your role as a teacher.”* Similarly, an associate professor commented: *“AI should intervene to a certain extent in the technical aspects—such as grammar and mechanics—then the teacher’s own evaluation criteria should come into play to finalise the feedback.”* These accounts demonstrate that experienced faculty sought to maintain their evaluative authority, positioning AI as a complement to, rather than a substitute for, their professional expertise.

Teachers from both public and private institutions discussed new classroom routines developed around AI feedback. A female lecturer described how her students now participate in collaborative evaluation: *“Students use AI tools for a first round of feedback, and then we evaluate their accuracy together. This process helps me and my students notice that AI can make errors, while also training them to focus and engage cognitively rather than relying passively on instant answers.”* Another instructor with moderate experience added, *“As students also have access to AI, simply passing along AI-generated feedback will not create a stimulating environment. Teachers should highlight areas that AI has overlooked and encourage critical thinking by bringing new perspectives into the discussion.”* These strategies show how teachers redefined AI feedback as an entry point for dialogue and reflection rather than a final judgement.

A few senior academics described adapting their assessment frameworks. An associate professor explained: *“My evaluations have evolved into more academic rubric-based assessments.”* Another teacher with extensive classroom experience noted: *“I can give prompts according to the feedback types appropriate to my students’ levels so that I can provide more understandable and easier feedback.”* Such responses suggest that AI integration has expanded beyond feedback delivery to the reevaluation of evaluation criteria.

Across different experience levels, gender groups, and institutional settings, participants viewed adaptation as a balancing act between speed and depth, as well as automation and professional judgment. Those with doctoral backgrounds tended to apply AI selectively to retain pedagogical control, while less-experienced teachers used it to enhance analytical capacity and efficiency. In both cases, adaptation reflected informed professional judgement rooted in context rather than uncritical acceptance of technology.

4.3 Challenges and Professional Concerns in AI-Supported Writing Instruction

Participants expressed a complex mixture of technical, psychological, and pedagogical concerns about incorporating AI-generated feedback into their writing courses. Their reflections showed that the challenges extended beyond technical reliability to questions of professional confidence, instructional control, and ethical responsibility.

Teachers at different career stages recognised that AI sometimes unsettled their sense of expertise. A mid-career lecturer in a public university observed, *“Sometimes, because artificial intelligence does not fully understand me, I can be quite stubborn about expressing my own ideas. ... I sometimes feel worried because it can produce near-perfect pieces of work. From a psychological standpoint, this can make you feel inadequate.”* Another lecturer with comparable experience remarked that *“overreliance on AI feedback ... can weaken creativity and problem-solving skills over time.”* Such remarks reveal the ambivalence with which teachers approached automation—valuing its efficiency but questioning its effect on human judgement and creative engagement.

More experienced staff, particularly assistant and associate professors with doctoral qualifications, voiced concern about students’ uncritical dependence on AI. One senior male participant explained, *“Since everyone uses Artificial Intelligence, students may misuse it and receive incorrect feedback.”*

Distinguishing between right and wrong is very important in this process. We always need to confirm the information we receive.” This statement reflects a recurring theme across the dataset: the need for teachers to mediate between the precision of technology and the interpretive depth of human feedback. Another senior participant commented that the speed of automated responses can make “both teachers and learners more impatient with the natural process of learning,” drawing attention to the pedagogical cost of instant evaluation. A third contributor, an associate professor with more than ten years of experience, expanded on this issue, observing that “*students tend to accept AI comments as absolute truth, which limits their ability to question and evaluate feedback critically.*” This concern underscored the perceived erosion of learner autonomy and the need to cultivate critical literacy, striking a balance between technological assistance and human reasoning.

Technical difficulties were also mentioned, particularly in public universities where connectivity and access are often unstable. A lecturer noted that “*infrastructure problems, such as those tools being down from time to time, prevent me from working smoothly.*” Although practical in nature, these interruptions served as a reminder to teachers of their reliance on external systems and the fragility of technological support in everyday instruction. Across ranks and institutions, teachers called for structured professional preparation to manage these challenges. Several participants recommended training in prompt design and interpretive strategies to secure more accurate and context-appropriate feedback. One participant suggested that “*teachers themselves should lead the way by promoting awareness and setting balanced examples within their professional communities.*” At the same time, another urged that “both teachers and students should be given training on how to use artificial intelligence in writing skills in an effective way.” These suggestions underscored a collective awareness that technical literacy must be matched with pedagogical judgment and ethical reflection. The accounts portray a profession navigating between technological innovation and the preservation of human authority. Teachers recognised the efficiency and analytic potential of AI-generated feedback but remained alert to its psychological and pedagogical consequences. They viewed sustainable integration as contingent on maintaining evaluative autonomy and developing institutional frameworks that prepare educators to use AI critically, purposefully, and within clearly defined pedagogical boundaries.

