

No Red Pen, Just AI: Student Perceptions of AI-Generated Feedback in Research Proposal Writing

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Article information	
Abstract	This qualitative study explores how students perceive AI-generated feedback in research proposal writing, an area that has not been widely studied yet. Using the Technology Acceptance Model (TAM) as a framework, the research investigates students' views on the usefulness, ease of use, attitude and intention to continue using AI-generated feedback. Data were gathered from 25 third-year English-major students at university who used the AI tool <i>Brisk Teaching</i> to get feedback on their research proposals. The findings revealed that students viewed the feedback as clear, thorough, and effective in not only correcting the surface errors but also in bringing up deeper issues such as the clarity of the argument. It appears that the majority of students agreed to continue using AI-generated feedback. Future extensions of the model should include ethical concerns, as students might raise doubts about the compatibility of the AI feedback with the academic values.
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1. Introduction

Feedback is a vital element of the writing process, especially in academic settings where students are required to develop a logical and well-argued discussion (Hattie & Timperley, 2007). With the introduction of artificial intelligence (AI), automated feedback tools (software that automatically reviews and comments on writing) are increasingly becoming alternatives to human feedback in academic writing.

Students' views on these AI tools are very important. Feedback will only achieve the desired effect if students find it useful and use it to improve their writing (Zhang, 2016; Zhang & Hyland, 2022). Roscoe et al. (2017) found that students can revise their work right away, no matter how they feel about it. However, the most important factor is how students feel about the quality of the feedback. Their decision may affect whether they keep using the tool.

Some students trust AI more than their peers and teachers because they believe that AI is consistent and objective or fair (Ruwe & Mayweg-Paus, 2023). Zhang and Hyland (2022)

pointed out that 91% of students in their study liked AI because it was easy to get and to access and provided fast responses. Such availability and promptness somehow motivated these students to work on multiple drafts.

In some cases, students who think the feedback comes from a digital tool or software can perform better than those who think it comes from a teacher (Reynolds et al., 2021). Wang (2024) noticed that 25 students who received feedback from *Poe* application were less anxious or nervous about writing than those who got input from their teacher. This lower level of anxiety or stress resulted in better improvements in their writing.

Some studies show that students also experience or have negative perceptions of AI-generated feedback. Guo et al. (2024) found that students did not trust AI-assisted feedback during GRE-style argumentative writing tasks when they perceived the source as unreliable or inadequately justified. Liang et al. (2024) also found that how well the tool fits the writing goal, or task relevance, is very important. Their study found that students liked the AI tool when it was clear that it was useful for the task or writing goal, but students did not like it when it seemed too hard, complicated, or unnecessary. This decision about usefulness often depends on what the feedback says. Ziqi et al. (2024) said that students turned down or ignored about 38% of AI suggestions because they thought the tool did not understand what they meant.

All the research mentioned above has been conducted using basic writing tasks, such as short essays of 250 words or GRE-type essays. Research proposal writing is much more complex. It is still unclear if students' views of AI feedback are similar in this context. This study addresses this gap by examining students' perceptions of AI-generated feedback in research proposal writing. In detail, this study seeks answers to the following questions:

1. How do students perceive the usefulness of AI-generated feedback in improving their research proposals?
2. How do students perceive the ease of understanding and applying AI-generated feedback in research proposal writing?
3. What are students' overall attitudes toward AI-generated feedback in research proposal writing?
4. To what extent do students intend to continue using AI-generated written feedback in future academic writing tasks?

These inquiries are addressed through the four main elements of the Technology Acceptance Model (TAM) (Davis, 1989): perceived usefulness, perceived ease of use, attitude toward use, and behavioral intention to use, which are also used to structure the results and the discussion. This framework is globally acknowledged and has been used in numerous studies. For instance, an analysis of 71 articles showed that TAM was the most common model for examining the use of learning technologies (Granić & Marangunić, 2019). Another recent examination of 23 articles on AI in higher education concluded that the relationships among TAM elements, such as the relationship between a student's attitude and their intention to use a tool, were accurate (Xue et al., 2025). Besides that, a worldwide review of AI studies revealed that "The TAM was the model most commonly adopted to measure acceptance and was found to have the most predictive success in measuring behavioural intentions" (Kelly et al., 2023, p. 30).

Most studies use TAM in large-scale surveys with quantitative data to examine general patterns. There is a shortage of qualitative studies to examine students' individual reasons and experiences in more detail. Zhai and Ma (2021) argue that students' perceptions cannot be fully understood through numbers alone and that more personal forms of data are also needed. By using TAM to analyze students answers to ten open-ended questions, this study aims to present aspects of students' perceptions that may not appear in numerical survey data.

2. Literature Review

This section focuses on three main areas related to AI-generated feedback in writing: Technology Acceptance Model (TAM), advantages and limitations of AI-generated feedback, and students' perceptions of using AI feedback.

2.1 The Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), introduced by Davis (1989), is often used to analyze how people adopt new technology. The model has four main elements: perceived usefulness (PU), perceived ease of use (PEOU), attitude toward using (ATU), and behavioral intention to use (BIU).

2.1.1 Perceived Usefulness (PU)

Perceived usefulness (PU) refers to the degree to which a person believes that a system can improve their performance (Davis, 1989). Research shows that students believe AI feedback is useful because it can help improve language accuracy, organization, and content.

Zhai and Ma (2021) studied 448 Chinese college students who experienced Automated Writing Evaluation (AWE). The study found that cognitive feedback was the strongest factor affecting PU. This type of feedback helps students reflect on how they solve problems in their writing. Farooq et al. (2024) also did a similar study on 385 students in China, Pakistan, and Malaysia. The students in their study said that AI tools helped them write better in social science class by improving their grammar and style. The benefits of having AI feedback were greater than the problems it may cause.

Other studies suggest there is a limit to how much AI actually helps students. Research conducted with 200 students in Manila, for example, indicated that students enjoyed using ChatGPT for generating essay ideas, but they did not believe the tool was essential for completing the rest of their writing (Zarei & Fabregas, 2025).

2.1.2 Perceived Ease of Use (PEOU)

Perceived Ease of Use (PEOU) refers to how easy individual believes a technology is to use (Davis, 1989). Selevičienė and Koloda (2025) used linear regression to analyze data from 123 ESL and ESP students from Lithuania and Ukraine. They found that students' sense of ease accounted for 67% of the variation in their perception of the tool's helpfulness.

The construction of the system or how the system is built also matters. Zhai and Ma (2021) believe that system features, such as interactivity and flexibility, might influence perceived ease of use (PEOU). Du et al. (2025) did a mixed-methods study with 212 English-major students in Vietnam. One the findings was that easy-to-use or user-friendly interfaces increased students' perceived benefits and led to more positive attitudes.

