

Student experiences of ChatGPT-supported engagement, relational interaction, and confidence in higher education

Feride Öksüz Gül ^{a *} 

^a Istanbul Medeniyet University, Türkiye.

Suggested citation: Öksüz Gül, F. (2025). Student experiences of ChatGPT-supported engagement, relational interaction, and confidence in higher education. *Journal of Educational Technology and Online Learning*, 8(4), 441-459

Highlights

- The study explores how counseling undergraduates experienced ChatGPT as a peer-like presence, shaping relational interaction in a Professional English course.
- Findings reveal increased engagement and confidence in structured tasks, alongside risks of overreliance, illusion of mastery, and diminished agency.
- The research highlights ChatGPT's potential to support relational and student-centered pedagogies while underscoring the need for careful instructional framing.

Abstract

In the rapidly evolving landscape of higher education, the integration of AI tools like ChatGPT into classroom practices has raised critical pedagogical questions. This study examines how undergraduate students experience ChatGPT as a peer-like presence within a Professional English course. Drawing on focus group interview with four students who interacted with ChatGPT during course activities, the research employs a reflexive thematic analysis to investigate how learners construct meaning around this AI-supported experience. Findings indicate that students frequently interpreted ChatGPT's responses in relational terms, describing it as a supportive peer, group member, or teacher-like presence. Its immediate, non-judgmental feedback was seen to reduce anxiety, encourage participation, and scaffold experimentation with professional English. At the same time, role fluidity created moments of uncertainty and raised concerns about overreliance, diminished ownership, and “illusion of mastery.” Engagement was fostered through performative and collaborative tasks such as role-play and debates, which positioned ChatGPT as a co-actor rather than a mere tool. Confidence gains were strongest in structured tasks like vocabulary building and translation, while trust weakened in interpretive or research-oriented domains, underscoring the importance of pedagogical framing. These findings suggest that generative AI can provide pedagogical value beyond functionality, supporting relational meaning-making, scaffolding student confidence, and sustaining engagement when embedded in guided, collaborative practices. The study highlights the need for critical design of AI-integrated learning environments that balance innovation with reflective awareness of agency, trust, and ethical use.

Article Info: Research Article

Keywords: *ChatGPT, student engagement, relational interaction, confidence, higher education teaching and learning.*

1. Introduction

In recent years, generative artificial intelligence (AI) tools such as ChatGPT have moved rapidly from experimental novelty to an active presence in higher education classrooms. Early discourse largely emphasized defining the technology and mapping its technical affordances (Zawacki-Richter, Marín, Bond & Gouverneur, 2019; Bozkurt et al., 2023), but scholarly attention is increasingly turning toward its pedagogical integration, particularly in teaching and learning contexts (Kasneci et al., 2023; Ma, 2025).

* Corresponding author. Istanbul Medeniyet University, Türkiye.

e-mail address: ferideoksz@gmail.com

This study was partly presented as a proceeding at the 5th International Conference on Educational Technology and Online Learning held between 26-29 August 2025.

Several recent reviews have attempted to capture the emerging role of ChatGPT and other generative AI tools in higher education, though their scope and depth vary. Farrelly and Baker (2023) offered a critical but non-systematic overview, framing ChatGPT as potentially more disruptive to higher education than prior technological shifts. Bannister Urbieto and Peñalver (2023) mapped a wide range of applications and areas, from language instruction and student learning to assessment, research, and academic integrity. Dempere, Modugu, Hesham and Ramasamy (2023) outlined both the opportunities and risks of integrating ChatGPT into higher education, while Ansari, Ahmad and Bhutta (2024) provided a global mapping of applications, highlighting the field's methodological and disciplinary breadth.

While several recent studies illustrate the potential of ChatGPT and other generative AI tools in higher education such as personalized support for international students (Wang et al., 2023), targeted gains in ESL speaking skills (Muniandy & Selvanathan, 2024), explorations of benefits and risks in language learning (Nugroho, Putro & Syamsi, 2023), and item generation for reading comprehension assessment (Shin & Lee, 2023), these studies focus on specific skills or technical functions. What remains underexplored are in-situ classroom studies that analyze how ChatGPT is embedded into ongoing teaching, how students interpret its role within peer and teacher dynamics, and how pedagogical framing mediates their engagement and confidence.

Addressing this gap, the present study examines undergraduate students' experiences of working with ChatGPT as a peer-like collaborator in a Professional English course. Rather than focusing on isolated skill outcomes, it investigates how students engage with AI-supported tasks in situ, how they interpret and assign relational or pedagogical meaning to ChatGPT, and how such interactions influence their engagement and confidence in using professional English.

This focus is significant for at least three reasons. First, as generative AI tools become part of everyday classroom practice, there is a growing need for context-rich accounts of how students themselves position ChatGPT within the relational fabric of a course. By foregrounding relational interaction, this study aims to clarify how ChatGPT may be framed as a tool, a peer, or a teacher-like authority, and what such framings can mean for students' sense of agency and ownership of learning. Second, by bringing together the lenses of relational interaction, student engagement, and confidence in professional English within a single course-based inquiry, the study offers a coherent perspective on how AI-supported activities may influence both participation and confidence in discipline-specific communication. In particular, it highlights the importance of considering how task structures and instructor framing might channel ChatGPT use toward rehearsal, collaboration, and reflective engagement while keeping questions of responsibility and critical judgment in view. Third, by situating ChatGPT within a Professional English course in higher education, the study draws attention to how AI-mediated learning intersects with professional identity formation and discipline-specific English, offering a basis for reflection among instructors and program designers across practice-oriented fields who must balance innovation with ethical and responsible use of AI. These considerations position the study to speak not only to classroom practice but also to broader debates in higher education teaching and learning about how generative AI can be integrated into student-centered, pedagogically grounded course design.

To achieve this aim, the following research questions were posed:

1. How do Psychological Counseling and Guidance students describe their experiences of interacting with ChatGPT during classroom activities in the Professional English course?
2. How do students interpret relational interactions with ChatGPT in their learning process?
3. How does the use of ChatGPT shape students' engagement with professional English tasks?
4. How does the use of ChatGPT shape students' confidence in using professional English?

2. Literature

2.1. Relational Interaction

Relational interaction with technology has been examined through social presence theory, which shows that perceiving an interlocutor as “real” sustains trust, satisfaction, and persistence in online learning (Lee, Jung, Kim & Kim, 2006). Early online learning research already demonstrated that perceived social presence predicts satisfaction and interaction quality (Gunawardena, 1995; Cui, Lockee & Meng, 2013). A much recent meta-analysis confirms that social presence is a strong predictor of both satisfaction and perceived learning outcomes across diverse online and blended learning environments (Richardson, Maeda, Lv & Caskurlu, 2017). Recent research also indicates that conversational agents and generative AI extend these dynamics: rather than functioning solely as tools, they are often positioned as peer-like collaborators or relational partners, reinforcing participation and emotional connection (Hew, Huang, Du & Jia, 2023; Huang & Chang, 2024; Wang et al., 2025). Bozkurt et al. (2023) further illustrate this ambiguity by showing how ChatGPT can be framed both as a simple tool, like a calculator or GPS, and as a potential teacher-like actor. In doing so, they underline how generative AI unsettles established role boundaries in education.