The qualitative analysis identified three main themes related to the study’s research questions. Each theme reflected a different aspect of how EFL teachers perceived, applied, and assessed AI-generated feedback in their writing teaching. Within these themes, several subthemes emerged through iterative coding and interpretive comparison of participants’ responses. Table 2 summarises the main themes, subthemes, representative quotations, and interpretive insights that collectively illustrate the teachers’ diverse experiences, judgments, and professional reflections on the pedagogical use of AI feedback tools.

Table 2. Summary of Main Themes, Subthemes, and Illustrative Evidence

Main Theme	Subtheme	Core Focus	Illustrative Evidence from Participants	Interpretation
Theme 1: Perceived Pedagogical Value and Reliability of AI-Generated Feedback	1.1 Functional Efficiency	Teachers valued AI feedback for speed, grammatical precision, and workload reduction.	“AI often highlights elements that I might not have noticed before. It helps me work more efficiently in terms of time and energy.” (Female lecturer, 25–34, M.A., 3 years’ experience)	AI was appreciated as a tool that supports formative assessment and time management.
	1.2 Conditional Trust and Verification	Teachers trusted AI for technical accuracy but doubted its interpretive depth and human sensitivity.	“AI performs exceptionally well in evaluating technical aspects, but it may overlook what gives a text its unique identity.” (Male assistant professor, PhD, 35–44) “We cannot trust it 100%; when accuracy matters, we always double-check.” (Female lecturer, 25–34, M.A.)	Acceptance of AI was selective, guided by professional judgment and the need for human verification.
Theme 2: Adaptation of Feedback Practices and Instructional Decisions	2.1 Pedagogical Mediation and Control	Teachers reframed AI feedback as a supplement requiring interpretive filtering and contextualisation.	“If you reflect AI-generated feedback directly to your students without filtering it through your own judgment, you are undermining your role as a teacher.” (Male assistant professor, PhD)	Teachers maintained evaluative authority by mediating AI output through professional criteria.

	2.2 Collaborative and Reflective Feedback Practices	Teachers engaged students in reviewing AI-generated feedback critically and collaboratively.	“Students use AI tools for a first round of feedback and then we evaluate their accuracy together.” (Female lecturer, 25–34, M.A.)	Collaboration transformed AI feedback into an opportunity for dialogue and critical engagement.
	2.3 Redesign of Assessment Frameworks	AI integration encouraged rubric-based and level-specific feedback adaptation.	“My evaluations have evolved into more academic rubric-based assessments.” (Associate professor, PhD, 10+ years’ experience)	Teachers adjusted their assessment criteria to integrate both automated and human evaluation systematically.
Theme 3: Challenges and Professional Concerns in AI-Supported Writing Instruction	3.1 Psychological and Professional Unease	Teachers reported concerns about overreliance on AI and its effect on professional confidence.	“Sometimes, I feel worried because it can produce near-perfect work, and this can make you feel inadequate.” (Lecturer, 25–34)	AI’s perceived superiority generated tension between efficiency and professional identity.
	3.2 Student Dependence and Critical Literacy	Teachers worried about students’ uncritical trust in AI feedback.	“Students tend to accept AI comments as absolute truth, which limits their ability to question and evaluate feedback critically.” (Associate professor, PhD, 10+ years’ experience)	Teachers viewed critical literacy as essential to counterbalance technological determinism.
	3.3 Technical and Institutional Barriers	Participants referred to access problems and lack of structured training in AI pedagogy.	“Infrastructure problems, such as tools being down from time to time, prevent me from working smoothly.” (Lecturer, public university) “Teacher-training programmes should include prompt-engineering-based training.” (Lecturer, M.A.)	Reliable infrastructure and pedagogical support were seen as prerequisites for effective AI integration.

5. Discussion

5.1 How Do EFL Teachers Perceive the Pedagogical Value and Reliability of AI-Generated Feedback in Writing Instruction?

The findings suggest that teachers viewed AI-generated feedback as a helpful support tool rather than a replacement for pedagogical approaches. Their responses showed appreciation for its efficiency in correcting grammar, improving textual cohesion, and making surface-level edits. These views align with research indicating that educators often use technological tools to reduce workload and ensure consistency in written feedback rather than to transform their teaching philosophy (Aljasser, 2025; Kim & Namkung, 2024). In this context, perceived usefulness appeared to be more important than curiosity or enthusiasm, reaffirming that practical considerations rather than innovation ideals drive the acceptance of technology in education (Ma et al., 2025; Mogaji et al., 2024).