Liang et al. (2024) further reported that perceived enjoyment, or how much students enjoyed using the tool, strongly influenced PEOU among Chinese university students. Shen (2025), however, warned that ease of use may also become a stress trap. Students might feel like they have to keep working and finish tasks faster because AI is always there and works quickly.

2.1.3 Attitude Toward Use (ATU)

Attitude Toward Use (ATU) refers to a person's overall attitude toward using technology (Davis, 1989). Shen (2025) studied 300 international students in Bangkok and analyzed the data using Structural Equation Modeling (SEM). The research found that students trusted the AI more if it seemed like a "real person" chatting with them.

Nevertheless, students' attitudes toward AI are often mixed. Selevičienė and Koloda (2025) demonstrated that although students acknowledge the advantages of AI, their perceptions of the ethics and concerns about academic integrity had a strong negative effect on their attitudes. Similarly, these results echo those of Du et al. (2025). Their findings indicated that students worried that relying too much on AI would undermine their ability to think critically and creatively on their own.

Li (2023) also found that perceived usefulness (PU) and perceived ease of use (PEOU) had positive effects on attitudes. However, those attitudes strongly affected interest in learning but had little effect on extrinsic goals. This result was based on a PLS-SEM analysis of 279 questionnaires from Chinese college students.

2.1.4 Behavioral Intention to Use (BIU)

Behavioral Intention to Use (BI) can be simply defined as a user's willingness to continue using or recommending a particular technology (Davis, 1989). Researchers argue that students' willingness to use AI is largely dependent on how helpful they perceive the technology to be and on their overall positive impression of it. A survey of 253 college students in Morocco revealed that the two main factors that led them to actually use the AI tool were their belief in its ability to help them and the presence of positive attitude toward it (Malmous & Zaidoune, 2025).

Social influence, however, is another important factor that can not be overlooked. Analyzing the results of their studies, Liang et al. (2024) and Zhai and Ma (2021) concluded that the influence of teachers and peers plays a very important role in a student's decision to use AI-based tools. For instance, if students think their teachers support their use of AI feedback, they are more likely to use it in their writing practices.

However, in spite of a strong intention to use these tools, students still keep the distance to a certain extent. Zarei and Fabregas (2025) found the connection between perceived usefulness (PU) and actual satisfaction to be quite weak. This implies that planning to use a tool does not always mean one will be satisfied with the tool's final output.

The above-mentioned studies indeed present valuable data. However, what is critically missing from all of them is the investigation of the research proposal writing genre. In fact, the writing tasks in the existing literature mostly deal with more basic genres, such as standardized exam preparation for the College English Test Band 4 (Zhai & Ma, 2021) or introductory communication essays (Zarei & Fabregas, 2025). There are also studies that have looked at

social science writing or EFL essays (Farooq et al., 2024; Liang et al., 2024), general English studies and daily homework assignments (Du et al., 2025; Malmous & Zaidoune, 2025), and routine school tasks (Selevičienė & Koloda, 2025). Other studies look at drafts produced during class activities (Shen, 2025) or for non-writing tasks, such as computer coding (Li, 2023). Furthermore, these studies are based on quantitative methods.

Most research so far has concentrated on numeric data and simpler writing tasks. It is still unclear how students deal with AI feedback when working on a more difficult task, such as writing a research proposal. A research proposal differs in nature because it requires a high level of original academic thought and a critical positioning within a field. This study, by using a qualitative method, does not only look at patterns of use. It also aims to examine more closely how students respond to AI-generated feedback in a more challenging academic task.

2.2 AI-Generated Feedback in Academic Writing

AI-generated feedback plays an important role in academic writing. However, challenges remain. The following sections discuss both the benefits and challenges of AI-generated feedback in academic settings.

2.2.1 Benefits

Some studies have recorded the advantages that AI-generated feedback could bring to academic writing. AI tools can provide students with immediate responses, unlike human feedback, which can sometimes take longer. Such fast responses can really assist students at various points or stages in their writing journey (Alsofyani & Barzanji, 2024; Jamshed et al., 2024). Timely feedback can really motivate students to review and revise their work more carefully (Oktarina et al., 2024).

Getting feedback generated by AI is helpful for students looking to work on their clarity, grammar, and coherence. The detailed and focused comments enabled students to revise more effectively (Akiba & Garte, 2024; Jamshed et al., 2024; Mahapatra, 2024). Sometimes, AI feedback can be just as effective as feedback from teachers when it comes to enhancing writing quality (Alsofyani & Barzanji, 2024).

AI-generated feedback can be useful in research proposal writing, which requires clear and precise language. Getting feedback from AI can really help spot grammar issues, recommend better word choices, and make the proposal more coherent.

2.2.2 Challenges

AI-generated feedback also has limitations. One major issue is its accuracy, especially in more complex writing tasks (Kurt & Kurt, 2024). AI systems often fail to give feedback that fits the specific context of a text, and this may reduce their ability to help students make writing improvements (Mehrabi-Yazdi, 2018; Saricaoglu, 2018).

Another challenge is the responsible use of AI. Relying too much on AI may weaken creativity and critical thinking skills (Alhajji, 2024). It may also limit students' chances to build their independent writing skills (Yesilyurt, 2023). Some students use AI to generate full texts, which can change the focus from actual learning to simply getting the task done (Akiba & Garte, 2024). These issues are especially important in research proposal writing. If students respond to AI feedback only at a surface level, they may not engage in the deeper critical thinking that is necessary for crafting a solid research proposal.

Technical and access issues are also important. To get the best results, AI tools require clear and well-written prompts (Kurt & Kurt, 2024; Oktarina et al., 2024). Students also need access to these tools (Yesilyurt, 2023). Limited access to AI may reduce their chance to receive effective and timely feedback.

Another limitation to consider is that AI does not really understand the full context of writing or its content. It might provide feedback that is either too general or does not quite matching what the writer or the task requires. AI is not very good at understanding the main components of writing, e.g., the argument, tone, and rhetoric (Alsofyani & Barzanji, 2024; Fan et al., 2024). In research proposal writing, this can be tricky for students since they have to discuss their points following the standards of the academic community. The lack of personal touch in AI feedback may also make people less likely to trust or follow the suggestions (Akiba & Garte, 2024).

Although AI-generated feedback offers clear benefits, these challenges suggest the need for careful integration. Issues such as accuracy, ethics, accessibility, and understanding of context need attention so that the benefits can be increased and the drawbacks can be reduced.

