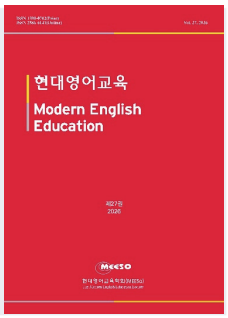
Modern English Education, Vol. 27, (2026) pp. 94-110
doi: https://doi.org/10.18095/meeso.2026.27.1.94



Modern English Education

ISSN: 1598-0782 / e-ISSN: 2586-6141
http://journal.meeso.or.kr

From Awareness to Application: University Students' Conceptualizations of AI in English Education

Hyun-Joo Oh (University of Seoul)

Received: 9 January 2026
Revised: 2 February 2026
Accepted: 4 March 2026

Oh, Hyun-Joo. (2026). From awareness to application: University students' conceptualizations of AI in English education. *Modern English Education*, *27*, 94-110.

Keywords
Artificial intelligence (AI),
AI literacy,
English education,
reflective writing,
peer feedback
인공지능,
AI 리터러시,
영어교육,
성찰적 글쓰기,
동료 피드백

Hyun-Joo Oh
Visiting Professor
Institute of Education Innovation
University of Seoul
hyunjooo@uos.ac.kr
ISNI: 0000 0005 2786 4658

Abstract

Despite growing interest in AI adoption in higher education, limited research has examined how university students conceptualize the pedagogical meaning of AI beyond measures of attitudes and user satisfaction. This study explored how Korean university students conceptualized AI in English education through analysis of 40 reflective essays and 80 peer feedback comments collected across four instructional contexts. Qualitative thematic and constant comparative analysis identified four recurrent perspectives: AI as an efficiency tool, a source of risk or limitation, a catalyst for pedagogical reconfiguration, and a vision for future English education. While all perspectives appeared across contexts, their relative emphasis varied by instructional role. Students writing as learners focused on efficiency and risk; those considering policy stressed ethical guidelines; and those positioned as prospective teachers proposed practical classroom and materials design strategies. Peer feedback supported conceptual development by encouraging critical reflection and refinement of pedagogically actionable ideas. Overall, the findings suggest that students view AI not merely as a technical aid but as a pedagogical agent connected to autonomy, ethics, assessment, and teacher–learner dynamics, highlighting the need for instructional designs that foster AI literacy through guided reflection and peer feedback.

INTRODUCTION

Artificial intelligence (AI) technologies are reshaping educational practices, influencing how students learn and how teachers design and deliver instruction. Since its release in November 2022, ChatGPT has become a widely used generative AI tool (Oh & Hsieh, 2025). Built upon large language models (LLMs), ChatGPT can generate human-like responses and support students in tasks such as writing, translation, and summarization, and it has been gradually integrated into language education and academic learning environments (Guo & Wang, 2024; Imran & Almusharraf, 2023; Teng, 2024). Unlike earlier automated writing systems where assessment and feedback were treated as separate processes (Stevenson & Phakiti, 2019), ChatGPT has demonstrated the potential to provide timely and adaptive feedback and may contribute to closer alignment between assessment and formative feedback (Barrot, 2023). For students, this integration enables real-time linguistic assistance and promotes self-directed learning (Yoon, 2023). For teachers, it offers

a means to reduce feedback workload and support course management (Jun, 2024; Teng, 2024). These developments signify not only a technological shift but also a pedagogical transformation in how assessment and feedback are conceptualized in English education.

The educational impact of AI has often been perceived as positive, providing students with practical, interactive, and adaptive forms of support. Kurt and Kurt (2024) highlighted AI's pedagogical value, noting its potential to foster engagement through its responsiveness and adaptability. Similarly, Stevenson and Phakiti (2014) reported modest evidence of positive effects of automated writing evaluation tools on students' writing quality. In the context of language learning and English as a foreign language (EFL) education, AI-assisted writing tools have been shown to support students' attention to linguistic form and revision-related practices, as well as to enhance their motivation to write (Lin, 2025; Song & Song, 2023). Taken together, these findings illustrate AI's role in facilitating both linguistic accuracy and learner engagement in EFL classrooms.

Nevertheless, the educational adoption of AI has also raised significant ethical, pedagogical, and practical concerns such as hallucinations, plagiarism, data privacy, and the potential decline in critical thinking due to overreliance on AI (Alkaissi & McFarlane, 2023; Barrot, 2023; El Ebyary & Shabara, 2024; Escalante et al., 2023). Zhu and Wang (2025) further cautioned that AI should not be regarded merely as a tool for efficiency, emphasizing that algorithmic bias, reliability, and broader social and moral implications demand responsible governance within robust educational and ethical frameworks. From this perspective, the integration of AI in education involves technological adoption, pedagogical considerations, and ethical reflection in higher education. Indeed, Herbold et al. (2023) made an insightful analogy between the use of ChatGPT and the use of calculators, implying that the central issue lies not in whether such tools are used, but in how, when, and for what educational purposes they are integrated into academic contexts.

In English language education, AI tools have been extensively explored for their potential to enhance learning, feedback, and assessment processes. In particular, studies in EFL writing contexts have indicated that ChatGPT can effectively identify and correct surface-level errors (Algaraady & Mahyoob, 2023), while it remains limited in addressing discourse-level or content-related issues (Oh & Hsieh, 2025). This pattern illustrates that the educational value of AI depends less on the technology itself and more on how it is integrated, interpreted, and mediated within classroom interactions. Accordingly, in AI-mediated writing contexts, students' feedback literacy, which is their ability to understand, evaluate, and apply feedback appropriately, has become a crucial factor in determining the effectiveness of AI integration (Carless & Boud, 2018; Teng & Ma, 2024). As Carlson et al. (2023) and Kasneci et al. (2023) have noted, developing digital and ethical literacy is vital to ensure that AI serves as a mediating tool rather than a replacement for human reasoning.

While the literature has documented students' attitudes, satisfaction, and behavioral intentions toward AI use (Lee & Kim, 2024; Meniado et al., 2024; Rhee et al., 2023; Romero-Rodríguez et al., 2023), relatively little research has investigated how students construct conceptual understandings of AI's educational significance. Previous studies have primarily examined affective or behavioral dimensions such as motivation, convenience, and usefulness, leaving the deeper pedagogical implications of students' conceptualizations largely underexplored. To address this research gap, the present study focuses on understanding how Korean university students conceptualize the role of AI in English education through reflective essays and peer feedback interactions. Developing a deeper understanding of how students frame and interpret AI is essential for identifying how they make sense of its potential, limitations, and responsibilities within their educational experiences. Such conceptualizations go beyond surface attitudes to embody students' reflective reasoning, ethical positioning, and pedagogical insight. In this regard, reflective writing and peer feedback serve as meaningful pedagogical spaces through which such understandings can be articulated and further refined.

Given these considerations, the current study investigates how Korean university students frame and negotiate the educational implications of AI. It also examines how these conceptualizations vary across instructional contexts and patterns of course participation. On this basis, the following research questions were formulated:

1) How do university students conceptualize AI in the context of English education through their reflective essays?

2) How do students' conceptualizations of AI vary across instructional contexts and patterns of course participation?

3) How do peer feedback interactions mediate students' conceptualizations of AI?

By addressing these questions, this study aims to contribute to a more interpretive and pedagogically informed understanding of AI in EFL contexts.

LITERATURE REVIEW

Conceptualizations of AI in English Education

University students have been identified as a key user group of ChatGPT for academic purposes, with usage patterns varying across individual and academic characteristics (Galindo-Domínguez et al., 2024). In response to this growing use, recent studies have explored students' perceptions of ChatGPT in EFL and higher education settings. For instance, Romero-Rodríguez et al. (2023) found that prior experience, performance expectancy, hedonic motivation, price value, and habit significantly influenced Spanish university students' behavioral intention to use ChatGPT. In a related study, Meniado et al. (2024) reported that Thai and Vietnamese EFL students held generally positive perceptions of using ChatGPT for English writing, valuing its usefulness for idea generation, organization, and revision, with perceptions influenced by relevance, usefulness, and engagement.