Learners attribute human qualities to AI when it provides communicative or affective support, producing intimacy, trust, and role attribution (Jin, 2025; Sonderegger & Seufert, 2022). Experimental evidence shows that both anthropomorphic design and assigned social role (e.g., mentor vs. servant) significantly influence users’ attachment and disclosure tendencies, with social presence mediating these effects (Zhang & Rau, 2023). Yet such relational framing raises concerns of agency transfer. When students grant authority to AI, responsibility for learning can shift from human to system, encouraging cognitive offloading and reduced reflection (Fan et al., 2025; Zhai, Wibowo & Li, 2024; Karamuk, 2025).

Relational qualities also intersect with emotional safety. Immediate and non-judgmental responses from AI can lower anxiety and foster belonging, conditions long recognized as crucial for engagement in digital classrooms (Richardson et al., 2017; Hew et al., 2023). Social presence depends not only on media richness but also on contextual and individual factors, underscoring the need for nuanced frameworks when applying it to AI-mediated learning (Oh, Bailenson & Welch, 2018). Overall, relational interaction remains an underexplored but critical dimension of AI-mediated learning, requiring frameworks that capture not only its instrumental benefits but also its socio-affective and agency-related implications.

2.2. Student Engagement

Student engagement is increasingly understood as a complex, multidimensional psycho-social process rooted in students’ investment of energy in a course (Fredricks, Blumenfeld & Paris, 2004; Heilporn, Lakhal, & Bélisle, 2021; Payne, 2019, Reeve & Tseng, 2011). Beyond simple indicators such as attendance or task completion, engagement encompasses what students do (behavioral participation), how they feel (emotional connectedness and sense of belonging), and how they think (cognitive effort, self-regulation, and strategic processing). Recent models also include motivational and relational components, highlighting intrinsic and extrinsic motivation, functional connectedness to learning opportunities, and emotional connectedness or “belonging” to the course as central to how students position themselves in relation to their studies (Heilporn et al., 2021). Complementing these dimensions, Payne (2019) conceptualizes engagement not as a simple engaged–disengaged binary but as a continuum, ranging from students who are fully engaged and committed to their course, through those who are disengaged from particular modules or differently engaged with the teaching process, to those who are largely disconnected from the course as a whole. In this study, student engagement is approached as the interplay of these behavioral, emotional, cognitive, and motivational–relational dimensions as students participate in ChatGPT-supported activities in a Professional English course.

In technology-mediated learning environments, questions also arise about how these dimensions are operationalized and observed. Evidence reviews show that behavioral indicators such as log-ins, clicks, or posts are often emphasized, while emotional and cognitive aspects, which are central to persistence and deep learning, remain underexplored (Henrie et al., 2015; Bond et al., 2020).

Recent syntheses of generative AI highlight a similar imbalance. A meta-analytic study report medium overall effects of ChatGPT on engagement, with the strongest outcomes for cognitive dimensions through personalized tutoring, technical assistance, and collaborative content generation; behavioral and emotional effects appear more limited or context dependent (Heung & Chiu, 2025). Complementing this, a systematic review of 72 empirical studies concluded that while evidence for behavioral engagement is robust yet narrow findings for emotional and cognitive engagement are mixed or underdeveloped, underscoring gaps in areas such as social interaction, study habits, and self-regulation that future research needs to address (Lo, Hew & jong, 2024). Multi-country survey evidence from the eyes of educators indicates cautious optimism among instructors, who see potential for personalization but remain concerned about reliability, trust, and integrity (Felipec et al., 2024).

Course-level studies provide more concrete illustrations. In second language (L2) writing contexts, ChatGPT supported behavioral practices such as information seeking, feedback, and rehearsal; stimulated cognitive noticing, planning, and regulation; and encouraged emotional states of curiosity and confidence, while also surfacing risks of overreliance and episodic distrust (Meşe, Kuru & Atay, 2025). Quasi-experimental evidence further shows significant gains in all three dimensions of engagement when ChatGPT was used for brainstorming and feedback compared to control groups (Anjarani, Furqon & Rakhmawati, 2024). Engagement with AI-mediated feedback also extends into metacognition: students must learn to plan, monitor, and evaluate their prompting and uptake, which expands “feedback literacy” to include prompt design, evaluative judgment, reflexivity, and ethical decision-making (Zhan & Yan, 2025).

2.3. Confidence and Professional English

Generative AI can bolster learners’ confidence by offering immediate, non-judgmental feedback and fluent models of language use, which lowers apprehension and supports risk-taking in L2 tasks (Ma, 2025; Guo & Lee, 2023). Evidence is mixed on whether such confidence translates into genuine progress without pedagogical scaffolds. Learners often value AI’s convenience yet report weaker ownership and perceived progress compared to teacher-mediated work (Ahmed, 2023), and overreliance may erode evaluative judgment and self-regulation (You & Zhang, 2025). Classroom studies similarly show that purposeful use of ChatGPT increases engagement, collaborative talk, and learner autonomy, while student skepticism helps maintain human oversight (Kostka & Toncelli, 2023). Longitudinal evidence further demonstrates that structured ChatGPT training can strengthen confidence, foster metacognitive awareness, and sustain real-world use beyond formal instruction (Van Horn, 2024).

In professionalized language use, AI also intersects with identity. Pre-service teachers, for example, report feeling more competent in profession-specific English when supported by ChatGPT, even though reliance on standardized outputs risks entrenching hegemonic language norms (You & Zhang, 2025). Position papers emphasize the promise and unresolved challenges of large language models for discipline-specific communication (Kasneji et al., 2023), while experimental work shows that embedding authentic prompts, reference verification, and guided reflection in a ChatGPT-based training mode can enhance professional self-worth and confidence in clinical contexts (Chang & Hwang, 2025). Complementing this, studies of argumentative writing illustrate how ChatGPT scaffolds both structural and dialogical aspects of complex academic genres, acting as a peer-like partner in planning, revision, and reflection (Su, Lin & Lai, 2023).

AI’s counseling-adjacent affordances (e.g., tailored career guidance, accessible well-being support) connect directly to professional role preparation in guidance and counseling programs. Reviews highlight how AI can provide immediate and empathetic assistance, help identify early signs of distress, and personalize advice for career development, while also noting that these functions must remain complementary to human expertise (Ma, 2025; Alqahtani et al., 2023). Importantly, Alqahtani et al. (2023) also stress AI’s potential in aligning curricula with labor market needs, suggesting that professional English learning with AI should be situated not only in classroom communication but also within broader trajectories of employability and student well-being.