Trust in the reliability of AI systems remained cautious. Teachers valued the precision of automated correction while questioning its capacity to interpret rhetorical intent, tone, and meaning. This ambivalence aligns with earlier findings that AI tools excel at structural editing but struggle with the more nuanced communicative aims of writing (Muñoz et al., 2025; Xiao et al., 2025). Studies in applied linguistics have long shown that teachers associate feedback quality with empathy, contextual awareness, and the ability to respond to learners’ voices—dimensions that algorithmic feedback cannot fully replicate (Schmidt & Strasser, 2022; Tao & Gao, 2021). The present results reaffirm that educators continue to see human judgment as central to formative assessment, especially when learner identity and authorial expression are involved.

Teachers’ selective acceptance of AI feedback reflects a process of cognitive negotiation shaped by experience and institutional context. Prior research has shown that professional trust in educational AI develops gradually through exposure and guided implementation (Nazaretsky et al., 2022; Liang et al., 2023). In this study, teachers’ past experiences with technology influenced their willingness to delegate evaluative authority. Those with established pedagogical routines viewed AI as a tool that could assist but not replace their interpretive decision-making. This aligns with Teacher Cognition Theory, which

suggests that instructional behaviour results from the interaction of beliefs, experience, and situational demands.

Overall, AI-generated feedback emerged as a secondary but valued resource within teachers' assessment repertoires. It enhanced efficiency and accuracy, though its pedagogical legitimacy remained dependent on professional oversight. Recent scholarship similarly contends that meaningful integration of AI in language education depends on ethical responsibility, critical engagement, and an explicit recognition of human agency in the feedback process (Mohammed & Khalid, 2025; Wale & Kassahun, 2024; Son et al., 2025). The teachers in this study viewed technology as a collaborative assistant within a human-centred feedback ecology, maintaining interpretation and empathy as the core features of effective writing instruction.

5.2 In What Ways Do EFL Teachers Adapt Their Feedback Practices and Classroom Decisions When Incorporating AI-Generated Feedback?

Teachers' engagement with AI-generated feedback resulted in gradual changes in how they conceptualised and delivered feedback in writing instruction. These adjustments were evolutionary rather than revolutionary, reflecting a professional tendency to incorporate innovation within existing pedagogical frameworks. This aligns with earlier research indicating that educators tend to adapt technology to their existing cognitive and instructional models rather than fundamentally changing their underlying belief systems (Tao & Gao, 2021; Liang et al., 2023). In practice, teachers remained the primary authorities of meaning, organising and filtering machine-generated input through their professional judgement.

A key change involved rethinking feedback as a two-way process. AI-generated comments were often seen as an initial step towards linguistic correction, followed by human interpretation and classroom discussion. Teachers used the technology to create space for dialogue, encouraging students to question automated suggestions and deepen their understanding through conversation. Similar findings have been reported in recent studies, where AI-mediated feedback has promoted collaborative reflection and self-regulation, rather than mere compliance (Kim et al., 2025; Wood, 2022). In these cases, feedback became a dynamic exchange, with human judgment shaping the pedagogical value of technological input.

A further adaptation appeared in assessment design. Several educators described re-evaluating their rubrics to accommodate AI-assisted evaluation while maintaining consistency with established standards. Similar developments have been documented in other contexts where the integration of technological feedback prompts clearer articulation of criteria and greater transparency in marking (Ursavaş, 2022; Wale & Kassahun, 2024). In this study, rubric revision served as a stabilising measure, enabling teachers to preserve alignment between instructional aims and the feedback generated by automated systems.

Teachers also demonstrated critical selectivity when using AI output. They frequently scrutinised the language, tone, and pedagogical appropriateness of the feedback before presenting it to learners. This behaviour reflects the interpretive agency central to Teacher Cognition Theory, where decision-making is grounded in belief, experience, and contextual awareness. Reviewing and modifying AI suggestions reaffirmed teachers' professional control and safeguarded the evaluative depth that underpins effective feedback (Nazaretsky et al., 2022; Aljasser, 2025).

The study further showed that AI integration promoted a reflective partnership between teachers and students. Learners were encouraged to compare algorithmic feedback with teacher commentary, fostering analytical engagement with linguistic form and rhetorical purpose. This approach aligns with the work of Franke et al. (2024) and Escalante et al. (2023), who noted that technology-mediated reflection can enhance learners' feedback literacy and interpretive skills. Through this process, feedback shifted from being a closed evaluative act to an exploratory dialogue that developed critical awareness.