In the Korean context, research has increasingly focused on how university students perceive and utilize ChatGPT for learning. For example, Rhee et al. (2023) investigated Korean university students' perceptions of ChatGPT and concluded that reliability, convenience, and satisfaction were salient dimensions influencing their attitudes toward its educational use, while concerns about plagiarism, data bias, and accuracy were also noted. Building on this, Lee and Kim (2024) revealed that Korean students' satisfaction with ChatGPT varied across disciplines and that its use was perceived to enhance learning efficiency, problem-solving skills, and overall academic performance. Lee (2023) explored Korean university students' perceptions of ChatGPT and found high awareness and satisfaction with their use, particularly for learning and information retrieval, alongside concerns about misinformation, overreliance, and ethical misuse. From an ethical perspective, Oh and Kim (2023) analyzed the relationship between Korean university students' ChatGPT use and their awareness of assignment plagiarism, showing that while students displayed positive attitudes toward ChatGPT, their ethical reasoning and attitudes toward plagiarism differed according to prior AI use experience and academic ethics awareness.

Although these studies provide valuable insights into students' attitudes and usage patterns, they primarily focus on the behavioral, motivational, and affective aspects of AI use. By contrast, how students conceptualize AI's pedagogical role in English education remains insufficiently examined, particularly in terms of how they interpret its value, limitations, and broader educational significance when not directly engaging with AI tools. Accordingly, in this study, the conceptualization of AI is defined not as a stable personal attitude or belief, but as a situated and dialogically constructed understanding that emerges through engagement with instructional tasks, role positioning, and peer interaction. From this perspective, students' conceptualizations of AI are viewed as context-sensitive judgments that are constituted and rearticulated through participation in pedagogical activities rather than as fixed or internally held opinions. This definition is grounded in a sociocultural perspective on learning, in which meaning-making is understood as a socially mediated process emerging via interaction and discourse in educational settings.

Contextual and Instructional Influences on Students' Conceptualizations of AI

Students' conceptualizations of AI in education are shaped by multiple contextual factors, including prior experience, disciplinary background, and educational culture. Previous studies have reported that students who frequently engage with AI-assisted tools or feedback systems demonstrate more positive attitudes and stronger motivation toward learning (Al Badi et al., 2020; Boudouaia et al., 2024; Song & Song, 2023). Disciplinary differences further differentiated these perceptions, as satisfaction and perceived future importance of ChatGPT use varied across academic majors, with theology, pharmacy, and arts students reporting relatively higher levels (Lee & Kim, 2024). Cultural and linguistic contexts also play a mediating role, in that research has emphasized the need for AI tools that are culturally and linguistically tailored to local educational settings and sensitive to socio-cultural factors in language learning (Zhu & Wang, 2025). Overall, the literature suggests that perceptions of AI are not universal but are situated within distinct academic and sociocultural contexts.

To account for these contextual differences, this study is theoretically informed by a sociocultural perspective, which conceptualizes learning and meaning-making as socially mediated processes shaped through interaction, discourse, and participation in culturally organized activities (Lantolf & Thorne, 2006; Vygotsky, 1978). From this viewpoint, students' understandings of AI are not formed in isolation but are constructed and rearticulated through engagement with instructional contexts and dialogic practices such as reflective writing and peer feedback.

From a sociocultural standpoint, instructional contexts can be understood as activity systems that position students in particular roles and configure the meanings they construct around educational tools such as AI. Differences in task design, instructional goals, and role expectations can therefore lead students to articulate distinct conceptualizations of AI, even

when engaging with the same technology. This perspective helps explain why students' conceptualizations of AI may vary across courses, not as a result of individual traits, but as a function of instructional framing and participation structures.

Building on this perspective, instructional design exerts a strong influence on how students conceptualize and respond to AI use in the classroom. When AI tools are purposefully integrated into writing or communication courses with explicit guidance from teachers, students generally view them as legitimate and pedagogically supportive tools rather than replacements for learning (Han & Li, 2024; Imran & Almusharraf, 2023). Conversely, when AI use is restricted or vaguely defined, students may experience uncertainty or moral tension regarding its appropriateness (Barrot, 2023; Kasneci et al., 2023). Empirical evidence also suggests that engaging students in reflective use of AI-generated feedback can foster more critical awareness of AI's affordances and limitations (Lin, 2025). The literature indicates that students' conceptualizations of AI are not static dispositions but dynamic constructs continually configured by pedagogical framing and task design. Taken together, prior research suggests that students' conceptualizations of AI are context-dependent and instructionally mediated, underscoring the value of reflective writing and peer feedback as sites of dialogic engagement with AI.

Reflective Writing and Peer Feedback as Dialogic Interactions for Developing AI Literacy

Reflective writing provides a metacognitive framework that enables students to critically examine their assumptions, beliefs, and learning practices (Zarestky et al., 2022), a process that is particularly valuable in AI-mediated educational contexts. Through this process, students may move beyond the instrumental use of tools like ChatGPT and begin to consider broader ethical, cognitive, and pedagogical dimensions of their learning. Previous studies have demonstrated that reflective writing fosters students' metacognitive awareness and critical reflection, supporting more self-regulated and responsible learning (Alt & Raichel, 2020; Zarestky et al., 2022).

Beyond individual reflection, feedback processes involving peer, teacher, and AI-mediated interactions extend such reflection into collaborative meaning-making, where students articulate, question, and refine their understandings through interaction. Through such feedback processes, students engage in dialogic meaning-making that can strengthen their behavioral, affective, and cognitive engagement with writing tasks, highlighting feedback as a socially mediated process rather than a one-way transmission of information (Zhang & Hyland, 2022). Such exchanges promote the development of students' feedback literacy (Carless & Boud, 2018). Similarly, Han and Li (2024) found that integrating ChatGPT as a mediating tool within teacher feedback promoted students' deeper engagement with revision, thereby indicating the collaborative and scaffolded potential of AI-assisted feedback.

Synthesizing these perspectives, reflective writing and peer feedback can constitute dialogic practices that empower students to develop AI literacy as a dynamic, socially mediated construct. The systematic review by Zhu and Wang (2025) emphasizes the need for students to critically examine the authority of AI tools, understand their limitations, and adopt responsible usage practices. In this way, AI literacy is conceived not as a set of technical skills but as a dynamic orientation shaped through reflection, dialogue, and collaborative meaning-making within educational contexts. While prior research has examined students' attitudes toward AI, comparatively less attention has been paid to how they make sense of it through reflective and interactive processes. To address this gap, the present study explores how students conceptualize AI through reflection and dialogue, focusing on the process-oriented aspects of their engagement across different instructional contexts. By examining these dialogic practices, this research complements attitudinal studies by moving toward a more interpretive understanding of how AI literacy is constructed in English education, offering insights into how reflective pedagogies can develop critical and contextually grounded AI literacy.

METHOD

Participants

The participants were 31 university students enrolled in three English education-related courses that were offered in four class sections during one academic year (the Spring and Fall semesters of 2025) at a university in Korea. The courses included *Logical Thinking and Writing in English* (taught in both semesters), *Current Issues in English Language Teaching and Learning* (Spring), and *Materials Development and Teaching Methods in English Language Teaching* (Fall). All courses analyzed in the present study were taught by the same instructor, contributing to consistency in instructional approach across the sections. The student group consisted of 11 male and 20 female students, with 14 in their third year and 17 in their fourth

year (see Table 1). Among these, 25 participants belonged to the Department of English Translation and Interpretation Studies, which includes sub-majors such as Teaching English to Speakers of Other Languages (TESOL), English Literature and Translation, English for Global Communication and Trade, and English Translation and Interpretation. The remaining six students were from other departments, including Global Business and Technology (GBT), Computer Science, Mathematics, French Studies, and Korean Studies, all of whom pursued English as a minor or double major. Out of the 31 students, four participants were completing a teacher certification program, indicating a potential future orientation toward English language teaching.