3. Methodology

3.1. Research Design

This study adopts a basic qualitative research design (Merriam & Tisdell, 2015) to explore how senior undergraduate students in a Professional English course in the Psychological Counseling and Guidance department make sense of working with ChatGPT as a peer-like presence. In a basic qualitative study, the researcher is primarily concerned with understanding how people interpret their experiences, how they construct their worlds, and what meanings they attribute to particular activities or phenomena (Merriam & Tisdell, 2015). Drawing on a constructivist and interpretivist paradigm, knowledge is understood not as pre-existing and waiting to be discovered, but as constructed by participants as they engage with the learning environment and with each other (Crotty, 1998; Merriam & Tisdell, 2015). In this research, the phenomenon of interest is students' lived experience of ChatGPT-supported activities, including how they understand relational interaction with the tool, how they describe their own engagement, and how they narrate changes in their confidence in Professional English. The design does not aim to generate formal theory (as in grounded theory), to capture the essence of a phenomenon (as in phenomenology), or to map a whole culture (as in ethnography); rather, its purpose is to develop rich, thematic accounts of meaning-making within a specific course context (Merriam & Tisdell, 2015). Positioned within a relational and reflexive epistemology (Smith, 2012), the study treats understandings as co-constructed between students and the instructor-researcher, and my dual role is explicitly acknowledged as part of the interpretive lens that shaped both the design and the subsequent analysis.

3.2. Data Generation Process

This study employed a semi-structured online focus group interview as its primary method of data generation. The interview protocol was developed through a review of relevant literature and refined with feedback from two experts (one in educational technology and one in psychological counseling and guidance) to enhance its credibility, relevance, and disciplinary appropriateness. The decision to conduct the interview online and synchronously was made based on both contextual and pedagogical considerations. As the interviews were scheduled after the completion of the course, students had already received their final grades, and many had left the university for their hometowns or job placements. Consequently, an online format was the most feasible and ethically responsible option. Existing research suggests that online focus group interviews can provide a more comfortable and less intimidating space for participants to articulate their experiences, particularly when discussing technology-mediated learning (Akar & Akçay, 2024). The online setting allowed participants to join from their own environments, which may have enhanced their sense of psychological safety and reflection. This aligns with broader findings in qualitative research pointing to the benefits of online interviews, including increased flexibility, accessibility, and openness (Archibald, Ambagtsheer, Casey & Lawless, 2019; Gray, Wong-Wylie, Rempel & Cook, 2020). The interview was conducted via Zoom and lasted approximately 68 minutes. With participants' consent, the session was audio-recorded and supported by visual prompts such as screenshots of ChatGPT interactions, Padlet tasks, and vocabulary activities used in class.

3.3. Study Group

Participants were recruited from 32 senior students enrolled in a Professional English course offered within the Psychological Counseling and Guidance department. This cohort was purposively selected because they were nearing graduation, had completed a full semester of structured ChatGPT-supported activities, and were preparing to enter counselling practice, where issues of communication, relational work, and responsible AI use are particularly salient. The course, taught by the researcher, incorporated ChatGPT as a supplementary peer-like tool to support English learning and professional communication tasks. Participation in the study was entirely voluntary and participants were invited to study after the course evaluation and graduation. After the final course evaluation and graduation procedures were completed, all 32 students were invited to participate. Four students volunteered, forming a small, information-rich sample consistent with the basic qualitative design. At the same time, the small sample necessarily limits the breadth and transferability of the findings and is acknowledged as a methodological limitation.

Table 1.

Participant Demographics and AI Use

Pseudonym	Age	Gender	English Proficiency	AI Tools Used	Primary Uses
Green	22	Female	A2	ChatGPT, Gemini	Story writing; seeking ideas when stuck; reassurance and validation needs
Yellow	22	Female	A1	ChatGPT	Idea generation; casual emotional conversations; fulfilling need for dialogue
Blue	21	Male	B2	ChatGPT, Grok	Social media content creation; image generation; multipurpose use
Red	23	Male	A1	ChatGPT, Copilot, Gemini	Academic and educational purposes

Table 1 presents the demographic profiles and AI use patterns of the four participants, identified with color-based pseudonyms to preserve anonymity. English proficiency levels (ranging from A1 to B2) were determined through a placement test administered by the course instructor at the beginning of the semester. While Green and Yellow (both female, age 22) primarily used ChatGPT for creative writing, idea generation, and emotional support, Blue (male, age 21) reported more advanced proficiency and employed multiple tools for social media content and multimodal tasks. Red (male, age 23) positioned AI mainly for academic and educational purposes.

3.4. Lesson Design Context

Professional English course was organized in two-week instructional cycles combining terminology development with academic text engagement. Each cycle began with targeted vocabulary practice, supported by ChatGPT-assisted dialogue and role-play activities, and continued with collaborative reading of counseling-related academic articles. For instance, in Week 1 students explored counseling terminology through translation, Frayer models, and ChatGPT-generated dialogues enacted in groups. In Week 2 they critically read an academic article, using ChatGPT to clarify vocabulary, compare interpretations, and generate counter-arguments for class debate. This dual structure provided the pedagogical foundation for students' interactions with ChatGPT, ensuring that its use was embedded in structured tasks rather than isolated exercises.

3.5. Data Analysis

The qualitative data were analyzed using reflexive thematic analysis (Braun & Clarke, 2006, 2019). Following the six-phase framework, I first immersed myself in the data through repeated reading and active note-taking. I adopted a theoretically informed yet interpretive stance, guided by sensitizing concepts drawn from the study's three lenses (*relational interaction*, *student engagement*, and *confidence in professional English*) while remaining open to inductively emerging insights (Braun & Clarke, 2013; Clarke & Braun, 2018; Byrne, 2022). Both semantic and latent codes were generated to capture explicit expressions as well as underlying relational meanings in student accounts. Codes were developed iteratively and reflexively, without a predefined codebook, consistent with the principles of reflexive thematic analysis.

These codes were then organized into clusters that converged into sub-themes. Sub-themes were not predefined but emerged from patterns in the data, representing shared meanings across coded extracts. Each set of sub-themes was then grouped under one of the three broader themes, corresponding to the conceptual lenses of the study (See Figure 1).

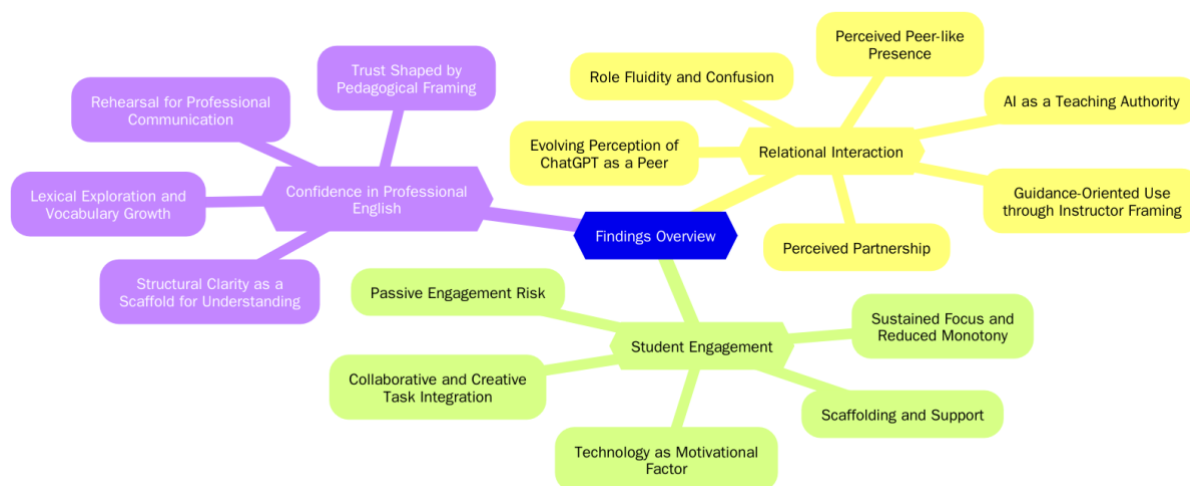


Fig. 1. Overview of sub-themes and themes

3.6. Researcher role and qualitative quality

As the researcher, I was also the course instructor, and this dual role carried both advantages and challenges for the study. On the one hand, sustained engagement with the course and with students' learning processes provided rich contextual understanding and helped me design meaningful, authentic prompts for the focus group. On the other hand, my position as the instructor may raise concerns about power dynamics and the possibility that students might feel constrained in voicing criticism.