2.3 Students' Perceptions of AI-Generated Feedback

Students who find AI-generated feedback useful and trustworthy are generally more willing to use it when revising their work. This can lead to better writing, including clearer structure, clearer ideas, and greater accuracy (Roscoe et al., 2017; Zhang, 2016; Zhang & Hyland, 2022). Favourable views of feedback have also been found to correspond to lower writing anxiety and higher writing self-confidence, which, in turn, can lead students to be more open to making revisions (Ruwe & Mayweg-Paus, 2023; Wang, 2024). Trust in AI feedback can also shape how students feel about the feedback and how actively they revise their writing (Ruwe & Mayweg-Paus, 2023). For instance, Abdullaev et al. (2025) found that EFL learners in Uzbekistan initially doubted AI suggestions but gradually built trust as they observed improvements in their writing, which then increased their willingness to engage with the AI feedback.

In contrast, when AI feedback lacked clear reasoning or was contextually unsuitable, students experienced confusion and dissatisfaction (Abdullaev et al., 2025). Such negative exposure can weaken students' trust in AI-generated suggestions and make them less willing to keep on using AI. As Roscoe et al. (2017) state, students' early experiences with AI feedback strongly influence their decision to keep using it or not.

The perception of students is a critical factor in determining whether AI-generated feedback can help them improve their writing. This is especially relevant in research proposal writing, where clear objectives and logical structure are important. When students trust and employ AI feedback, it may help them develop research proposals that have higher academic quality. If they find AI-generated feedback untrustworthy, they may be less willing to make revisions.

3. Methodology

The study took place in a *Research Proposal Writing* course taught by one of the authors or researchers of the current study. The participants were 25 third-year undergraduate students from the English Department, majoring in Linguistics Studies. They had intermediate English proficiency based on the department's placement standards. The group consisted of six male students and 19 female students, all about 19 to 20 years old. As part of the course, each student wrote a research proposal with a title, an Introduction (Chapter 1), a Literature Review (Chapter 2), a Method (Chapter 3), and references.

Over the first five weeks of the semester, class meetings focused on helping students develop their research plans. This included selecting their topics, developing research questions, and deciding on method orientations. Formal chapter-writing started in week 6. Students prepared Chapters 1, 2, and 3 in that order. Each chapter was submitted for teacher feedback during the weekly consultation. The teacher marked each submitted chapter with written remarks. After that, students revised Chapters 1, 2, and 3 and compiled them into a single complete proposal draft (including references). This compiled version became the first complete draft of the proposal.

Once students submitted their initial complete draft (title, chapters 1-3, references), *Brisk Teaching* (an AI-based tool, educator pro version for university level) was used to give AI-generated feedback. Since students were using *Google Docs*, the AI commentary automatically appeared in the same document through *Google Classroom*. *Brisk Teaching* marked up the texts' excerpts and offered suggestions on grammar, clarity, coherence, and idea development, without the teacher having to intervene. However, the teacher could review each suggestion and accept or reject it before students saw it. In the majority of cases, the teacher of this *Research Proposal Writing* course agreed with the feedback from *Brisk Teaching*, which means that the AI's assessment was very much consistent with the human evaluation. The *Brisk Teaching* tool was used in four rounds. Each round focused on a different level of the text: 1) complete draft, 2) each chapter separately, 3) each section of each chapter, 4) each paragraph of each section.

Students were not told that the feedback on their full proposal draft came from an AI tool. This was done so that they would respond or react to the feedback in a natural way, without being influenced by where the feedback came from. The aim was also to capture their response to the feedback itself, not their prior opinion or view of AI. This helped the study focus on how students actually utilized the AI-generated feedback in their writing revisions.

After students got feedback from AI-generated comments, they answered ten open-ended questions about their experience. These questions gave them a chance to share their ideas in detail and provide examples. Students' responses were collected anonymously via *Google Forms* to ensure they could express their thoughts freely.

Because no existing instrument fit this context, the ten questions were specially developed for this study. They were reviewed by two teachers who were not part of the study. These two reviewers gave their opinion on the clarity, relevance, and suitability of the questions in relation to the study goals. Both reviewers were experienced writing teachers with more than 10 years of teaching experience at the university level. Based on their comments, several rewordings were done before finalizing of the instrument.

The questions were developed based on the Technology Acceptance Model (TAM). In fact, TAM served as a guide for interpreting the answers, rather than as a structured survey

instrument. The questions aimed to obtain information on four major TAM elements: Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude Toward Use (ATU), and Behavioral Intention to Use (BIU). Table 1 below maps each question to the TAM components.

Table 1
Mapping of Questions to TAM Components

TAM Component	Questions That Fit
Perceived Usefulness (PU): Perception of feedback's usefulness for improving writing.	Q1. What did you like about the written feedback provided on your research proposal? Q3. How helpful was the written feedback in improving the quality of your proposal or guiding your revisions? Please explain. Q4. What specific improvements did you make to your proposal after receiving the written feedback? Q6. On a scale of 1 to 5 (with 1 being the lowest and 5 being the highest), how would you rate the feedback given? Q7. Refer to your answer for the previous question. Why did you give this rating?
Perceived Ease of Use (PEOU): Perception of feedback clarity and ease of understanding.	Q2. What did you dislike about the written feedback provided on your research proposal? Q5. Were there any suggestions or comments in the written feedback that seemed unclear or difficult to follow? How did you address them? Q8. What would you suggest to improve the written feedback given in this class?
Attitude Toward Use (ATU): Overall impression of AI-generated feedback.	Q6. On a scale of 1 to 5 (with 1 being the lowest and 5 being the highest), how would you rate the feedback given? Q7. Refer to your answer for the previous question. Why did you give this rating? Q10. What makes the feedback in this class unique or different from other feedback you have received for writing assignments in other classes, if any?
Behavioral Intention to Use (BIU): Willingness to use AI-generated feedback in the future.	Q9. Would you like to continue receiving this type of written feedback in the future? Why or why not?

As shown in Table 1, two questions (Q6 and Q7) are listed under both PU and ATU. Question 6 asks students to rate the feedback, while question 7 asks them to explain the reason for that rating. The responses then reflect both how useful the students considered the feedback and their overall evaluation of it. The aspect of BIU was investigated using one direct question

(Q9). This question asked if the students would like to keep getting this kind of feedback in the future. Because the research employed open-ended answers rather than a structured survey scale, one question was sufficient to capture what students wanted to do and why.