TABLE 1
Participants' Background (N = 31)

Category	Details	*N*
Gender	Male	11
	Female	20
Year of study	3rd year	14
	4th year	17
Major	TESOL	15
	English Literature and Translation	8
	English for Global Communication and Trade	1
	English Translation and Interpretation	1
	Other majors (GBT, Computer Science, Mathematics, French Studies, and Korean Studies)	6
English as a minor or double major	(among the 6 non-English majors)	6
Teacher certification program	Pre-service teachers	4

Data Collection

A total of 40 reflective essays and 80 peer feedback comments were collected from participants across four class sections. The data collection process was embedded within students' regular coursework and involved two sequential activities: individual essay writing and peer feedback exchange. First, students in each class were asked to write one academic essay consisting of four to five paragraphs in English on a given topic related to AI in English education (see Table 2). They were explicitly instructed not to use any AI tools or online translators and to rely on their own English ability, consulting a dictionary only if necessary. Next, after submitting the essays, each student read two classmates' essays and provided written feedback comments through an online discussion forum, following concise written guidelines that encouraged constructive and reflective comments. It should be noted that nine students were enrolled in more than one course (either within the same semester or across semesters). Consequently, the total number of essays exceeded the number of individual participants. The unit of analysis in this study was the reflective essay and its associated peer feedback comments, not the individual student. An overview of the writing tasks and data collected is presented in Table 2.

It is also acknowledged that most participants had prior exposure to generative AI tools such as ChatGPT in their everyday academic lives. Accordingly, the essays and peer feedback are interpreted as reflecting students' conceptual understandings of AI shaped by prior experience, instructional framing, and role positioning within each course, rather than as the direct outcome of AI use during the writing tasks themselves.

Across the courses, most participants were upper-year undergraduate students majoring in English-related fields, many of whom were oriented toward future roles as English educators, translators, or language professionals. As such, the courses positioned students not only as language learners but also as prospective practitioners who were expected to critically reflect on educational issues and pedagogical practices. Within this instructional context, students were encouraged to consider AI in relation to broader questions of teaching, learning, and instructional design rather than from a purely personal or user-oriented perspective. This shared orientation likely informed how students engaged with the essay tasks and peer feedback activities and provides important context for interpreting the conceptual positions identified in the analysis.

TABLE 2
Writing Tasks and Data Collected

Semester	Course title	Essay topic	Essays (*N*)	Peer feedback comments (*N*)
2025 Spring	*Logical Thinking and Writing in English*	How do you think AI will influence English education in the future?	15	30
	Current Issues in English Language Teaching and Learning	In what specific ways should AI be integrated into English education?	9	18
2025 Fall	*Logical Thinking and Writing in English*	How will AI change the roles of teachers and learners in English education?	7	14
	Materials Development and Teaching Methods in English Language Teaching	What are the most effective ways to integrate AI tools into English language teaching and materials development?	9	18
Total			40	80

AI-related topics were addressed at a conceptual level through lectures and reading materials. However, no structured in-class oral discussions were conducted as part of the data collection. The four essay prompts collectively offered distinct analytical lenses through which students' perspectives on AI in English education could be examined. The sequence of topics, starting from the overall influence of AI and continuing to integration strategies, role changes, and materials development, reflected a conceptual expansion instead of a temporal order. The first prompt addressed AI's general influence on English education, the second focused on possible ways to integrate AI into teaching and learning, the third encouraged reflection on how such integration might reshape the roles of teachers and learners, and the final prompt explored practical classroom and materials applications. It is important to note, however, that these prompts did not represent a linear sequence for the same students but rather a conceptual expansion across writing tasks. This conceptual structure, when viewed as a whole, allowed the analysis to examine how students' perspectives on AI were articulated at different levels of abstraction across writing tasks, ranging from broad predictions to pedagogical considerations and classroom-based applications (see Figure 1).

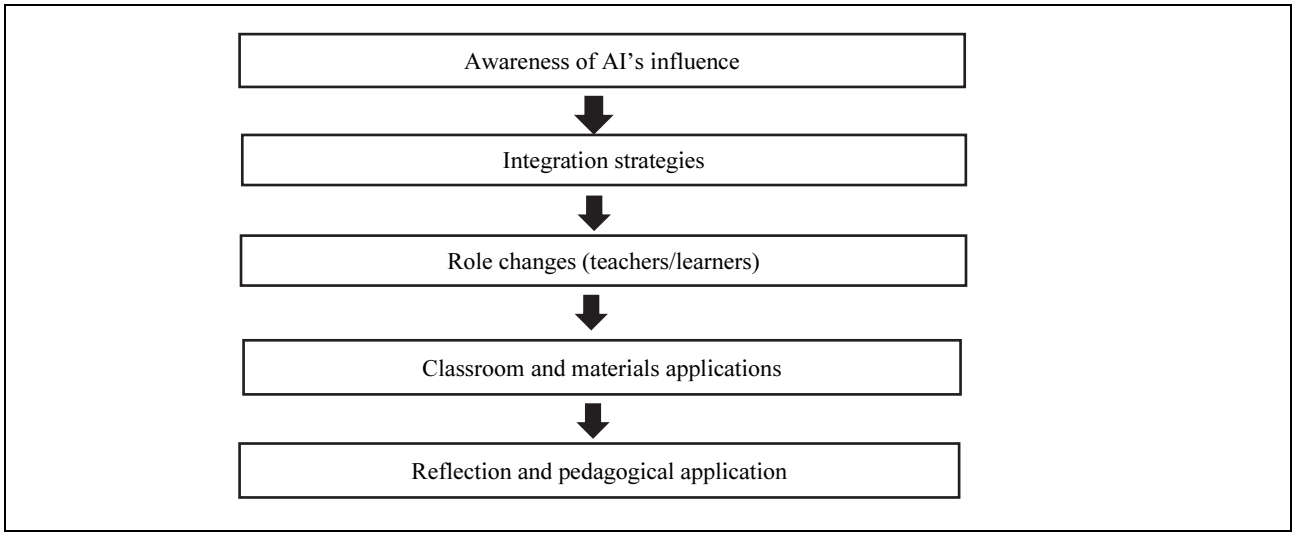


FIGURE 1
From Awareness to Application: A Model of Students' Conceptualizations of AI in English Education

Data Analysis

All written data were analyzed qualitatively using a multi-step coding procedure informed by thematic analysis (Braun & Clarke, 2006) and constant comparative methods (Glaser & Strauss, 1967). The dataset comprised 40 reflective essays and

80 peer feedback comments. The analysis addressed two main aims: (1) to examine how students conceptualized the influence of AI in English education, and (2) to identify how these conceptualizations were mediated through peer interaction.

The reflective essays were first manually open-coded, after which conceptually similar codes were compared and clustered into higher-order categories. An inductive coding approach was employed to allow patterns to emerge naturally from the data without relying on predetermined categories. A codebook was developed from initial close readings of the dataset and was progressively refined through multiple coding cycles as new conceptual distinctions became visible. A summary excerpt of the final codebook, including themes, sub-codes, definitions, inclusion criteria, and representative excerpts, is provided in Appendix A to illustrate the analytic process. Through iterative comparison across participants and courses, four key themes emerged that capture recurring patterns in students' conceptualizations of AI. Coding decisions were guided by semantic content, with priority given to meaning over frequency, and excerpts were coded according to the central conceptual stance expressed by the writer even when multiple themes co-occurred in a single essay.

The 80 peer feedback comments were separately analyzed to investigate how peer interaction mediated students' conceptualizations of AI. Each comment was coded for its dominant type of conceptual contribution using six inductively and deductively developed categories: (1) No conceptual contribution, (2) Reinforcement, (3) Expansion, (4) Pedagogical concretization, (5) Critical awareness, and (6) Transformation/Reframing. Only one code was assigned per comment to allow systematic comparison across the dataset. A frequency table was then generated to demonstrate overall patterns regarding how peer feedback tended to support conceptual refinement, not surface-level text evaluation.

To capture contextual variability, students' conceptualizations and peer feedback patterns were compared across the four class sections. Case-level analytic summaries were created to trace how the same students positioned AI across different instructional contexts, with particular attention to the nine participants enrolled in two courses. This approach allowed conceptualizations to be interpreted not as fixed personal beliefs but as context-dependent judgments that shifted in accordance with the role perspective each course invited. Trustworthiness of analysis was strengthened through constant comparison within and across courses and the use of two complementary data sources (reflective essays and peer feedback comments). As the purpose of the study was to understand how students constructed and negotiated meanings around AI in English education, the analysis prioritized sense-making processes over measuring learning gains.