In addressing these issues, I drew on Roller and Lavrakas's (2015) Total Quality Framework, focusing in particular on credibility, analyzability, and transparency as key dimensions of qualitative quality. To support credibility, students were clearly informed that participation was entirely voluntary, unrelated to their grades, and that they could withdraw at any time without consequences. The focus group was also scheduled after the main assessment tasks were completed to weaken perceived links with evaluation. For analyzability, I kept reflexive analytic memos on my assumptions and reactions and systematically documented coding iterations and theme development to maintain a coherent analytic trail. Transparency was strengthened by providing thick description of the research process, ChatGPT-supported activities, and focus group procedures, enabling readers to judge the transferability and practical usefulness of the findings for their own AI-supported teaching contexts.

3.7. AI Use

Throughout the research, I used ChatGPT for language-related support (such as polishing English expression, checking clarity, and translation) and for generating draft diagrams to visualize the thematic structure. These functions were strictly ancillary. Empirical materials including transcripts, codes, and themes were generated and interpreted by me, and participant quotations were drawn from the original data rather than produced or substantively modified by AI. By clearly delimiting and reporting the scope of AI use, I aim to make the role of ChatGPT in this qualitative study ethically explicit and open to readers' scrutiny. In the course itself, I also addressed responsible use of AI with students, explicitly discussing ethically problematic practices such as delegating graded tasks to ChatGPT, fabricating sources, or copying AI-generated text without attribution. I clarified that AI could be used as a support for idea generation, language rehearsal, and reflection rather than as a substitute for their own academic work.

4. Findings

4.1. Relational Interaction

Across student narratives, the shifting nature of relational engagement with ChatGPT was notable, revealing how students moved beyond viewing it as a mere tool and began relating to it as a peer, partner, or even a teacher-like presence. This theme comprises six interrelated sub-themes: Evolving Perception of

ChatGPT as a Peer, Perceived Peer-like Presence, Perceived Partnership, AI as a Teaching Authority, Role Fluidity and Confusion, and Guidance-Oriented Use through Instructor Framing.

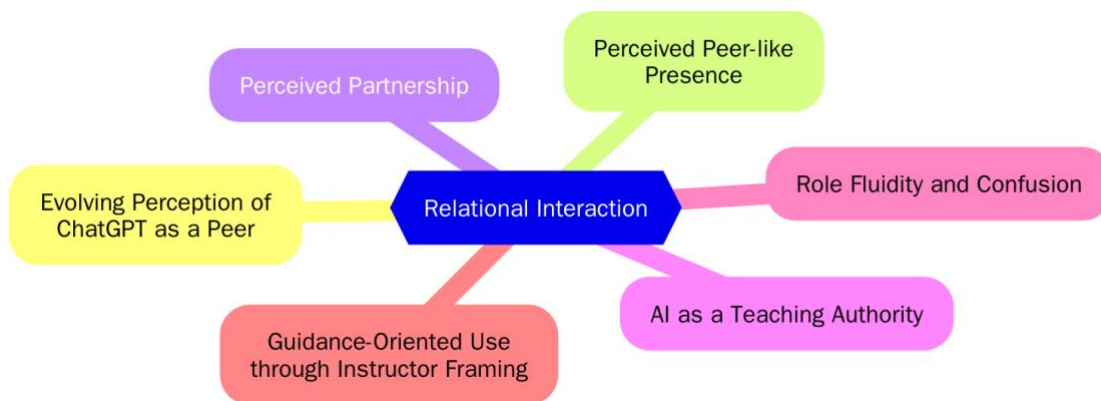


Fig. 1. Relational Interaction

4.1.1. Evolving Perception of ChatGPT as a Peer

Students' interaction with ChatGPT was observed to develop in increasingly interpersonal ways over time. Rather than remaining a static tool, the AI became something students could relate to within the flow of classroom engagement. One participant, Green, offered a particularly rich account of how her perception of ChatGPT evolved throughout the course. Initially, she described thinking of it merely as "just AI," a neutral tool without social presence. But this perception gradually shifted. At some point, she began imagining it as a group member "like the sixth person in a five-person team." Framing ChatGPT in this way, she explained, made the class feel more enjoyable, even playful. This shift was not spontaneous but rather prompted by how the instructor had introduced the tool as a peer. "You had said something like 'AI is your group mate.' I hadn't thought of it that way before, but I really liked that idea" (Green). When the instructor was unable to respond immediately to student questions, ChatGPT offered a kind of conversational continuity: "Sometimes we couldn't ask you our all questions, but Chat would respond. It made me feel like someone was listening to my thoughts" (Green).

4.1.2. Perceived Peer-like Presence

Within collaborative settings, students described ChatGPT as a peer-like presence, a helpful groupmate who provided support during group tasks and classroom challenges. It was not just a background tool, but someone imagined sitting "next to them," helping them keep up or contribute when others could not. "There were parts I didn't understand, but it felt like a classmate sitting next to me who helped me catch up" (Red). Another noted how, when the group had no clear direction, ChatGPT stepped in: "When no one had any ideas, ChatGPT could still suggest something. We could think of it as someone who gives ideas when we're stuck" (Yellow). In some cases, the AI was imagined as the most capable member of the team as someone who could synthesize everyone's input. "It felt like the most experienced person in the group...Like a leader. You give it the parts, and it puts everything together" (Red).

4.1.3. Perceived Partnership

Outside structured tasks, students described a personalized form of interaction with ChatGPT that blended cognitive support with emotional reassurance. It became a quiet presence they could rely on, someone to ask personalized questions and receive adaptive responses from. "We carry it in our pocket like a joker," Green remarked, "It helps protect our confidence in class". Blue similarly described it as a kind of consultant or external perspective: "It wasn't a teacher exactly, but it felt like someone I could ask things, like a different brain or point of view" (Blue). The AI's adaptability was central to this perception.

Beyond cognitive assistance, this partnership carried a strong affective dimension. In moments of solitude or stress, ChatGPT's presence served as an anchor: "Sometimes my groupmates didn't come to class, and I was alone, but actually, I wasn't. ChatGPT was there" (Green). Similarly, Yellow described its human-like responsiveness and conversational rhythm: "Sometimes I feel like a person has translated it... I understand it better that way" (Yellow).