All 25 third-year students in the class took part in the study. The responses were made anonymous by using codes (S1, S2, etc). No personal information, such as names or student numbers, was collected. Ethical approval was granted by the Head of the English Department prior to the study. The students were informed about the purpose of the study and told that their participation was voluntary and would not affect their course grades. All students agreed to let their responses be used for research.

The responses were analyzed using qualitative thematic analysis by following Braun and Clarke (2006). The answers were first read multiple times. Initial codes were then assigned. Following that, similar codes were categorised into more general themes using the TAM model's components. Rather than counting the frequency of specific comments, the analysis aimed to find patterns of meaning throughout the data.

There was no missing data because all 25 students answered all ten questions. Three researchers worked on the coding and theme development. One of them was also the course teacher. To lessen bias, the same two teachers who had previously evaluated the open-ended questions also assessed the codes and themes. Any differences in interpretation were discussed until agreement was reached.

4. Findings and Discussion

This section is organized into four parts based on the Technology Acceptance Model (TAM): Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude Toward Use (ATU), and Behavioral Intention to Use (BIU).

4.1 Perceived Usefulness (PU)

The findings are organized into four key themes related to students' perceptions of the usefulness of AI-generated feedback. A discussion is provided at the end to relate the results to previous studies and theoretical perspectives.

4.1.1 Aspects of Written Feedback Valued by Students

In general, students thought the feedback received was clear, correct, and easy to understand. They liked that the feedback showed them what they needed to change. The feedback also gave detailed clear, step-by-step-instructions on how to revise their work. Some students mentioned that the examples and suggestions really helped them find the mistakes they had missed.

A student said that the feedback was really “placed on the words or sentences that needed correction” (S2). Another student felt that the feedback was “concise but detailed at the same time” (S24). These comments show that students preferred feedback that showed where changes were needed and how to make their work better.

4.1.2 Helpfulness of Written Feedback in Improving the Proposal

In response to question 3, students mentioned that the feedback was helpful because it clearly identified the areas that needed improvement and offered suggestions for how to fix

them. Straightforward, direct comments generated by *Brisk Teaching* were useful for their revision process.

Some students mentioned that the feedback made them realize of how readers see their proposals. One student mentioned, “The feedback helped me see my problem and what I needed to do about it” (S12). Another student said, “The written feedback helped me make my whole proposal clearer. It helps me understand what the reader is thinking after they read it” (S5).

4.1.3 Specific Improvements Made After Receiving Written Feedback

In response to question 4, students said that they could do some things better after getting the feedback, e.g. reorganize their sections, make their arguments or ideas stronger, and add references. Some students made big or major changes, while others made small or minor changes.

One student pointed out that, “Your suggestions gave me all the information I needed on many things, like content, grammar, and format” (S21). This shows that the feedback was about more than one part of the proposal at the same time. Another student (S10) said, “The feedback helps me to know where I got carried away with my opinions that didn’t have any support.” This answer means that the AI-generated feedback helped students see and improve the weak parts in their proposal.

4.1.4 Student Ratings and Reasons for Evaluating the Feedback

Many students gave the AI feedback a score of 4 or 5 in response to questions 6 and 7. They said that the feedback was clear, thorough, and useful for making changes. Students also said that the feedback helped them identify specific problems and gave them ideas for fixing them.

A few students, on the other hand, also mentioned that some parts of the feedback were not good enough. One student said, “The feedback is actually helpful, but should have been more detailed” (S19). Another one said, “I’d like to have an offline meeting for consultation too” (S23), indicating that they would rather speak with someone directly to address the feedback. At times, the feedback was confusing and hard to understand. As a student (S22) said, “The feedback makes me confused, and I have problems in writing my chapter”. These comments show that most students found the feedback helpful, but some had problem understanding some parts of the AI-generated feedback and wanted more information.

4.1.5 Discussion: Perceived Usefulness (PU)

The findings show that many students believed that AI-generated written feedback would help them write their proposals. This is in line with perceived usefulness in TAM, which refers to the extent to which a person believes that a system can help them do better (Davis, 1989).

Students in this study said that the feedback helped them find mistakes in their proposals, make their ideas clearer, and improve their writing in terms of structure and content. It looks like the AI-generated feedback from *Brisk Teaching* really helped them address both the surface-level issues and the broader structural problems. Other researchers have come across similar results, showing that feedback generated by AI can help EFL writers make their

writing clearer, more coherent, and grammatically correct (Akiba & Garte, 2024; Mahapatra, 2024). Such clear feedback really helps students learn (Kulprasit, 2018).

The findings of the present study suggest that clear explicit AI-generated feedback could improve students' intellectual or cognitive engagement with their writing. Students tend to think more carefully or critically about their ideas and make better revisions when the feedback highlights their mistakes and explains the reasoning behind it.

This is consistent with the findings of some earlier studies. Oktarina et al. (2024) and Wale and Kassahun (2024) found that feedback is more useful when it encourages students to reflect on their writing. Zhai and Ma (2021) showed that cognitive feedback, or feedback that helps students think about problems in their writing, affects how useful they find the feedback. In this current study, students also felt that the suggestions or feedback given helped them notice weaknesses or flaws in their arguments and reconsider their ideas more carefully.

Results from surveys conducted on a large scale indicate that students generally have a positive attitude towards AI tools when they can clearly see the benefits these tools can bring to their writing. For instance, Farooq et al. (2024) found that university students from different countries regarded AI tools as really useful for polishing grammar, style, and organization of academic writing. Liang et al. (2024) also mentioned that the task relevance (or how relevant a task is) is an important factor influencing the perceptions of usefulness. In this current study, feedback was provided immediately on students' research proposals. This could be the reason why many students considered it useful for improving their writing.

Some students' answers also suggest that AI-generated feedback might not be enough for the difficult parts of writing a research proposal. When writing a research proposal, people have to think about theories and make methodological choices. Studies from the past show that students depend more on teacher feedback when they need to think deeply or carefully read (Zhang & Hyland, 2018). Researchers have found that AI tools still have trouble understanding rhetorical purpose or disciplinary context (Alsofyani & Barzanji, 2024; Fan et al., 2024).

The results indicate that AI-generated feedback may work best when it is combined with teacher guidance. AI can give students clear and quick advice, but they may still need time to talk about the feedback and figure things out. Hyland and Hyland (2006) argue that feedback is most efficient when it is dialogic, meaning there is an exchange of discussion between the writer and the reviewer. In fact, several other studies also highlight the fact that relying too much on AI-generated feedback can lead to weak critical engagement or surface-level revision (Alhajji, 2024; Yesilyurt, 2023).