As the analysis was conducted by a single researcher, methodological rigor was enhanced through several strategies. These included prolonged engagement with the dataset over time, iterative recoding across analytic phases, and the use of analytic memos to document evolving interpretations and reflexive considerations. In addition, analytic interpretations were revisited to examine category boundaries and refine emerging themes.

The data analyzed in the current study consisted of anonymized reflective essays and peer feedback comments produced as part of regular coursework. For ethical considerations, all materials were de-identified after grading was finalized, and no personally identifiable information was included in the dataset. Participation had no effect on students' grades or evaluation, and the analysis posed minimal risk to participants.

FINDINGS AND DISCUSSION

University Students' Conceptualizations of AI in English Education

Analysis of the 40 reflective essays revealed four recurrent conceptualizations of the ways university students perceived the influence of AI on English education: (1) AI as an efficiency tool for learning and teaching, (2) AI as a source of risk or limitation, (3) AI as a catalyst for pedagogical reconfiguration, and (4) AI as a vision for future English education (see Table 3). These themes emerged consistently across courses, although with varying emphases depending on the instructional context.

First, students commonly described AI as a highly efficient learning tool that offers immediate feedback, personalized learning experiences, and expanded opportunities for self-directed learning. They emphasized that AI reduces waiting time for teacher feedback and facilitates continuous language practice. For instance, when reflecting on AI's role in reducing delays in teacher feedback, one student noted that AI provides "instant feedback, [which] helps users right away" (Essay #11), and another commented that AI allows learners to "practice speaking and writing skills with it" (Essay #14), enabling access to sustained language learning outside the classroom. Multiple essays also acknowledged benefits for teachers, such as time saved in lesson preparation, and a representative excerpt stated that "AI can reduce the workload of teachers and help increase classroom efficiency" (Essay #26). Taken together, these reflections point to students' awareness of AI as a practical means of improving instructional efficiency and supporting independent language learning.

TABLE 3
Summary of Thematic Structure Derived from the Reflective Essays

Theme	Sub-codes	Core meaning
AI as an efficiency tool for learning and teaching	Instant feedback and error correction; Personalized or self-paced learning; Teacher workflow efficiency; Multimodal resource generation; Access beyond the classroom	AI is conceptualized as a practical, timesaving, or supportive tool that improves learning efficiency, access, and instructional workflow.
AI as a source of risk or limitation	Overreliance and reduced autonomy; Creativity loss; Hallucinations and inaccuracies; Plagiarism and academic integrity; Data privacy and ethical concerns	AI is framed as a problematic, unreliable, or potentially harmful force in learning.
AI as a catalyst for pedagogical reconfiguration	Redefined teacher roles; Redefined learner roles; AI literacy and critical use; Assessment redesign and fairness; Assignment design with AI scaffolding; AI-enabled tasks and materials design; Human–AI balance	AI acts as a transformative force promoting rethinking of teacher/learner roles, assessment, and instructional design.
AI as a vision for future English education	Future-oriented predictions; Conditions for effective integration	AI is envisioned as shaping the future of English education, with emphasis on anticipated changes and the conditions required for meaningful integration.

Second, students were equally aware of the risks associated with AI use in English education. Concerns about overreliance and diminished autonomy were widespread. For example, one student warned that "if students are simply cutting and pasting AI-generated sentences into their essays, they're missing a lot of the real learning" (Essay #33), and another similarly noted that "overreliance on AI can have negative effects on students in terms of learner autonomy" (Essay #36). Several essays additionally acknowledged hallucinations and inaccuracies, emphasizing that "Given that AI occasionally provides false information called hallucination, teachers' intervention is necessary in order to prevent fossilization of incorrect knowledge" (Essay #36). Ethical issues such as plagiarism and authenticity were also salient, with recognition that "AI can trigger various copyright issues like plagiarism and hinder learners' critical thinking ability" (Essay #14). These concerns demonstrate students' reflective awareness of the limitations of automated feedback and indicate that AI is not unconditionally beneficial but a tool requiring responsible and moderated use.

Third, beyond framing AI as either helpful or harmful, a significant portion of essays portrayed AI as a catalyst for reconfiguring teacher and learner roles as well as overall instructional design. While imagining changes in classroom roles and assessment practices, students envisioned teachers shifting from knowledge transmitters to facilitators, mentors, and evaluators who guide the critical use of AI; for example, one essay stated that "teachers need to change their role, not just giving knowledge, but guiding, motivating, and creating fair ways to check learning" (Essay #25). At the same time, learners were described as becoming more autonomous and "active learners and co-designers with their teachers" instead of passive recipients of knowledge (Essay #29). Several essays further emphasized the need to develop AI literacy, particularly the ability to evaluate accuracy, detect hallucinations, and use AI ethically, and suggested that explicit classroom guidelines would be necessary to promote appropriate use. Students proposed structural modifications to assessment and assignment design, such as fairness-oriented evaluation procedures and step-based workflows in which AI provides scaffolding during early drafting but is gradually withdrawn to ensure independent performance. Even when students described innovative AI-supported tasks and materials (e.g., AI-assisted speaking practice or Canva/Padlet-based projects), they repeatedly underscored the importance of maintaining a deliberate balance between technological efficiency and human interaction, indicating that core relational and ethical dimensions of teaching remain fundamentally human responsibilities.

Fourth, when projecting future curricula and assessment systems, several students extended their reflections to how AI might reshape English education in the future. A recurring prediction was that AI will become a ubiquitous learning infrastructure, supporting self-directed language practice without temporal or spatial constraints. For instance, one student anticipated a future where learners can study anytime and anywhere with AI functioning as a "perfect private tutor," and further predicted that automation of grammar and vocabulary correction would shift English curricula toward communication- and thinking-oriented goals, even implying that "College Scholastic Ability Test (CSAT) formats of English may also change from focusing on reading comprehension and grammar to speaking" (Essay #12). Beyond such

predictions, another group of essays reaffirmed the irreplaceable value of human educators for emotional support, ethical guidance, and interaction, stressing that AI should remain "only a tool, not a living thing" (Essay #21). Together, these future-oriented reflections show that students view AI as reshaping not only current instructional practices but also broader educational norms and expectations, pointing to the need for balanced and ethically grounded integration.

Overall, the findings reveal that students view AI not merely as a technical tool but as a pedagogical agent with the potential to reshape classroom dynamics, assessment systems, and teacher–student relationships. Their reflections demonstrate an awareness of AI's dual nature, simultaneously enabling and constraining, and highlight the importance of frameworks that integrate AI literacy, ethical use, and scaffolded autonomy. From an instructional standpoint, these findings indicate the necessity of moving beyond simple restrictions or permissions regarding AI use and toward designs that help students develop AI literacy, negotiate the boundary between assistance and overreliance, and gradually transition from AI-supported performance to independent production. In this respect, one central challenge for English education in the AI era may not be whether to use AI, but how to mobilize it in ways that support autonomy, ethical judgment, and meaningful language learning. Consequently, the findings point to the relevance of pedagogical approaches that integrate AI in ways that balance automation with human mediation and foster deep, reflective engagement with learning.

Contextual Variations in Students' Conceptualizations of AI

In this analysis, variations in students' conceptualizations of AI were interpreted as context-sensitive responses shaped by instructional contexts and patterns of course participation. Accordingly, these variations were not attributed solely to essay topics or to differences in individual AI use. A comparison among the four class sections revealed that, although the four main themes identified in the previous section appeared in all essays, the relative emphasis placed on each theme varied substantially across instructional settings.

Logical Thinking and Writing in English (2025 Spring, N = 15)

In this course, students wrote about how AI will influence English education in the future and their reflections tended to address AI in broad and philosophical terms. Students framed AI largely as a dual force that may both enhance and undermine English learning. Efficiency benefits such as instant feedback, personalization, and out-of-class practice were emphasized, yet these were consistently paired with concerns about overreliance, loss of creativity, and plagiarism. Essays repeatedly stated that AI improves learning efficiency but cannot replace human teachers, and many suggested that AI should remain only a tool that supports learning, rather than functioning as a substitute. Collectively, conceptualizations in this course presented AI through a future-oriented, macro-level perspective centered on the long-term transformation of English education.