4.1.4. AI as a Teaching Authority

While students sometimes saw ChatGPT as a peer-like presence or a partner, at other times they perceived it more explicitly as a teacher. "It was a teacher-student relationship. I asked questions and got answers. I kept asking for more explanation, and it kept providing them. That's what our dynamic was" (Red). Yellow stated this sentiment: "It felt more like a teacher than anything else, something that helped me understand things" (Yellow). These interpretations were not necessarily contradictory. Instead, they reflected the flexibility with which students navigated relational roles. They sometimes expect guidance; other times they expect collaboration.

4.1.5. Role Fluidity and Confusion

As students engaged more deeply with ChatGPT, their perception of its role in the learning process began to shift and sometimes blur. What began as a supportive tool occasionally assumed a more dominant function, prompting students to question their own place in the learning dynamic. This ambiguity occasionally led to discomfort. At times, it evoked discomfort or a worry about whether they were truly learning. "Sometimes I felt like I wasn't doing enough myself...It was doing what I was supposed to do, so who am I in this process?" (Yellow). Blue similarly articulated unease: "Sometimes I felt like I was taking shortcuts, like it was doing the thinking for me". This led to what he described as an "illusion of mastery" a feeling of competence that wasn't necessarily earned through understanding. Such reflections reveal how quickly a relational partner can become a replacement and how this shift raises complex questions about learning ownership, authorship, and educational integrity.

4.1.6. Guidance-Oriented Use through Instructor Framing

As students' perceptions of ChatGPT evolved and shifted throughout the course, one recurring influence stood out: the instructor's framing of how and why to use the tool. This guidance did not simply shape what students did with AI, but how they understood its role in their learning process. Rather than positioning ChatGPT as a shortcut to answers, the instructor encouraged students to use it as a scaffold for developing strategies, exploring alternatives, and reflecting on their thinking.

This reframing appeared to shift how some students related to the tool. One participant, Yellow, recalled a moment when she was prompted to ask ChatGPT not what the answer was, but how she could learn or approach the topic differently. "You told us to ask it how we should learn something, not just what the answer was. That changed how I used it and made me feel more comfortable". The distinction between using AI to think versus using AI to replace thinking became a turning point for her. This kind of pedagogical mediation offered a metacognitive layer that helped students maintain a sense of learning ownership.

4.2. Student Engagement

In the context of this course, students repeatedly highlighted how the integration of ChatGPT into classroom activities shaped their motivation, participation, and emotional investment in learning. In this theme, five interwoven sub-themes capturing both the enabling and constraining aspects of AI-supported engagement has emerged: *Technology as Motivational Factor*, *Passive Engagement Risk*, *Scaffolding and Support*, *Collaborative and Creative Task Integration*, and *Sustained Focus and Reduced Monotony*.

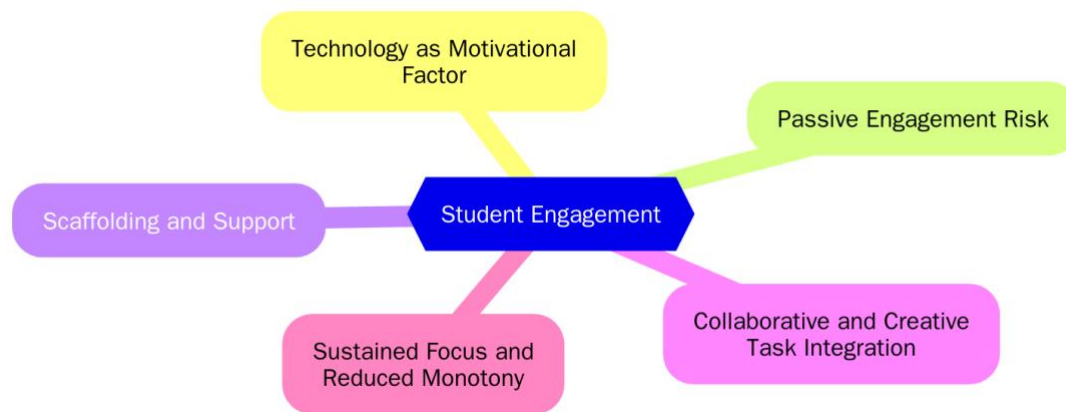


Fig. 2. Student Engagement

4.2.1. Technology as Motivational Factor

For the focus group participants, the presence of AI in class appeared to increase both their motivation and the perceived relevance of course activities. This was exemplified in Blue's remark: "We're already children of the tech age, so using this technology in class pulls us in more". The perceived alignment between their digital habits and the course design made participation feel more natural. Green noted, "Since we were already using it for class-related tasks, it made things easier and drew us into the lesson". The lifting of typical restrictions also made a difference: "In other classes, phones are banned, so we can't always engage. But here we were allowed to use it, and that made the course more enjoyable" (Blue). Just having the tool available also gave some participants a sense of readiness and direction.

4.2.2. Passive Engagement Risk

For the focus group participants, the motivational and practical benefits of AI were accompanied by concerns about over-reliance. "If it's used too much, I think it makes people lazy," Blue remarked. "It reduces our ability to think for ourselves". Ethical concerns were particularly pronounced in practice-based fields like counseling. "In questions like, 'What would you do for a client?' students shouldn't be getting answers from AI. It weakens both thinking and responsibility" (Red). Such reflections pointed to a broader worry about the erosion of learning ownership, where AI could take over cognitive processes that students felt they should be developing themselves. As Green put it, clear parameters were essential: "Only certain uses of chat should be allowed and the instructor should decide which. Otherwise, students might start using it in ways that replace critical thinking".

4.2.3. Scaffolding and Support

This sub-theme reflects how participants used ChatGPT not only to access information but to actively rehearse and embody language use in ways that made learning more concrete. The tool served as a scaffold that bridged abstract content and lived classroom experience, enabling students to enact, test, and refine language in action. Participants noted that ChatGPT helped them engage in structured rehearsal of academic language. Green recalled: "In our lesson, we used a few key words to create mini skits. It became a fun way to work with vocabulary" (Green). One participant described how this process extended beyond vocabulary into sentence-level clarity: "I would ask it to explain why the wrong answers couldn't fit, and it really helped me understand" (Red). For these students, AI-mediated activities allowed theory to be "tried on" in a safe, performative space before applying it in more formal or professional settings.

4.2.4. Collaborative and Creative Task Integration

Participants highlighted ways AI could be embedded into collaborative, performance-based activities that extended beyond language rehearsal into playful, competitive, or experimental classroom formats. “In our school debate, the opposing side was Chat. I’d love to see something like that in our lessons too, seeing how human thought competes with AI would be interesting” (Green). Another suggested using it for role-based simulations: “For example, I could be the counselor, and you could be the client with anxiety disorder. You tell me your problem, and I play the counselor. We could use ChatGPT to embody this other person” (Yellow). Such activities position ChatGPT as a co-creator in group work, not simply a source of answers, and encouraged students to respond critically and creatively to its output.

4.2.5. Sustained Focus and Reduced Monotony

Within the focus group, some participants described how working with ChatGPT created a sense of continuous momentum during class. “Being in constant activity, always doing something, always in motion, helped me maintain my focus and prevented my connection with the lesson from breaking” (Red). This sustained rhythm was not incidental; it was reinforced by the course design, which integrated vocabulary learning into role-play and dialogue-based tasks supported by ChatGPT. For these students, the alternation between human and AI contributions kept the pace lively, reduced monotony, and supported emotional regulation throughout the lesson.