Overall, these results show that students found the AI-generated feedback useful because it told them exactly what they needed to do to improve their proposals. This result confirms the TAM model's concept of perceived usefulness. Meanwhile, the findings also reveal that teachers should probably be more involved in helping students with difficult academic writing tasks, such as research proposals.

4.2 Perceived Ease of Use (PEOU)

This section presents what the students said about how easy it was to understand and use the written feedback they got on their research proposals. The findings are presented in three main areas, followed by a discussion.

4.2.1 Student Concerns About the Written Feedback

Responses to question 2 show that most students did not have any major problems with the feedback they got. Some students said that the feedback was clear and easy to understand. For example, one student noted, “I have no complaints about all the feedback... they were all logical and highlighted areas of my writing that need revision” (S21). Another student commented, “Personally, I did not find any difficulties when understanding the feedback because it was very to the point and clear” (S17).

Some students, though, reported some problems in understanding some of the AI comments. Some described the feedback was too vague or general, and others said some of the words were hard to understand. One student explained, “Sometimes the feedback uses high level words in English... it is hard to understand...” (S9). Another student was confused about how to respond such as, “The feedback stated, ‘Can you explain how Holmes' social factors theory relates to your own research...?’ I was very confused” (S2). These students’ answers suggest that although the feedback was generally understandable and clear, but there were times when it was hard to understand because the language was too vague or the explanation was not clear enough.

4.2.2 Addressing Unclear or Difficult-to-Follow Feedback

In response to question 5, students discussed different ways to handle feedback that was not easy to understand. Some of them went back to their proposals and read the feedback carefully again and again until they understood what it meant. A student said, “Re-read the feedback... would be able to understand which part needed fixing” (S7).

Some other students asked their teacher or classmates to explain or clarify the AI feedback that they did not understand. For example, one student said, “I addressed them by asking my teacher about it directly” (S8). Some students also used tools, such as “I used AI to translate it to Indonesian...” (S9). These strategies helped them understand the feedback and make the necessary changes to their proposals.

4.2.3 Suggestions for Improving Written Feedback

Students who answered question 8 said they liked the feedback and gave some ideas for improvement. Some people wanted more specific feedback and clearer explanations. One student said they wanted “specific feedback on the words or sentences” (S2), and another said they wanted feedback that was “even more specific... a little more detail about what’s missing” (S4).

Some students also said that they got the same feedback more than once, or that it was too similar. For example, one student said, “Sometimes the feedback is overlapping... I don’t know what to do” (S10). Another student said that it was hard because they could not ask questions directly. One student said, “I can’t directly ask if I have some questions” (S23).

Some students also came up with other ways to give feedback that might make it easier to understand. One student said, “I think maybe it would be better if you use the audio... so it will help me better” (S22). At the same time, some students felt that the current format was already clear, “...the feedback is already good” (S1).

4.2.4 Discussion: Perceived Ease of Use (PEOU)

This study found that students thought the written feedback was pretty easy to understand and use. This supports the concept of Perceived Ease of Use (PEOU) in TAM. Davis (1989) describes PEOU as how much a person thinks that using a system does not take much effort. In this study, the system refers to AI-generated feedback that students receive on their research proposals. The feedback was straightforward and tied to specific sections of the proposal, so students were able to see what needed to be improved and make the right changes. Previous research shows that students tend to use feedback more effectively when it is straightforward and clearly linked to the areas that need improvement (Nicol & Macfarlane-Dick, 2006).

Furthermore, the results show that feedback can be harder for students to understand when the language is unclear or the explanation is limited. When students write their research proposal, they need to explain the research problem, make clear connections between ideas, and refer to relevant theories or literature. When the feedback, for instance, does not clearly show how to revise theoretical or conceptual parts, students may need to put in more effort to understand the comments. Earlier studies have noted that AI-generated feedback can be hard to understand because it does not always explain things in context or show an understanding of the object (Alsofyani & Barzanji, 2024; Saricaoglu, 2018).

System design has a major impact on how easy a tool is perceived to be. One line of research indicates that user-friendly systems, interactive features, and flexible interfaces make AI tools not only more accessible but also understandable to students (Du et al., 2025; Zhai & Ma, 2021). Results of the present study reveal that the majority of students found the feedback format easy to understand. Yet, a few of them proposed ways to make the explanations clearer or to provide feedback in different ways.

The ways students dealt with confusion in this study are similar to those reported in earlier studies. When AI-generated feedback was unclear, students did not rely on it alone. They also asked teachers, discussed the feedback with peers, and used translation tools or other tools to help them understand it. Other studies also show that AI-assisted feedback works better when students use various sources to support (Kurt & Kurt, 2024; Wale & Kassahun, 2024).

These results suggest that students found it easier to use AI-generated feedback when it was clear, specific, and closely related to their writing. Feedback that was unclear, repeated, or did not come with immediate clarification was harder to use. In TAM, the ease of use may also affect how useful students think the feedback is. Students are more likely to consider a tool is useful if it is easy to use.

4.3 Attitude Toward Use (ATU)

This section presents students' responses about their overall attitude toward the written feedback generated by *Brisk Teaching*. It focuses on how they rated the feedback and how they compared it to feedback received in other writing classes. The findings are followed by a brief discussion.

4.3.1 Students' Ratings and Reflections on the Feedback

Most students rated the feedback a 5 in response to questions 6 and 7. They said it was clear, accurate, and very useful for proposal revision. They liked comments that indicated exactly which parts needed revision. One student noted, "Honestly, this is the first time I have

received such specific feedback on my writing... It was very helpful for me” (S2). Another student stated that the feedback was “...clear and helpful... very detailed and effective” (S21).

Those who rated the feedback a 4 still found it valuable, but they mentioned some unclear parts. One student who marked it as 3 admitted that they had difficulty interpreting some comments and preferred another format of explanation, “I think maybe it would be better if you use the audio, not the written feedback, so it will help me better...” (S22). Despite this minor concern, most students described the feedback as helpful and were generally satisfied with the experience.

4.3.2 Perceived Uniqueness of Written Feedback

In response to question 10, students generally said that this AI-generated feedback was more detailed than the feedback they had received in previous writing courses. They also noted that it focused more on content and structure, than grammar. One student explained that “The feedback from this class is truly focused on the content of the research, the structure of the writing, and even proper thesis formatting” (S14). Another student reported that the feedback “provided not only an assessment but also an insight and a guideline so that we could revise with hardly any significant confusion” (S3).