Overall, teachers viewed AI as a supplementary tool rather than a replacement for pedagogical reasoning. Adaptation focused on professional recalibration—integrating automation where it enhanced efficiency while preserving human insight as the core of writing instruction. The evidence suggests an informed integration model grounded in pedagogical authority, contextual relevance, and ongoing reflective practice. In this model, human expertise continues to shape the meaning, reliability, and educational value of feedback, while AI acts as a supporting mechanism that improves established approaches to teaching and assessment.

5.3 What Challenges and Professional Concerns Do EFL Teachers Experience When Integrating AI-Generated Feedback into Their Teaching?

Teachers' reflections revealed that the challenges associated with AI-generated feedback extended beyond technical issues to encompass questions of professional identity, pedagogical control, and ethical responsibility. Their experiences indicate a cautious awareness of the tensions between technological support and human judgment in the writing classroom.

Several teachers expressed concerns about professional uncertainty as automated systems became capable of producing accurate or sophisticated feedback. This response aligns with a psychological adjustment observed in earlier studies, where educators questioned their roles as technology began to perform evaluative functions traditionally carried out by teachers (Jiménez, 2024; Feldman-Maggor et al., 2025). These concerns extended beyond personal worries and touched on broader issues of pedagogical legitimacy. Teachers were worried that overreliance on automation could restrict the reflective and interpretive space that characterises expert feedback.

Participants also expressed concern about students' uncritical acceptance of AI suggestions. They observed that learners often saw machine-generated comments as authoritative, neglecting to question the contextual or rhetorical suitability of the advice. This trend aligns with findings from Yildiz Durak and Onan (2025) and Mohammed and Khalid (2025), who noted that habitual reliance on automated feedback can weaken self-monitoring and critical reasoning. Teachers viewed their role as one of mediation, guiding students to evaluate, compare, and refine AI input through discussion and reflection. Maintaining this mediating role was seen as essential for preserving learner autonomy and fostering a reflective classroom culture.

Technical barriers compounded these pedagogical concerns. Those teaching in public universities mentioned disruptions caused by limited access or unstable infrastructure, which interrupted classroom flow and undermined confidence in the reliability of digital platforms. Similar obstacles have been documented in studies examining technological adoption under uneven institutional conditions (Dogan et al., 2025; Guan et al., 2025). Such limitations reminded participants that technological integration depends as much on practical feasibility as on instructional willingness.

Teachers consistently called for systematic training that addresses both the functional and interpretive aspects of AI use. They advocated for professional development that prepares educators to create effective prompts, critically evaluate automated responses, and address ethical questions concerning data use and authorship. Similar recommendations have been made in studies emphasising that technical proficiency alone is inadequate without pedagogical reflection and contextual understanding (Ding et al., 2024; Lucas et al., 2024). Participants viewed critical literacy in AI-assisted feedback as essential for maintaining academic integrity and professional autonomy.

In summary, the challenges identified by participants point to an emerging professional discourse grounded in caution and critical awareness. Teachers valued AI-generated feedback for its immediacy and linguistic precision, but resisted any shift that might marginalise their interpretive expertise or diminish reflective dialogue with students. Their perspectives suggest that sustainable integration depends on three interrelated conditions: institutional support that addresses technical constraints, targeted professional development that builds informed judgment, and a continued recognition of the

teacher's central role as the interpreter of meaning and the arbiter of pedagogical quality in AI-supported writing instruction.

6. Implications

The findings contribute to current theories on teacher cognition and technology acceptance by demonstrating that teachers' engagement with AI-generated feedback is influenced less by technological capability than by professional reasoning and contextual judgement. Within the framework of Teacher Cognition Theory, the study affirms that belief systems and experiential knowledge continue to shape how innovation is interpreted and applied in writing instruction. Practically, the evidence suggests that sustainable integration requires institutional policies that maintain teacher agency while supporting reflective adaptation to technological change. Structured professional development is vital, especially programmes that develop analytical skills in prompt design, ethical decision-making, and pedagogical evaluation of automated feedback. Classroom practice improves when teachers view AI as an auxiliary tool for formative dialogue rather than a replacement for human insight. In this regard, the study broadens theoretical understanding of the balance between cognitive authority and technological support, while providing practical guidance for designing teacher-education curricula and institutional frameworks that encourage critical, context-aware use of AI in EFL writing pedagogy.