4.3. Confidence in Professional English

Participants described a growing sense of confidence in using professional English when supported by ChatGPT. The following four interrelated sub-themes (See Figure 3) illustrate how confidence was constructed: *Structural Clarity as a Scaffold for Understanding*, *Lexical Exploration and Vocabulary Growth*, *Trust Shaped by Pedagogical Framing*, and *Rehearsal for Professional Communication*.



Fig. 3. Confidence in Professional English

4.3.1. Structural Clarity as a Scaffold for Understanding

Within the focus group, participants highlighted that ChatGPT’s value was not limited to providing answers, but often lay in its ability to make the internal structure of language visible. In a course context that required students to navigate unfamiliar professional terminology and complex sentence patterns, this structural clarity helped them break down and reconstruct meaning with greater precision. Some students emphasized the way ChatGPT helped them visualize sentence structure and syntactic groupings. “It kept together syntactic chunks that shouldn’t be separated,” said Blue, pointing to the way the tool enhanced their ability to grasp the grammatical and semantic coherence of a sentence. Another added, “When I read its explanation, it really settled in my mind” (Red), highlighting a deeper internalization supported by linguistic clarity.

4.3.2. Lexical Exploration and Vocabulary Growth

Within the focus group, participants described using ChatGPT not just to check meaning, but to actively explore and expand their professional vocabulary. In a course that required engagement with domain-specific terminology, the AI became a tool for tailoring vocabulary to different levels of difficulty and for experimenting with lexical variation. “I would say, ‘Give me A1 or B2 words related to this topic,’ and it would list them. That helped me find the right difficulty level to work with” (Green). This experimentation contributed to a stronger sense of lexical control and readiness to engage with disciplinary texts. As one student reflected, “Before taking this course, I didn’t know even the basic English equivalents of concepts in guidance and counseling. Now... I can at least recognize words and grasp some parts” (Red).

4.3.3. Trust Shaped by Pedagogical Framing

Within the focus group, trust in ChatGPT was closely linked to the clarity of task boundaries and the instructor’s framing of its role. Participants suggested that when activities had well-defined goals such as translation, vocabulary development, or structured explanation, they could rely on the AI’s output with confidence. “In the context of our course, where expectations were clearly set... I could trust it. But when I used it for analyzing SPSS outputs for other course, it made serious errors. That experience made me lose confidence in using it for research” (Yellow). Rather than prompting outright rejection, such moments fostered a more critical awareness of when and how AI could be a reliable partner in the learning process.

4.3.4. Rehearsal for Professional Communication

Participants described envisioning ways to use ChatGPT that extended beyond academic tasks, positioning it as an interactive partner for simulating professional roles. In these imagined scenarios, AI served as a stand-in for clients, students, or colleagues, creating opportunities to rehearse language use and decision-making in realistic, context-rich situations. “You could be the counselor, and let Chat play the anxious client. It could really help us practice” (Blue). Another proposed, “I’d like to teach a topic and have Chat play the class, maybe even ask me questions” (Yellow). Such reflections illustrate a form of confidence rooted not only in linguistic competence, but in the ability to envision AI as a tool for preparing to operate in professional environments.

5. Discussion

The findings reveal that students positioned ChatGPT as more than a tool, describing it as a peer(-like), partner, or teacher-like presence. Research on social presence in online courses highlights how relational qualities enhance engagement and satisfaction (Richardson et al., 2017). Students’ sense of having “a sixth group member” or a “classmate next to me” mirrors prior evidence that dialogic AI can reduce isolation and sustain participation and trust through a perceived sense of social presence (Hew et al., 2023; Huang & Chang, 2024; Wang et al., 2025). In this context, some students came to view ChatGPT not only as a cognitive resource but also as an affective anchor that helped them stay engaged, particularly when peers or the instructor were not immediately available.

Building on this, students’ perception of ChatGPT as an adaptable partner aligns with findings that AI interactions can foster affective intimacy, cognitive competence, and social flow (Jin, 2025) as well as personalized, needs-based learning opportunities (Sonderegger & Seufert, 2022). These relational dynamics suggest that instructors should deliberately consider relational aspects of AI when designing learning activities. Still, some participants also attributed teacher-like authority to ChatGPT, treating AI feedback as equivalent to human instruction. In addition, Li et al. (2025) found that college students demonstrated significantly higher levels of emotional and agentic engagement when an instructor was present compared to when only ChatGPT mediated the interaction, underscoring the enduring role of human presence.

Much of the emerging literature on AI in higher education conceptualizes role change primarily on the instructor side, focusing on lecturers as orchestrators, facilitators, or designers of AI-supported learning (Lee et al., 2024; Farazouli, Cerratto Pargman, Bolander Laksov & McGrath, 2025) rather than on students’ shifting positions. In this study’s data, however, role fluidity surfaced sharply in students’ own accounts, as they positioned ChatGPT as peer, partner, and quasi-teacher. The participants were worried that the AI was doing what they were supposed to do. This student-side role fluidity is not only affective but epistemic,

because it reshapes how effort, agency, and responsibility for learning are distributed in AI-mediated classrooms.

Role fluidity experienced as “illusion of mastery” and concerns about diminished agency align with evidence that AI-supported work can trigger cognitive offloading and even “metacognitive laziness,” reducing critical engagement despite short-term performance gains (Karamuk, 2025; Zhai et al., 2024). Findings display that instructor framing proved critical in mitigating these risks when students were encouraged to ask, “how to learn” rather than “what the answer is,” they described stronger agency and reflection. However, this qualitative insight does not in itself demonstrate changes in learning performance or agency. Fan et al.’s (2024) experimental study shows that while AI quickly generated high-quality output, it did not significantly enhance students’ foundational knowledge or their ability to transfer that knowledge to new contexts. In addition, this study’s findings on self-regulated knowledge suggest that learners in the ChatGPT (AI) group were more inclined to rely on technology, potentially triggering metacognitive laziness by bypassing critical self-regulation processes. Kong and Yang’s (2025) human-centered learning and teaching framework similarly conceptualizes generative AI as a partner that should strengthen, rather than replace, students’ self-regulated learning cycles across forethought, performance, and reflection. Read through this lens, role fluidity becomes problematic when students increasingly treat AI as a stand-in rather than a collaborator. The “illusion of mastery” reported by the participants signals a breakdown in SRL, in which AI is allowed to carry the task while metacognitive monitoring and evaluative judgment remain underdeveloped. Higher education instructors must weigh short-term performance gains against the potential erosion of metacognitive effort, learning ownership, and agency when AI is positioned as an always-available partner.

Building on these relational dynamics, students’ engagement with AI revealed a tension between empowerment and overreliance. Heung and Chiu’s (2025) meta-analysis confirms that ChatGPT-based learning can significantly enhance engagement, especially cognitive engagement, but also cautions that these benefits may be undermined by risks of overreliance and disengagement. In our data, students’ framing of ChatGPT as a “joker card” reflects this duality: an immediate motivational pull that risks becoming contingent on constant availability rather than deeper learning commitments. While efficiency was valued, students worried that such reliance could weaken independent reasoning, a concern voiced most strongly in practice-based fields like psychological counseling. These findings resonate with Lee and Hannafin’s (2016) warning that poorly designed scaffolding or overly directive systems may shift responsibility away from learners and foster surface-level engagement.