Current Issues in English Language Teaching and Learning (2025 Spring, N = 9)

In response to the prompt asking in what specific ways AI should be integrated into English education, students conceptualized AI from a more policy- and system-driven stance. They articulated specific instructional channels such as writing feedback, speaking partners, assessment functions, and material creation, while simultaneously calling for guidelines to regulate appropriate AI use. Ethical safeguards including clear prompting rules, restrictions for examinations, and plagiarism detection appeared frequently. Compared with the *Logical Thinking and Writing in English* course, conceptualizations here focused less on whether AI is educationally desirable and more on the policy and curricular conditions under which its responsible use is expected.

Logical Thinking and Writing in English (2025 Fall, N = 7)

In this course, where students examined how AI will change the roles of teachers and learners in English education, reflections shifted markedly toward role reconfiguration. Teachers were reconceptualized as facilitators who guide learning, sustain motivation, evaluate progress, and mediate how AI is used, whereas learners were positioned as agentive contributors who co-design their learning instead of engaging in passive, teacher-led instruction. At the same time, although AI was seen as supporting instructional efficiency, essays emphasized emerging challenges, including authenticity concerns, reduced student autonomy, and the need for teachers to validate AI-generated output. Compared with both Spring courses, conceptualizations displayed a stronger focus on identity, authority, and agency in the AI-mediated classroom.

Materials Development and Teaching Methods in English Language Teaching (2025 Fall, N = 9)

When addressing how AI tools can be most effectively integrated into English language teaching and materials development, students in this course articulated the most practice-oriented conceptualizations. Nearly all essays presented concrete teaching scenarios that integrated AI into lesson planning, activity design, and materials development. Students referenced specific tools (e.g., Canva, Padlet, Quizlet, ChatGPT) and provided step-by-step instructional workflows, such as using AI for first-draft scaffolding followed by teacher-validated revision. Teachers were described as interaction designers who use AI to facilitate collaboration, not to replace human communication, and learners as autonomous agents who should eventually perform without AI during evaluation. While role-shift discussions also appeared in the previous course, this group offered more practically applicable techniques and pedagogical integration models.

Overlapping Participants

For participants enrolled in more than one course, differences across essays were interpreted as situationally grounded articulations shaped by each course context, rather than as evidence of linear conceptual development or stable individual beliefs. While the four class sections varied in instructional orientation, contextual influence was especially salient among nine students who were enrolled in two courses. Across their texts, students' core stance toward AI as a useful but potentially risky tool that should support human learning without replacing it remained relatively stable. These differences did not reflect a change in underlying beliefs; instead, they reflected shifts in the perspective from which students wrote and in the aspects of AI they foregrounded, depending on the instructional context.

A first pathway was observed among four students who took *Logical Thinking and Writing in English* (2025 Spring) followed by *Current Issues in English Language Teaching and Learning* (2025 Spring). In their first essays, these students framed AI in broad terms, weighing benefits and risks for English education and stressing the irreplaceability of human teachers. In their second essays, however, they shifted toward a policy- and system-oriented stance, proposing concrete classroom guidelines, assessment procedures, and institutional safeguards for AI use. A second pathway emerged among three students who transitioned from *Current Issues in English Language Teaching and Learning* (2025 Spring) to *Materials Development and Teaching Methods in English Language Teaching* (2025 Fall). Their later essays adopted a novice teacher or instructional designer position, translating earlier concerns about efficiency, overreliance, and interaction into detailed lesson plans, activity sequences, and AI-assisted materials for pre-, while-, and post-task activities. A third pathway was found among two students who participated in both *Logical Thinking and Writing in English* (2025 Fall) and *Materials Development and Teaching Methods in English Language Teaching* (2025 Fall). Their first essays analyzed how AI would reshape teacher and learner roles, highlighting shifts toward teacher facilitation and learner autonomy. In their second essays, this role-based perspective was operationalized into practice: they designed writing lessons in which AI provided scaffolding for idea generation and grammar correction, while teachers monitored feedback quality and gradually reduced students' AI dependence to ensure independent performance.

Across these three pathways, overlapping participants recontextualized a shared set of expectations in ways that aligned with the role positions and discourse of each class, shifting from learner-oriented reflection to policy-oriented critique and to teacher-oriented instructional design. Collectively, these patterns indicate that conceptualizations of AI are not fixed personal beliefs but instructionally mediated judgments that are negotiated as students move between different participation structures and role identities in higher education coursework.

Integrated Interpretation and Pedagogical Implications

Synthesizing the findings, the analysis extends these results by demonstrating how students' conceptualizations of AI are aligned with the pedagogical logics and role configurations embedded in different instructional contexts. When positioned as learners, students emphasized efficiency and risk; when asked to think from a policy standpoint, they highlighted guidelines and ethical safeguards; and when acting as prospective teachers, they focused on classroom implementation and instructional design. In other words, how students evaluated AI depended largely on the role perspective each course invited them to take. These patterns suggest that AI literacy is cultivated not simply through AI use, but through engagement with AI across multiple educational roles. When courses guide students to engage with AI not only as users but also as evaluators and future teachers, they may be better positioned to balance the benefits of AI with ethical and pedagogical considerations. Designing such opportunities may be an important step toward fostering sustainable and pedagogically grounded uses of AI in future English education. As a whole, the results underscore the value of viewing AI use not as a static skill, but as a situated learning process that depends on pedagogy, role framing, and guided reflection.

Peer Feedback as a Mediational Resource for Conceptual Refinement

While essay data illustrated how students initially conceptualized AI, peer feedback provided a complementary perspective on how these conceptualizations were negotiated and refined through interaction. A total of 80 peer feedback comments were coded into six categories (see Table 4). The distribution showed that peer interaction primarily stimulated conceptual refinement rather than surface-level text evaluation. 'Critical awareness' comments (53.8%) constituted the dominant category, indicating that peers repeatedly encouraged writers to reconsider assumptions about the educational value of AI by raising concerns such as overreliance, reduced creativity, fairness in assessment, loss of motivation, and additional instructional demands on teachers. Instead of dismissing AI, these comments pushed writers to move beyond efficiency-focused narratives and acknowledge the need for conditions and safeguards that make AI use educationally meaningful, particularly when essays framed AI primarily as a tool for immediate feedback and language practice, as reflected in comments such as "I wonder if over-relying on AI might limit the chance to make mistakes and learn from them naturally."

'Expansion' comments (21.3%) broadened students' thinking by introducing dimensions that were absent in the original essays, such as AI literacy (how to ask and refine prompts or verify AI-generated information), social and emotional variables (comfort or anxiety when speaking with AI, fear of embarrassment, feelings of isolation, or changes in motivation), and policy-level or systemic issues (widening gaps between developed and developing countries, the constraints of Korea's test-oriented system, or questions about fairness and accountability in assessment). These expansions were typically triggered when the original essays foregrounded either general optimism or general concern without specifying how teachers and learners might evaluate, question, or regulate AI use in practice. For example, when an essay portrayed AI primarily as a convenient tool for individual language practice, a peer expanded the discussion by introducing a social–emotional dimension, questioning whether heavy reliance on AI might reduce opportunities for face-to-face interaction and increase feelings of isolation. In another case, when an essay attributed learning problems directly to AI itself, a peer broadened the argument by shifting attention to students' patterns of AI use and emphasizing the role of learner agency and instructional guidance in shaping outcomes.