Students also discussed how much feedback they received and how easy it was to understand. One of them said, “There is definitely way more feedback and it is more detailed” (S8). Some students said that using *Google Docs* made it easier to follow the feedback because its commenting feature can place comments right next to the relevant parts of their writing. This made the feedback easier to get to and easier to see. For instance, one student shared, “I appreciate how the lecturer in this class utilized the comment feature on *Google Docs*... This was very helpful for me in understanding how to improve my writing going forward” (S2).

Students also admitted that the AI-generated feedback made them think more carefully about their ideas or arguments. One student felt that the comments “encourage me to think critically” (S4), and another one wrote that feedback “... often makes me reconsider my arguments...” (S12). This means that the AI-generated feedback helped students not only revise or improve their writing, but also think more carefully about the content of their research proposals.

4.3.3 Discussion: Attitude Toward Use (ATU)

The findings show that students generally expressed positive feelings about the written feedback that they got in the *Research Proposal Writing* course. Attitude Toward Use (ATU) in TAM refers to users’ overall evaluation of a system and is shaped by both Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) (Davis, 1989). In this study, students’ positive attitudes seemed to come from their view that the feedback was helpful, specific, and fairly easy to understand. This is in line with earlier TAM-based studies, which found that students are more likely to respond positively to AI tools when they see them as useful and easy to use (Li, 2023).

The way feedback is given can also change how students feel. With digital tools like *Google Docs*, comments can show up next to the text. This makes it easy for students to see what they need to change in their writing. Previous studies have shown that students like feedback that is specific, given in context, and easy to find in their writing (Liu & Wu, 2019;

Nicol, 2010). In the present study, the feedback was given through comments placed next to the relevant parts of the text in *Google Docs*. This may have helped the students see what is needed and apply the suggestions more easily. Some studies also show that students may trust AI tools more when they talk to them in a way that sounds more human. This can lead to a more positive attitude toward using them (Shen, 2025).

In addition, previous studies reported that timely and relevant feedback can motivate students and improve their engagement in the writing process (Oktarina et al., 2024; Wale & Kassahun, 2024). If feedback highlights what to improve and how to revise, students are more likely to respond positively and make meaningful changes.

Overall, the results suggest that students' positive perception of AI-generated written feedback was shaped by both its quality and its relevance to research proposal writing. In line with TAM, when students find feedback useful and can apply it without much difficulty, they are more likely to develop a positive attitude toward using it in academic writing tasks.

4.4 Behavioral Intention to Use (BIU)

This section presents students' responses about their willingness to use written feedback in future academic writing. A brief discussion follows.

4.4.1 Students' Willingness to Use Similar Feedback in the Future

This part discusses question 9, which asked whether students would like to receive similar written feedback in the future. The majority of students responded positively, noting that the comments were clear, helpful, and easily accessible for revision. Students believed that the feedback given stimulated them to think more critically about their writing and to gradually refine their ideas.

Several students pointed out that the feedback gave them the chance to go over the remarks as many times as they wanted while revising their work. For instance, one student shared, "Yes, I would love to... I tend to rely on written feedback which cannot disappear" (S10). Another student explained that "Written feedback is important for me to improve the quality of my paper..." (S20). Besides that, students pointed out that the feedback was helpful not only for one-time writing but also for writing development. One student described it as "constructive and detailed... helps me grow... pushes me to think more deeply and refine my ideas..." (S4), while another said, "It acts as a guide, helping me gradually improve my writing skills with each revision" (S17).

Some students suggested combining written feedback with other forms of explanation. One student said, "Yes, but still need an offline meeting" (S23), implying a preference for occasional face-to-face discussion. Another student said, "If you ask me, I will say no, because I think audio feedback will help much better" (S22), suggesting that audio explanation might be more comprehensible. However, one student clearly preferred written comments over spoken feedback, "Yes, I prefer written feedback better than aural feedback because it helped me better" (S25).

Overall, the responses show that most students were willing to continue using AI-generated written feedback for their academic writing tasks. At the same time, a few students suggested that written feedback would work better if combined with other forms of feedback.

4.4.2 Discussion: Behavioral Intention to Use (BIU)

Results showed that, overall, students were very willing to continue using AI-generated written feedback in their academic work. Behavioral Intention to Use (BIU) in TAM refers to a user's willingness to adopt or continue using a system (Davis, 1989). Here, students viewed the feedback as useful and fairly easy to understand. This helps explain why they were willing to continue using it. Previous research has also shown that students are more likely to adopt AI tools when they see them as useful and develop positive attitudes toward them (Malmous & Zaidoune, 2025).

One of the reasons why students might intend to make use of the feedback is that they have easy access to its written form. If the feedback is electronically saved and students have the possibility to refer to it again when they revise, they can reread the points raised, think about their work, and make the changes themselves. Nicol (2010) points out that when feedback is available, students can engage in self-regulated learning since they can return to it and implement it at a time that suits them. When students are working on their research proposals, feedback can be a great help as they figure out how to revise their arguments, reorganize their sections, and enhance overall clarity.

The nature of research proposal writing may also explain why students wanted to continue using this type of feedback. Writing a proposal involves more than fixing grammar. It is also a matter of arranging ideas in a coherent manner, constructing solid arguments supported by reliable sources, and following the rules and conventions of academic discourse. Feedback that addresses these areas can help students improve both the structure and the content of their work. Hyland and Hyland (2006) describe this as formative feedback that helps writers develop their ideas and improve the overall quality of their texts.

Teacher involvement might impact students' willingness to use AI-generated feedback. Besides, the roles of instructor support and peer influence have also been identified as major factors in shaping students' intentions to use AI tools for academic performance (Liang et al., 2024; Zhai & Ma, 2021). In this study, the teacher checked the AI-generated comments before giving them to the students. Since the students did not know that the teacher had reviewed the AI-generated comments before sharing them, this teacher review could not directly affect their trust in the feedback. However, it may have improved the clarity and quality of the AI-generated feedback that the students eventually received.

These findings differ somewhat from earlier studies that described AI-generated feedback as too general or not detailed enough (Alsofyani & Barzanji, 2024; Kurt & Kurt, 2024). In this study, students saw the feedback as detailed and relevant to their writing tasks. One possible reason is that the teacher reviewed the AI-generated comments before sharing them with students. This may have helped clarify the feedback and make it more suitable for the academic context. Another possible reason is that AI feedback tools may now be better able to produce specific and context-sensitive comments than those examined in earlier studies.

At the same time, the findings suggest that although students generally supported AI-generated written feedback, some still wanted more chances to ask questions or receive feedback in different ways. This suggests that AI-generated written feedback might be most effective when paired with other types of guidance, such as having discussions with teacher or peers. This approach may address different learning preferences while keeping the practical benefits of AI-driven feedback.