In contrast to these risks, students also emphasized constructive uses of ChatGPT that sustained engagement. Scaffolding emerged as one of the most productive strategies: students rehearsed dialogues, tested vocabulary, and simulated professional roles, turning abstract content into performative learning. Meşe et al. (2025) similarly found that AI can provide safe rehearsal spaces, consistent with Lee and Hannafin’s (2016) call for scaffolding that is adaptive and withdrawable.

Beyond individual rehearsal, students highlighted ChatGPT’s potential in collaborative and creative tasks such as role-play dramatizations or counselor–client simulations. Prior work shows similar benefits. Anjarani et al. (2024) report enhanced peer learning and creativity, while Sonderegger and Seufert (2022) argue that chatbots can foster teamwork, reflective dialogue, and metacognitive strategies. These findings suggest that imaginative uses of AI can activate deeper processes of reflection and team learning, positioning it as a catalyst for collaborative meaning-making rather than a mere provider of answers. Students also described how ChatGPT supported sustained focus and reduced monotony, a benefit rarely examined in the literature. Alsaïari et al. (2024) show that emotionally enriched AI feedback can ease negative emotions such as anger, while Vilhunen et al. (2025) demonstrate that situational engagement peaks when tasks balance challenge, competence, and interest. The rhythm students reported may therefore reflect not simply AI’s availability but the structuring of tasks in ways that sustain meaningful engagement rather than shallow busyness.

Moving from engagement to confidence, students’ growing assurance in using professional English emerged as one of the most tangible outcomes of AI-supported learning, though highly context-dependent.

Consistent with evidence that generative AI can scaffold structural and linguistic clarity in writing and explanations (Su, et al., 2023; Warschauer et al., 2023), students reported that ChatGPT's ability to unpack complex terms and syntactic patterns eased their comprehension of disciplinary texts and reduced anxiety. Similar effects were observed in professional training, where structured, case-based ChatGPT use enhanced confidence and reflective practice (Chang & Hwang, 2025). Yet such clarity can mask shallow learning; fluent AI outputs may create an illusion of mastery without deeper skill acquisition (Ahmed, 2023), underscoring the need for deliberate instructional mediation.

A second dimension of confidence was lexical exploration. Students used ChatGPT to test vocabulary across proficiency levels, mirroring findings that it supports definitions, dialogue generation, and L1 explanations (Kohnke, Moorhouse & Zou, 2023). This experimentation fostered readiness to engage with disciplinary texts but it was in parallel with prior evidence that learners often feel more confident in vocabulary than in open-ended, critical language use (Songsienchai, Sereerat & Watananimitgul, 2023). Trust in ChatGPT was shaped by pedagogical framing. In bounded tasks such as translation, structured explanations, vocabulary learning students expressed confidence, but this weakened in interpretive or research-oriented contexts. Students' perceptions align with Liu, Hu, Gladman & Gallagher's (2025) observation that reliance on AI depends on perceptions of reliability, transparency, and ethical use. Sustained confidence, therefore, may require reflective questioning rather than uncritical adoption, consistent with Van Horn's (2024) argument that critical literacy is essential to avoid shallow engagement.

Finally, some students envisioned ChatGPT as a partner for professional rehearsal, using it in counselor–client simulations or mock teaching. This aligns with Stojanov's (2023) framing of AI as a “more knowledgeable other,” where confidence extends beyond linguistic skills to professional preparation. Complementary evidence from Chang and Hwang (2025) confirms that structured AI-mediated practice can integrate theory with application in safe rehearsal spaces. Yet such safety may foster misleading confidence unless balanced with authentic opportunities for practice.

6. Conclusion, Limitations and Future Directions for Higher Education

This study explored how university students engaged with ChatGPT in a course designed to support their professional English development. Drawing on students' reflections and experiences, several patterns emerged ranging from increased confidence and emotional safety to concerns about overreliance and role confusion. These findings provide insight not only into how students interacted with ChatGPT, but also into how educators might thoughtfully integrate it into higher education. Based on these results, five implications are outlined for university instructors seeking to incorporate ChatGPT in ways that are both meaningful and pedagogically sound.

First, ChatGPT can act as a motivational tool when aligned with students' digital practices, making learning feel more relevant and engaging. At the same time, clear boundaries are essential. Students valued explicit guidance on when AI could be used for exploratory support, such as language rehearsal or brainstorming, and when human critical thinking should remain central. ChatGPT was also most effective when embedded in collaborative or performative tasks (role-plays, debates, or co-created dialogues) that transformed it into a shared classroom partner rather than a solitary assistant. Beyond cognitive benefits, students highlighted its affective role, describing ChatGPT as a supportive presence that reduced anxiety and fostered belonging in challenging moments. Finally, their growing critical awareness of AI's limitations signals the need for instructors to frame AI not as a replacement for thinking but as a prompt for reflection on what it means to learn and create alongside intelligent tools. These findings indicate that integrating ChatGPT into higher education is not merely a technical or instrumental decision but one that requires pedagogical intentionality, emotional sensitivity, and a willingness to renegotiate roles and relationships in the classroom.

This study is subject to a key methodological limitation. The findings are based on an in-depth focus group with four self-selected students from a single Professional English course in one department. While this small, information-rich sample is appropriate for a basic qualitative design, it necessarily narrows the range of perspectives represented and limits the transferability of the results beyond similar course and institutional contexts. Future research with larger and more diverse cohorts, across different disciplines and

course designs, would be valuable to examine whether the patterns identified here are shared or contested in other settings, and to inform faculty development efforts aimed at designing student-centered, ethically grounded AI-informed pedagogies.

References

- Ahmed, M. A. (2023). ChatGPT and the EFL classroom: Supplement or substitute in Saudi Arabia's eastern region. *Information Sciences Letters*, 12(7), 2727-2734.
- Akar, B., & Akçay, S. (2024). Nitel araştırmalarda çevrimiçi odak grup görüşmeleri. *Ufuk Ötesi Bilim Dergisi*, 24(1), 55-72.
- Alqahtani, T., Badreldin, H. A., Alrashed, M., Alshaya, A. I., Alghamdi, S. S., Bin Saleh, K., ... & Albekairy, A. M. (2023). The emergent role of artificial intelligence, natural learning processing, and large language models in higher education and research. *Research in social and administrative pharmacy*, 19(8), 1236-1242.
- Alsaiani, O., Baghaei, N., Lahza, H., Lodge, J., Boden, M., & Khosravi, H. (2024). Emotionally enriched feedback via generative AI. arXiv preprint arXiv:2410.15077. <https://arxiv.org/abs/2410.15077>
- Anjarani, S., Furqon, M., & Rakhmawati, F. (2024). ChatGPT to foster students' engagement in writing class: An intervention study. *Voices of English Language Education Society*, 8(3), 633-645. <https://doi.org/10.29408/veles.v8i3.27687>
- Ansari, A. N., Ahmad, S., & Bhutta, S. M. (2024). Mapping the global evidence around the use of ChatGPT in higher education: A systematic scoping review. *Education and Information Technologies*, 29(9), 11281-11321.
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using zoom videoconferencing for qualitative data collection: perceptions and experiences of researchers and participants. *International journal of qualitative methods*, 18, 1609406919874596.
- Bannister, P., Urbiet, A. S., & Peñalver, E. A. (2023). A systematic review of generative AI and (English medium instruction) higher education. *Aula Abierta*, 52(4), 401-409.
- Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International journal of educational technology in higher education*, 17(1), 2.
- Bozkurt, A., Junhong, X., Lambert, S., Pazurek, A., Crompton, H., Koseoglu, S., Farrow, R., Bond, M., Nerantzi, C., Honeychurch, S., Bali, M., Dron, J., Mir, K., Stewart, B., Costello, E., Mason, J., Stracke, C. M., & Romero-Hall, E. (2023). Speculative futures on ChatGPT and generative artificial intelligence (AI): A collective reflection from the educational landscape. *Asian Journal of Distance Education*, 18(1), 53-130. Retrieved from <https://www.asianjde.com/ojs/index.php/AsianJDE/article/view/709>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. SAGE Publications.
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, 56, 1391-1412. <https://doi.org/10.1007/s11135-021-01182-y>