TABLE 4
Frequency of Peer Feedback Codes (N = 80)

Code type	Meaning	Frequency (*N*)	Percentage (%)	Representative contribution patterns
Critical awareness	Raises concerns about risks, limitations, or the need for regulation	43	53.8	Concerns about overreliance, reduced creativity, fairness in assessment, loss of motivation, and increased teacher burden
Expansion	Adds new dimensions to the original perspective	17	21.3	Considerations of AI literacy, questioning strategies, social/emotional factors, and policy-level considerations
Transformation/ Reframing	Challenges or reinterprets the writer's original stance	8	10.0	Reframing from 'AI as a problem' to 'responsible use,' and from 'replacement' to 'human–AI complementarity'
Pedagogical concretization	Suggests actionable instructional or assessment strategies	6	7.5	Proposals for step-by-step scaffolding, staged withdrawal of AI support, and level-based guidelines
No conceptual contribution	Makes no contribution to conceptual change	5	6.3	Feedback limited to structure, clarity, or formatting
Reinforcement	Strengthens or confirms the original stance without shifting meaning	1	1.3	Strong agreement and endorsement without alteration of the conceptual view

Note. Percentages may not total 100 due to rounding.

'Transformation/Reframing' comments (10.0%) were less frequent but had a strong conceptual influence, as peers directly challenged the writers' stance and shifted the interpretive focus from AI itself to users' responsibility. Instead of accepting statements such as "AI lowers students' writing ability" or "AI will replace teachers" at face value, these comments reframed them in more conditional interpretations. In other words, peers often responded to deterministic or binary framings in the

essays by reintroducing agency, conditions of use, and the mediating role of instruction. For instance, they argued that writing outcomes depend on how students choose to use AI, or that teachers' mediating and evaluative roles become even more necessary in AI-rich learning environments. This pattern was reflected in comments such as "The real problem is not AI itself, but students who rely on it too much. When used wisely, AI can act as a mentor by giving useful feedback and helping students improve." Similarly, when an essay attributed limitations in AI feedback to the tool's inability to recognize learners' academic levels, a peer reframed the issue by shifting responsibility from AI itself to users' interaction practices, noting that appropriate guidance and instruction in how to communicate with AI could lead to more level-sensitive and educationally meaningful responses.

'Pedagogical concretization' comments (7.5%) contributed to practical classroom implications, encouraging writers to specify how their claims could be operationalized, such as through independent writing followed by AI-based comparison and subsequent self-revision, withdrawing AI support for exams, or differentiating guidelines by proficiency level. Such comments were most likely to appear when essays articulated general pedagogical principles or normative claims about appropriate AI use, without specifying concrete procedures, sequencing, or assessment conditions under which these principles could be enacted. 'No conceptual contribution' (6.3%) and 'Reinforcement' (1.3%) appeared only rarely, indicating that peer feedback functioned primarily as a mechanism for conceptual refinement rather than surface-level correction or simple endorsement.

Taken together, these patterns indicate that peer feedback functioned as a mediational process through which students shifted from binary judgments of AI ('good' or 'bad') toward more context-sensitive, design-oriented conceptualizations of AI in English education. This finding aligns with previous research suggesting that dialogic peer feedback promotes deeper metacognitive engagement by prompting students to think more deeply, question more, and refine their ideas (Filius et al., 2018), but extends the literature by revealing that peer feedback can also foster AI literacy, the ability to evaluate, question, and use AI tools responsibly in educational contexts.

Importantly, the coding patterns showed subtle course-specific emphases. In the two *Logical Thinking and Writing in English* courses, peer comments tended to stress the risks of learner overreliance on AI, the need to balance efficiency with independent thinking, and the importance of teacher guidance and usage guidelines. In the *Current Issues in English Language Teaching and Learning* course, students more often raised system-level questions about how AI should be regulated within Korea's test-oriented examination culture, how fairness and accountability can be ensured, and what attitudes teachers and learners should adopt. In the *Materials Development and Teaching Methods in English Language Teaching* course, peers frequently questioned the feasibility of AI-mediated tasks, the preparation burden and expertise required of teachers, and the risk that AI might undermine interactional and emotional aspects of classroom learning. Across these contexts, AI integration was increasingly framed not as a purely technological choice but as a pedagogical and ethical design issue, underscoring the need for teacher mediation, clear guidelines, and sustainable learning pathways.

Building on prior studies that have examined students' attitudes, perceived benefits, and concerns regarding AI use (Lee & Kim, 2024; Oh & Kim, 2023; Rhee et al., 2023), this study adopts a complementary approach by examining how students conceptualize AI through authentic writing tasks and incorporating peer feedback as an additional layer of interpretation. This dual dataset enables a richer understanding of how conceptualizations emerge and are shaped across different instructional settings. Across instructional topics, students' reflections were articulated at different levels of concreteness, ranging from broad predictions about AI's influence on English education to role reconfiguration and detailed instructional and materials design. Rather than listing the advantages and disadvantages of AI, students articulated design-level ideas such as multi-draft AI-supported writing, AI-embedded speaking tasks, scaffold-fade models, and teacher–AI–learner role distribution. At the same time, peer interaction served as a critical mediational resource, suggesting that AI literacy develops not as a fixed personal attitude but as a dialogic, negotiated, and context-dependent construct.

In summary, these findings indicate that peer feedback functioned as a mediational resource through which students' initial conceptualizations of AI were questioned, expanded, and rearticulated in more context-sensitive and pedagogically grounded ways. Viewed from a sociocultural perspective, students' understandings of AI emerged not as fixed personal beliefs but as socially mediated judgments constructed through dialogue, interaction, and participation in instructional activities. From this perspective, AI literacy emerges as a pedagogically cultivated orientation rather than an individual technical skill, developed through reflective writing, peer negotiation, and guided evaluation of AI use in educational contexts. As conceptualized in the proposed conceptual model, students' conceptual understandings were continually rearticulated through iterative cycles of reflection, peer mediation, and role repositioning, illustrating how engagement with feedback enabled shifts from binary evaluations of AI toward more nuanced, design-oriented understandings within English education.

CONCLUSION

This study examined how Korean university students conceptualized AI in English education by analyzing reflective essays and peer feedback processes across four instructional contexts in English education coursework. The findings showed four recurring perspectives that captured both instrumental and pedagogical dimensions of AI: AI as an efficiency tool, as a source of risk or limitation, as a catalyst for pedagogical reconfiguration, and as a vision for future English education. Although these themes appeared across all classes, the aspects foregrounded differed according to instructional goals and role expectations; students adopted broader and philosophical views when positioned as learners, more regulatory and system-focused views when reflecting from a policy standpoint, and more practical views when acting as prospective teachers. Peer feedback further contributed to conceptual refinement by encouraging students to question assumptions, expand the scope of their arguments, and translate abstract claims into pedagogically actionable ideas.

Overall, the analysis indicates that students did not perceive AI simply as a technological aid but as a pedagogical agent intertwined with autonomy, ethics, assessment, and teacher–learner dynamics. Students articulated more balanced and specific conceptualizations when they were given structured opportunities to reflect on AI from multiple perspectives and engage in dialogic discussion rather than individual reflection alone. These patterns suggest that AI literacy may be fostered not only through exposure to AI tools, but through instructional arrangements that integrate guided reflection, peer interaction, and explicit attention to responsible and context-appropriate use. Whereas much of the existing literature has documented students' attitudes, perceived benefits, and concerns regarding AI use, the present study extends this line of research by demonstrating how students actively conceptualize and negotiate the pedagogical role of AI through reflective writing and peer engagement. By foregrounding conceptualization as a dialogic and instructionally mediated process, this study moves beyond static accounts of AI perception toward a more interaction-sensitive understanding of AI literacy, with implications for English education practices that position students as learners, evaluators, and prospective teachers.

Nonetheless, some limitations should be acknowledged. The results of this research should be interpreted with caution given the single-institution context and the reliance on written reflections, which may not fully capture implicit beliefs or actual classroom behavior. The data also do not support conclusions about individual conceptual trajectories over time. In addition, because participants were primarily English-majoring students, the findings may reflect perspectives shaped by prior familiarity with language learning and teaching rather than representing university students more broadly. Future research could adopt longitudinal designs to examine how students' conceptualizations of AI are negotiated and rearticulated over time, compare conceptualizations across disciplines, or analyze classroom interaction to explore how students use and interpret AI in practice.