Overall, the results of the current study suggest that students' choice to continue using AI-generated written feedback was shaped by two main factors: the extent to which it was helpful in improving their academic writing and the availability of AI-generated feedback during the revision process. In line with TAM, students tend to keep using feedback when they find it helpful and easy to use.

5. Conclusion

This study extends the research on AI-generated feedback by focusing on how students respond when they receive AI feedback in their research proposal, a context that has not been extensively examined in previous studies. Using a qualitative approach based on the Technology Acceptance Model (TAM), the study offers insights into perceived usefulness, perceived ease of use, and students' overall experiences with AI-generated feedback, which have often been examined through quantitative methods.

Many students thought the AI feedback was helpful, clear, and detailed when it came to correcting language mistakes and providing more specific advice on content. At the same time, some students mentioned that some of the AI-generated comments were a bit unclear or too vague. These findings lead to a number of important points to consider.

First, teachers play a key role when it comes to handling unclear feedback. As shown in this study, one way to address this is for teachers to give direct feedback early in the drafting process through weekly meetings. Teachers can also review the AI-generated suggestions before sharing them with students and give clarification or explain more if necessary.

Second, the results show that advanced AI tools such as *Brisk Teaching* can give feedback that goes beyond just grammar and spelling. They can also comment on more complex aspects of writing, such as clarity of ideas and strength of arguments. Using such AI tools in writing courses could really help teachers spend less time examining students' drafts. To use such tools more effectively, teachers might need training on how to choose and use the tools correctly. They also need to have access to the tools (Mills et al., 2024; Roscoe et al., 2017).

Third, this study supports the application of TAM to understand and analyze how students respond to AI-generated feedback in academic writing. Nevertheless, TAM does not include ethical concerns, even though these concerns are becoming more important with the wider application of AI tools in education. Students may question whether AI-generated feedback is consistent with academic values. Because of this, adding Perceived Ethical Acceptability to TAM may provide a better understanding of the reasons behind students' acceptance or refusal of AI-based tools.

This current research also has some limitations. First, it focused on one *Research Proposal Writing* class in one university, so the results cannot be generalized to a wider context. Second, one of the researchers was also the instructor of the class. Although students' responses were collected anonymously and the coding was reviewed by other teachers, this dual role could have affected both the student responses and the interpretation of the data. Third, the research did not fully examine independent AI feedback, as the teacher checked the AI-generated remarks before students received them. Besides, students had already got their teacher's feedback during earlier weekly consultations, so their perceptions of the AI-generated feedback could have been at least partially influenced by that earlier human support. Fourth, since the students did not know the feedback was generated by an AI tool, their comments

focused on how helpful the feedback was for revising their works, rather than their views on the AI itself. Lastly, this study was limited to short-term perceptions from one proposal draft and did not evaluate long-term changes in writing quality or revision behavior.

Future research may address these limitations through various strategies. First, it can look at how AI-generated feedback is used in other academic settings. Second, it can compare AI feedback that has been reviewed by teachers with AI feedback that teachers have not looked at. Third, it can examine whether students act differently when they know that the feedback comes from AI. Fourth, researchers can also explore if getting AI feedback over time helps students enhance their writing skills, become more independent in revising, or change how they approach writing tasks.

6. About the Authors

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7. References

- Abdullaev, D., Abdazimov, A., Khusainova, Z., Makhmudov, S., & Sagdullaeva, D. (2025). A phenomenological study on the impact of personalized AI Feedback on writing quality: Insights from EFL students in Uzbekistan. *Computer-Assisted Language Learning Electronic Journal*, 26(7), 162-186.
- Akiba, D., & Garte, R. (2024). Leveraging AI tools in university writing instruction: Enhancing student success while upholding academic integrity. *Journal of Interactive Learning Research*, 35(4), 467–478.
- Alhajji, R. (2024). Assessing the influence of AI on modern student writing standards: An educators' perspective. *Research Journal in Advanced Humanities*, 5(3).
<https://doi.org/10.58256/5tpepv73>
- Alsofyani, A. H., & Barzanji, A. M. (2024). The effects of ChatGPT-generated feedback on Saudi EFL learners' writing skills and perception at the tertiary level: A mixed-methods study. *Journal of Educational Computing Research*, 63(2), 431–463.
<https://doi.org/10.1177/07356331241307297>

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319. <https://doi.org/10.2307/249008>
- Du, T. T., Dung, D. T. B., Ly, H. T. B., Huong, N. T. K., Triet, A. M., & Xuan, N. T. (2025). Students' perceptions of artificial intelligence in academic writing: A case at a university in Vietnam. *Eurasian Journal of Applied Linguistics*, 11(2), 122-134. <https://doi.org/10.32601/ejal.11210>
- Fan, Y., Tan, S., & Lim, G. Y. W. (2024). EAP teacher feedback in the age of AI: Supporting first-year students in EFL disciplinary writing. *Australian Journal of Applied Linguistics*, 7(3), 1943. <https://doi.org/10.29140/ajal.v7n3.1943>
- Farooq, M., Buzdar, H. Q., Yen, Y. Y., & Bakhsh, A. (2024). Integrating AI in sustainable writing: an empirical investigation of the technology acceptance model in Asian social sciences. *Journal of Logistics, Informatics and Service Science*, 11(3), 324-338.
- Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology*, 50(5), 2572-2593. <https://doi.org/10.1111/bjet.12864>
- Guo, K., Pan, M., Li, Y., & Lai, C. (2024). Effects of an AI-supported approach to peer feedback on university EFL students' feedback quality and writing ability. *The Internet and Higher Education*, 63, 100962. <https://doi.org/10.1016/j.iheduc.2024.100962>
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of educational research*, 77(1), 81-112.
- Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching*, 39(2), 83–101. <https://doi.org/10.1017/s0261444806003399>
- Jamshed, M., Ahmed, A. S. M. M., Sarfaraj, M., & Warda, W. U. (2024). The impact of ChatGPT on English language learners' writing skills. *International Journal of Interactive Mobile Technologies (iJIM)*, 18(19), 18–36. <https://doi.org/10.3991/ijim.v18i19.50361>
- Kelly, S., Kaye, S. A., & Oviedo-Trespalacios, O. (2023). What factors contribute to the acceptance of artificial intelligence? A systematic review. *Telematics and informatics*, 77, 101925. <https://doi.org/10.1016/j.tele.2022.101925>
- Kulprasit, W. (2018). Students' perspective: Three types of reflective written feedback. *ABAC Journal*, 38(2), 67–81.
- Kurt, G., & Kurt, Y. (2024). Enhancing L2 writing skills: ChatGPT as an automated feedback tool. *Journal of Information Technology Education: Research*, 23, 024. <https://doi.org/10.28945/5370>
- Li, K. (2023). Determinants of college students' actual use of AI-based systems: An extension of the technology acceptance model. *Sustainability*, 15(6), 5221. <https://doi.org/10.3390/su15065221>
- Liang, J., Huang, F., & Teo, T. (2024). Understanding Chinese university EFL learners' perceptions of AI in English writing. *International Journal of Computer-Assisted Language Learning and Teaching*, 14(1), 1–16. <https://doi.org/10.4018/ijcallt.358918>