7. Limitations and Directions for Further Research

The present study has certain limitations that should be recognised when interpreting its findings. It involved thirty-six EFL instructors working in Turkish universities, a scope that limits the representativeness of the results. Data were collected through open-ended written responses during the last three weeks of the second academic term of 2025, providing an immediate perspective rather than insights into long-term change. Because the data relied on self-reporting, some accounts may have reflected personal bias or selective recall. Differences in participants' familiarity with AI feedback tools may also have influenced the depth of their reflections. The lack of classroom observation restricted the ability to link reported beliefs with actual teaching practices. Additionally, the rapid pace of technological development means that the specific applications discussed may change quickly, affecting the stability of specific observations.

Further investigations should broaden the participant pool to include institutions from various educational systems and cultural contexts. Longitudinal designs would track changes in teachers' attitudes and feedback practices as AI systems evolve. Combining qualitative analysis with classroom observation or quantitative modelling could provide a more thorough understanding of how AI feedback influences instruction and learner engagement. Exploring student perspectives would also deepen insight into reciprocal feedback processes. Future research might focus on developing teacher-training frameworks that foster professional judgment, ethical awareness, and critical AI literacy. Such work would help establish a solid evidence base for integrating intelligent feedback systems into language education in a manner that preserves pedagogical integrity and values human expertise.

8. Conclusion

This study investigated how EFL teachers perceive, adapt to, and manage the integration of AI-generated feedback within writing instruction. The findings indicate that teachers saw AI feedback as a supportive tool that enhances efficiency and linguistic accuracy, while remaining sceptical about its interpretative and pedagogical reliability. Their use of AI reflected cautious adaptation rather than replacement, involving selective filtering, rubric refinement, and structured classroom dialogue to maintain professional agency. Teachers considered AI-generated input beneficial for surface-level corrections but inadequate for addressing rhetorical and contextual depth, reaffirming the ongoing need for human intervention in feedback. Concerns were raised about student dependence, ethical responsibilities, and the potential decline in creative engagement, highlighting the importance of critical

literacy and professional control. These insights demonstrate that the integration of intelligent feedback systems in EFL education is influenced by teachers' cognition, beliefs, and evaluative autonomy. The study thus supports the application of Teacher Cognition Theory and the TAM in understanding AI adoption, while emphasising the need for teacher training programmes that foster reflective judgment, technical skills, and ethical awareness to sustain pedagogically meaningful uses of AI in language teaching.

Declarations

- **Ethical Approval and Consent to Participate**

Ethical approval for this study was obtained from the Ethics Committee of Firat University. Participants were fully informed about the purpose, procedures, and their rights before participation, provided written consent, and took part voluntarily. Confidentiality and anonymity were maintained throughout, with all data managed in accordance with approved ethical standards.

- **Competing Interests**

The author declares that there are no competing interests or potential conflicts of interest related to this research.

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- **Author Contributions**

The author independently conceived, designed, conducted, and analysed the study, interpreted the results, and solely prepared, drafted, and revised the entire manuscript.

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- **Disclosure of AI usage**

Not applicable

- **Data availability statement**

The data supporting the findings of this study are available upon request from the corresponding author.

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Appendix 1

Open-ended questionnaire

Demographic Information	1. Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female
	2. Age Group	<input type="checkbox"/> 25–34	<input type="checkbox"/> 35–44 <input type="checkbox"/> 45 or above
	3. Highest Educational Qualification	<input type="checkbox"/> Bachelor's	<input type="checkbox"/> Master's <input type="checkbox"/> PhD
	4. Academic Rank	<input type="checkbox"/> Lecturer	<input type="checkbox"/> Assistant Professor <input type="checkbox"/> Associate Professor <input type="checkbox"/> Professor
	5. Years of Teaching Experience	<input type="checkbox"/> 1–5 years	<input type="checkbox"/> 6–10 years <input type="checkbox"/> More than 10 years
	6. Experience with AI Feedback Tools	<input type="checkbox"/> Less than 1 year	<input type="checkbox"/> 1–3 years <input type="checkbox"/> More than 3 years
	7. Type of Institution	<input type="checkbox"/> Public	<input type="checkbox"/> Private
Questions	1. How would you describe your overall experience with AI-generated feedback tools when teaching writing?		
	2. What are your views on the accuracy, usefulness, and educational value of the feedback provided by such tools?		
	3. How has the use of AI-generated feedback influenced the way you give or discuss feedback with your students?		
	4. Can you describe any specific changes you have made in your teaching or assessment practices as a result of using AI feedback tools?		
	5. What difficulties or concerns have you faced while integrating AI-generated feedback into your teaching?		
	6. How do you think institutions or teacher-training programmes can support teachers in dealing with these challenges?		