Despite these limitations, the results highlight the potential value of pedagogical designs that integrate AI thoughtfully while maintaining teacher mediation and space for student reasoning, thereby supporting responsible use without reducing learner autonomy. Ultimately, continued exploration of how AI is interpreted and enacted in classroom settings may contribute to moving English education beyond polarized debates and toward more constructive and pedagogically grounded uses of emerging technologies.

References

Al Badi, A. A., Osman, M. E. T., & Al-Mekhlafi, A. M. (2020). The impact of virtual writing tutor on writing skills and attitudes of Omani college students. *Journal of Education and Development*, *4*(3), 101–116. https://doi.org/10.20849/jed.v4i3.828

Algaraady, J., & Mahyoob, M. (2023). ChatGPT's capabilities in spotting and analyzing writing errors experienced by EFL learners. *Arab World English Journal (AWEJ) Special Issue on CALL*, *9*, 3–17. https://doi.org/10.24093/awej/call9.1

Alkaissi, H., & McFarlane, S. I. (2023). Artificial hallucinations in ChatGPT: Implications in scientific writing. *Cureus*, *15*(2), e35179. https://doi.org/10.7759/cureus.35179

Alt, D., & Raichel, N. (2020). Reflective journaling and metacognitive awareness: Insights from a longitudinal study in higher education. *Reflective Practice*, *21*(2), 145–158. https://doi.org/10.1080/14623943.2020.1716708

Barrot, J. S. (2023). Using ChatGPT for second language writing: Pitfalls and potentials. *Assessing Writing*, *57*, 100745. https://doi.org/10.1016/j.asw.2023.100745

Boudouaia, A., Mouas, S., & Kouider, B. (2024). A study on ChatGPT-4 as an innovative approach to enhancing English as a foreign language writing learning. *Journal of Educational Computing Research*, *62*(6), 1289–1317. https://doi.org/10.1177/07356331241247465

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Carless, D., & Boud, D. (2018). The development of student feedback literacy: Enabling uptake of feedback. *Assessment & Evaluation*

in Higher Education, *43*(8), 1315–1325. https://doi.org/10.1080/02602938.2018.1463354
Carlson, M., Pack, A., & Escalante, J. (2023). Utilizing OpenAI's GPT-4 for written feedback. *TESOL Journal*, *15*(2), e759. https://doi.org/10.1002/tesj.759
El Ebyary, K., & Shabara, R. (2024). ChatGPT-generated corrective feedback: Does it do what it says on the tin? *Teaching English with Technology*, *24*(3), 68–89. https://doi.org/10.56297/vaca6841//BFFO7057/MYEH4562
Escalante, J., Pack, A., & Barrett, A. (2023). AI-generated feedback on writing: Insights into efficacy and ENL student preference. *International Journal of Educational Technology in Higher Education*, *20*, Article 57. https://doi.org/10.1186/s41239-023-00425-2
Filius, R. M., de Kleijn, R. A. M., Uijl, S. G., Prins, F. J., van Rijen, H. V. M., & Grobbee, D. E. (2018). Strengthening dialogic peer feedback aiming for deep learning in SPOCs. *Computers & Education*, *125*, 86–100. https://doi.org/10.1016/j.compedu.2018.06.004
Galindo-Domínguez, H., Delgado, N., Campo, L., & Sainz de la Maza, M. (2024). Use of ChatGPT in higher education: An analysis based on students' gender, age, academic performance, academic year and university degree. *REDU. Revista de Docencia Universitaria*, *22*(2), 16–30. https://doi.org/10.4995/redu.2024.21647
Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.
Guo, K., & Wang, D. (2024). To resist it or to embrace it? Examining ChatGPT's potential to support teacher feedback in EFL writing. *Education and Information Technologies*, *29*, 8435–8463. https://doi.org/10.1007/s10639-023-12146-0
Han, J., & Li, M. (2024). Exploring ChatGPT-supported teacher feedback in the EFL context. *System*, *126*, 103502. https://doi.org/10.1016/j.system.2024.103502
Herbold, S., Hautli-Janisz, A., Heuer, U., Kikteva, Z., & Trautsch, A. (2023). A large-scale comparison of human-written versus ChatGPT-generated essays. *Scientific Reports*, *13*, 18617. https://doi.org/10.1038/s41598-023-45644-9
Imran, M., & Almusharraf, N. (2023). Analyzing the role of ChatGPT as a writing assistant at higher education level: A systematic review of the literature. *Contemporary Educational Technology*, *15*(4), ep464. https://doi.org/10.30935/cedtech/13605
Jun, Byoungho. (2024). A study on the utilization of generative AI by university students: Focusing on ChatGPT. *Journal of Korea Society of Digital Industry and Information Management*, *20*(4), 59–68. https://doi.org/10.17662/ksdim.2024.20.4.059
Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günnemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., Stadler, M., Weller, J., Kuhn, J., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, *103*, 102274. https://doi.org/10.1016/j.lindif.2023.102274
Kurt, G., & Kurt, Y. (2024). Enhancing L2 writing skills: ChatGPT as an automated feedback tool. *Journal of Information Technology Education: Research*, *23*, Article 24. https://doi.org/10.28945/5370
Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press.
Lee, Lim-Jung, & Kim, Non-Joong. (2024). Using ChatGPT through the eyes of college students: Analyzing importance and satisfaction by major. *Journal of the Korean Academia-Industrial Cooperation Society*, *25*(3), 326–340. https://doi.org/10.5762/KAIS.2024.25.3.326
Lee, Yong-Whan. (2023). Analysis of college students' perception about generative artificial intelligence ChatGPT. *The Treatise on The Plastic Media*, *26*(4), 46–55. https://doi.org/10.35280/KOTPM.2023.26.4.6
Lin, X. (2025). A preliminary study investigating adult learners' perspectives of using ChatGPT to seek effective assignment feedback. *The Australian Educational Researcher*, *52*, 3393–3420. https://doi.org/10.1007/s13384-025-00856-y
Meniado, J. C., Huyen, D. T. T., Panyadilokpong, N., & Lertkomolwit, P. (2024). Using ChatGPT for second language writing: Experiences and perceptions of EFL learners in Thailand and Vietnam. *Computers and Education: Artificial Intelligence*, *7*, 100313. https://doi.org/10.1016/j.caeai.2024.100313
Oh, Hyun-Joo, & Hsieh, S. F. (2025). An analysis of ChatGPT-generated feedback on argumentative essays in Korean EFL classrooms. *Modern English Education*, *26*(1), 166–181. https://doi.org/10.18095/meeso.2025.26.1.166
Oh, Saenae, & Kim, Hyo-Jung. (2023). The statistical analysis of the relationship between university students' perception of using ChatGPT and their awareness of assignment plagiarism. *The Society of Hansung Language and Literature*, *50*, 253–281. https://doi.org/10.23114/hsemh.2023.50..253
Rhee, Jung-Uk, Kim, Hee-Ra, & Shin, Hye-Won. (2023). A study on college students' perceptions of ChatGPT. *Journal of Home Economics Education Research*, *35*(4), 1–12. https://doi.org/10.19031/jkheea.2023.12.35.4.1
Romero-Rodríguez, J. M., Ramírez-Montoya, M. S., Buenestado-Fernández, M., & Lara-Lara, F. (2023). Use of ChatGPT at university as a tool for complex thinking: Students' perceived usefulness. *Journal of New Approaches in Educational Research*, *12*(2), 323–339. https://doi.org/10.7821/naer.2023.7.1458
Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: Assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, *14*, 1260843. https://doi.org/10.3389/fpsyg.2023.1260843
Stevenson, M., & Phakiti, A. (2014). The effects of computer-generated feedback on the quality of writing. *Assessing Writing*, *19*, 51–65. https://doi.org/10.1016/j.asw.2013.11.007
Stevenson, M., & Phakiti, A. (2019). Automated feedback and second language writing. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 125–142). Cambridge University Press. https://doi.org/10.1017/9781108635547.009
Teng, M. F. (2024). A systematic review of ChatGPT for English as a foreign language writing: Opportunities, challenges, and

recommendations. *International Journal of TESOL Studies*, *6*(3), 36–57. https://doi.org/10.58304/ijts.20240304

Teng, M. F., & Ma, M. (2024). Assessing metacognition-based student feedback literacy for academic writing. *Assessing Writing*, *59*, 100811. https://doi.org/10.1016/j.asw.2024.100811

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Yoon, Ok-Han. (2023). The emergence of ChatGPT and exploration of the direction of liberal arts education. *Journal of the Korea Contents Association*, *23*(5), 86–96. https://doi.org/10.5392/JKCA.2023.23.05.086

Zarestky, J., Bigler, M., Brazile, M., Lopes, T., & Bangerth, W. (2022). Reflective writing supports metacognition and self-regulation in graduate computational science and engineering. *Computers and Education Open*, *3*, 100085. https://doi.org/10.1016/j.caeo.2022.100085

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

Zhu, M., & Wang, C. (2025). A systematic review of AI in language education: Current status and future implications. *Language Learning & Technology*, *29*(1), 1–29. https://doi.org/10.64152/10125/73606

Appendix A. Codebook for Reflective Essay Analysis (Themes, Sub-codes, Definitions, Inclusion Criteria, and Representative Excerpts)

Theme 1. AI as an Efficiency Tool for Learning and Teaching: AI is conceptualized as a practical, timesaving, or supportive tool that improves learning efficiency, access, and instructional workflow.