- Liu, Q., & Wu, S. (2019). Same goal, different beliefs: Students' preferences and teachers' perceptions of feedback on second language writing. *Journal of Writing Research*, 11(vol. 11 issue 2), 299–330. <https://doi.org/10.17239/jowr-2019.11.02.03>
- Mahapatra, S. (2024). Impact of ChatGPT on ESL students' academic writing skills: A mixed methods intervention study. *Smart Learning Environments*, 11(1). <https://doi.org/10.1186/s40561-024-00295-9>
- Malmous, M., & Zaidoune, S. (2025). Student adoption of AI writing tools: A PLS-SEM and TAM-based analysis in Moroccan higher education. In E. Cela, N. R. Vajjhala, & M. M. Fonkam (Eds.), *Next-generation AI methodologies in education* (pp. 209-254). IGI Global Scientific Publishing.
- Mehrabi-Yazdi, O. (2018). Short communication on the missing dialogic aspect of an automated writing evaluation system in written feedback research. *Journal of Second Language Writing*, 41, 92–97. <https://doi.org/10.1016/j.jslw.2018.05.004>
- Mills, K., Ruiz, P., Lee, K., Coenraad, M., Fusco, J., Roschelle, J., & Weisgrau, J. (2024, May). *AI literacy: A framework to understand, evaluate, and use emerging technology*. Digital Promise. <https://doi.org/10.51388/20.500.12265/218>
- Nicol, D. (2010). From monologue to dialogue: Improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, 35(5), 501–517. <https://doi.org/10.1080/02602931003786559>
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218. <https://doi.org/10.1080/03075070600572090>
- Oktarin, I. B., Saputri, M. E. E., Magdalena, B., Hastomo, T., & Maximilian, A. (2024). Leveraging ChatGPT to enhance students' writing skills, engagement, and feedback literacy. *Edelweiss Applied Science and Technology*, 8(4), 2306–2319. <https://doi.org/10.55214/25768484.v8i4.1600>
- Reynolds, B. L., Kao, C. W., & Huang, Y. (2021). Investigating the effects of perceived feedback source on second language writing performance: A quasi-experimental study. *The Asia-Pacific Education Researcher*, 30(6), 585–595. <https://doi.org/10.1007/s40299-021-00597-3>
- Roscoe, R. D., Wilson, J., Johnson, A. C., & Mayra, C. R. (2017). Presentation, expectations, and experience: Sources of student perceptions of automated writing evaluation. *Computers in Human Behavior*, 70, 207–221. <https://doi.org/10.1016/j.chb.2016.12.076>
- Ruwe, T., & Mayweg-Paus, E. (2023). “Your argumentation is good”, says the AI vs humans – The role of feedback providers and personalised language for feedback effectiveness. *Computers and Education: Artificial Intelligence*, 5, 100189. <https://doi.org/10.1016/j.caeai.2023.100189>
- Saricaoglu, A. (2018). The impact of automated feedback on L2 learners' written causal explanations. *ReCALL*, 31(2), 189–203. <https://doi.org/10.1017/s095834401800006x>
- Selevičienė, E., & Koloda, D. (2025). University students' acceptance of ChatGPT as a writing assistance tool in ESL and ESP studies. *Analele Universitatii Ovidius Constanta, Seria Filologie*, 36(1), 550-565.

- Shen, Q. (2025). Artificial intelligence as a pedagogical communicator: mixed-methods insights from Raffles International College Bangkok. *Computers and Education Open*, 100297. <https://doi.org/10.1016/j.caeo.2025.100297>
- Wale, B. D., & Kassahun, Y. F. (2024). The transformative power of AI writing technologies: Enhancing EFL writing instruction through the integrative use of Writerly and Google Docs. *Human Behavior and Emerging Technologies*, 2024, 1–15. <https://doi.org/10.1155/2024/9221377>
- Wang, D. (2024). Teacher- versus AI-generated (Poe application) corrective feedback and language learners' writing anxiety, complexity, fluency, and accuracy. *The International Review of Research in Open and Distributed Learning*, 25(3), 37–56. <https://doi.org/10.19173/irrodl.v25i3.7646>
- Xue, L., Mahat, J., Ghazali, N., & Shi, X. (2025). Technology acceptance model (TAM) in artificial intelligence in higher education (AIHed): A systematic literature review. *Journal of Institutional Research South East Asia*, 23(1), 355-375.
- Yesilyurt, Y. E. (2023). AI-enabled assessment and feedback mechanisms for language learning: Transforming pedagogy and learner experience. In G. Karta (Ed.), *Transforming the language teaching experience in the age of AI* (pp. 25-43). IGI Global.
- Zarei, N., & Fabregas, I. D. (2025). Students' perceived usefulness and satisfaction with ChatGPT in writing: A quantitative analysis. *ES Review. Spanish Journal of English Studies*, (46), 167-189. <https://doi.org/10.24197/6es65z75>
- Zhai, N., & Ma, X. (2021). Automated writing evaluation (AWE) feedback: A systematic investigation of college students' acceptance. *Computer Assisted Language Learning*, 35(9), 2817–2842. <https://doi.org/10.1080/09588221.2021.1897019>
- Zhang, Z. (2016). Student engagement with computer-generated feedback: A case study. *ELT Journal*, 71(3), 317-328.
- Zhang, Z., & Hyland, K. (2018). Student engagement with teacher and automated feedback on L2 writing. *Assessing Writing*, 36, 90–102. <https://doi.org/10.1016/j.asw.2018.02.004>
- Zhang, Z., & Hyland, K. (2022). Fostering student engagement with feedback: An integrated approach. *Assessing Writing*, 51, 100586. <https://doi.org/10.1016/j.asw.2021.100586>
- Ziqi, C., Xinhua, Z., Qi, L., & Wei, W. (2024). L2 students' barriers in engaging with form and content-focused AI-generated feedback in revising their compositions. *Computer Assisted Language Learning*, 1–21. <https://doi.org/10.1080/09588221.2024.2422478>