1.1. Instant Feedback and Error Correction
Definition: References to AI providing immediate feedback on grammar, vocabulary, pronunciation, or writing quality.
Inclusion: Grammarly, ChatGPT corrections, AI speaking feedback, real-time scaffolding.
Example: "By speaking with AI, we can not only gain confidence but also get corrected immediately when we make a mistake" (Essay #3).

1.2. Personalized or Self-paced Learning
Definition: References to AI adapting learning content, goals, or pace to individual learners.
Inclusion: Customized materials, leveled exercises, personalized vocabulary lists, AI tutoring.
Example: "AI can customize study plans or content based on the learner's level and needs, which can make learning more personalized" (Essay #10).

1.3. Teacher Workflow Efficiency
Definition: References to AI reducing teachers' workload or supporting lesson preparation and instructional management.
Inclusion: Generating materials, correcting essays, designing quizzes, automating repetitive tasks.
Example: "AI can reduce the workload of teachers and help increase classroom efficiency" (Essay #26).

1.4. Multimodal Resource Generation
Definition: References to AI being used to generate learning materials in various formats.
Inclusion: Canva, Padlet, TTS tools, sample dialogues, speaking prompts.
Example: "The materials will be made with Canva assisted by AI recommended function. Since Canva AI tools provide sound effects, templates, and design tools, teachers can create immersive PPT materials which catch students' attention" (Essay #36).

1.5. Access Beyond the Classroom
Definition: References to AI expanding learning opportunities beyond class time or physical space.
Inclusion: Anytime or anywhere learning, self-study support, practice at home.
Example: "Teachers have limited teaching time, but AI like ChatGPT is available 24/7. For instance, I want to study English, after finishing my own schedule including college lectures, assignments or some other things I have to do. Then, I wouldn't start to study English until late evening or even dawn when teachers are not available answering my questions" (Essay #3).

Theme 2. AI as a Source of Risk or Limitation: AI is framed as a problematic, unreliable, or potentially harmful force in learning.

2.1. Overreliance and Reduced Autonomy
Definition: References to excessive dependence on AI that may weaken learners' autonomy or self-directed learning skills.
Inclusion: Loss of autonomy, dependence on machine-generated answers.
Example: "Third, while AI is very helpful for English education, there are still some concerns about overreliance on technology" (Essay #30).

2.2. Creativity Loss
Definition: References to AI discouraging originality, independent idea generation, or creative thinking.
Inclusion: Formulaic AI output, diminished creativity, homogenized expression.
Example: "If learners rely too much on AI and misuse it to generate answers or complete assignments, they may lose opportunities to perform creativity or critical thinking skills" (Essay #38).

2.3. Hallucinations and Inaccuracies
Definition: References to AI providing false, misleading, or unnatural information.
Inclusion: Incorrect content, unnatural phrasing, misinterpretation of context.
Example: "Given that AI occasionally provides false information called hallucination, teachers' intervention is necessary in order to prevent fossilization of incorrect knowledge" (Essay #36).

2.4. Plagiarism and Academic Integrity
Definition: References to ethical concerns related to copying, unauthorized AI use, or unclear authorship.
Inclusion: Copy-and-paste practices, unfair evaluation, unclear authorship.
Example: "Many college students show concerns such as the risk of plagiarism and decline in learning ability" (Essay #8).

2.5. Data Privacy and Ethical Concerns
Definition: References to concerns about data collection, privacy, or misused personal information.
Inclusion: Ethical guidelines, security risks, unverified data sources.
Example: "Finally, ethical and privacy issues may arise when students' data are collected and stored by AI platforms" (Essay #39).

Theme 3. AI as a Catalyst for Pedagogical Reconfiguration: AI acts as a transformative force promoting rethinking of teacher/learner roles, assessment, and instructional design.

3.1. Redefined Teacher Roles
Definition: References to teachers' roles shifting from knowledge transmitters to facilitators, mentors, and evaluators.
Inclusion: Guidance, motivation, critical literacy instruction, feedback moderation.
Example: "In the era of AI-enhanced English education, teachers are not merely knowledge transmitters but learning facilitators" (Essay #26).

3.2. Redefined Learner Roles
Definition: References to learners being positioned as autonomous agents or co-designers of learning.
Inclusion: Student-centered learning, self-assessment using AI, active exploration.
Example: "Second, learners are no longer passive lesson takers but active learners and co-designers with their teachers" (Essay #29).

3.3. AI Literacy and Critical Use
Definition: References to the need for critical and responsible AI use.
Inclusion: Prompting skills, hallucination awareness, accuracy checks.
Example: "Teachers can also set classroom guidelines about the usage of AI to promote academic responsibility and honesty" (Essay #38).

3.4. Assessment Redesign and Fairness
Definition: References to the need for new evaluation or assessment methods due to AI's impact on authorship and fairness.
Inclusion: AI-supported scoring, double submission (original + AI version), authenticity checks.
Example: "Besides, to prevent copying or overuse of AI-generated content, teachers have to build a new standard of assessment" (Essay #25).

3.5. Assignment Design with AI Scaffolding
Definition: References to structured assignment workflows that incorporate AI as scaffolding.
Inclusion: AI-assisted outlining, drafting, speaking practice, step-by-step design.
Example: "First, students complete an AI-assisted assignment; second, they give a presentation about how they used AI; finally, teachers check whether students relied on AI responsibly" (Essay #18).

3.6. AI-enabled Tasks and Materials Design
Definition: References to the design of tasks, activities, or full lesson plans that integrate AI into communicative learning.
Inclusion: CBLT/CLT integration, project-based learning, AI-assisted speaking labs, Canva/Padlet tasks.
Example: "The convergence of two methods—CBLT and CLT—with AI platforms will be able to realize ideal language classroom where students communicate collaboratively and cooperate with a specific goal; completing a task in a space for interaction provided by AI" (Essay #36).

3.7. Human–AI Balance
Definition: References to maintaining an appropriate balance between AI use and human authority, interaction, or judgment.
Inclusion: Emotional support, cultural understanding, ethical judgment.
Example: "Teachers should maintain a balance between technology and human communication to lead learner-centered English education effectively" (Essay #26).

Theme 4. AI as a Vision for Future English Education: AI is envisioned as shaping the future of English education, with emphasis on anticipated changes and the conditions required for meaningful integration.

4.1. Future-oriented Predictions
Definition: References to long-term predictions about how AI may reshape English education.
Inclusion: Teacher replacement, curriculum evolution, societal impact.
Example: "If these tools become more realistic, AI will be able to sufficiently replace the role of a teacher" (Essay #22).

4.2. Conditions for Effective Integration
Definition: References to conditions required for ethical, safe, and pedagogically meaningful AI integration in English education.
Inclusion: Guidelines, AI-use rules, balanced integration.
Example: "Educators should not simply lean on AI for automation, but more thoughtfully integrate it to stimulate learners' capacity to reason critically while they self-direct their own learning" (Essay #33).