- Chang, C. C., & Hwang, G. J. (2025). ChatGPT-facilitated professional development: evidence from professional trainers' learning achievements, self-worth, and self-confidence. *Interactive Learning Environments*, 33(1), 883-900. <https://doi.org/10.1080/10494820.2024.2362798>.
- Clarke, V., & Braun, V. (2018). Using thematic analysis in counselling and psychotherapy research: A critical reflection. *Counselling and Psychotherapy Research*, 18(2), 107–110. <https://doi.org/10.1002/capr.12165>
- Crotty, M. (1998). *The foundations of social research*. Sage Publications.
- Cui, G., Lockee, B., & Meng, C. (2013). Building modern online social presence: A review of social presence theory and its instructional design implications for future trends. *Education and Information Technologies*, 18(4), 661–685. <https://doi.org/10.1007/s10639-012-9192-1>
- Dempere, J., Modugu, K., Hesham, A., & Ramasamy, L. K. (2023, September). The impact of ChatGPT on higher education. In *Frontiers in Education* (Vol. 8, p. 1206936).
- Fan, Y., Tang, L., Le, H., Shen, K., Tan, S., Zhao, Y., ... & Gašević, D. (2025). Beware of metacognitive laziness: Effects of generative artificial intelligence on learning motivation, processes, and performance. *British Journal of Educational Technology*, 56(2), 489-530. <https://doi.org/10.1111/bjet.13544>
- Farrelly, T., & Baker, N. (2023). Generative artificial intelligence: Implications and considerations for higher education practice. *Education Sciences*, 13(11), 1109. <https://doi.org/10.3390/educsci13111109>
- Farazouli, A., Cerratto Pargman, T., Bolander Laksov, K., & McGrath, C. (2025). Navigating uncertainty: university teachers' experiences and perceptions of generative artificial intelligence in teaching and learning. *Studies in Higher Education*, 1-16.
- Felipe, A. L., Azuela, L., Eleazar, M., Azuela, H., Shrestha Khwakhali, U., Aragoncillo, A., & Ricafort, R. (2024). Exploring ChatGPT integration in classrooms: Impact on student engagement and personalized learning support. *Proceedings of the 2024 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT)*. IEEE Xplore.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Gray, L. M., Wong-Wylie, G., Rempel, G. R., & Cook, K. (2020). Expanding qualitative research interviewing strategies: Zoom video communications. *The qualitative report*, 25(5), 1292-1301.
- Gunawardena, C. N. (1995). Social presence theory and implications for interaction and collaborative learning in computer conferences. *International journal of educational telecommunications*, 1(2), 147-166.
- Guo, Y., & Lee, D. (2023). Leveraging ChatGPT for enhancing critical thinking skills. *Journal of Chemical Education*, 100(12), 4876-4883.
- Heilporn, G., Lakhal, S., & Bélisle, M. (2021). An examination of teachers' strategies to foster student engagement in blended learning in higher education. *International Journal of Educational Technology in Higher Education*, 18, 25. <https://doi.org/10.1186/s41239-021-00260-3>
- Henrie, C. R., Halverson, L. R., & Graham, C. R. (2015). Measuring student engagement in technology-mediated learning: A review. *Computers & Education*, 90, 36–53. <https://doi.org/10.1016/j.compedu.2015.09.005>
- Heung, Y. M. E., & Chiu, T. K. F. (2025). How ChatGPT impacts student engagement: A systematic review and meta-analysis study. *Computers and Education: Artificial Intelligence*, 8, 100361. <https://doi.org/10.1016/j.caeai.2025.100361>

- Hew, K. F., Huang, W., Du, J., & Jia, C. (2023). Using chatbots to support student goal setting and social presence in fully online activities: Learner engagement and perceptions. *Journal of Computing in Higher Education*, 35(1), 40-68. <https://doi.org/10.1007/s12528-022-09338-x>
- Huang, H. W., & Chang, J. (2024, October). Human-AI Interactions in Teacher Education: Examining Social Presence and Friendship. In *Proceedings of the 2024 International Conference on Artificial Intelligence and Teacher Education* (pp. 64-69).
- Jin, S. H. (2025). Measures of Learner-Generative AI Relationships. *Computers and Education Open*, 100258. <https://doi.org/10.1016/j.caeo.2025.100258>
- Karamuk, E. (2025). The Automation Trap: Unpacking the Consequences of Over-Reliance on AI in Education and Its Hidden Costs. In *Pitfalls of AI Integration in Education: Skill Obsolescence, Misuse, and Bias* (pp. 151-174). IGI Global Scientific Publishing.
- Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... & 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>
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). Exploring generative artificial intelligence preparedness among university language instructors: A case study. *Computers and Education: Artificial Intelligence*, 5, 100156.
- Kong, S.-C., & Yang, Y. (2024).** A human-centered learning and teaching framework using generative artificial intelligence for self-regulated learning development through domain knowledge learning in K–12 settings. *IEEE Transactions on Learning Technologies*, 17, 1562–1573. <https://doi.org/10.1109/TLT.2024.3392830>
- Kostka, I., & Toncelli, R. (2023). Exploring applications of ChatGPT to English language teaching: Opportunities, challenges, and recommendations. *Tesl-Ej*, 27(3), 1-19.
- Lee, E., & Hannafin, M. J. (2016). A design framework for enhancing engagement in student-centered learning: Own it, learn it, and share it. *Educational technology research and development*, 64(4), 707-734.
- Lee, K. M., Jung, Y., Kim, J., & Kim, S. R. (2006). Are physically embodied social agents better than disembodied social agents?: The effects of physical embodiment, tactile interaction, and people's loneliness in human–robot interaction. *International Journal of Human-Computer Studies*, 64(10), 962–973.
- Lee, D., Arnold, M., Srivastava, A., Plastow, K., Strelan, P., Ploeckl, F., Lekkas, D., & Palmer, E. (2024). The impact of generative AI on higher education learning and teaching: A study of educators' perspectives. *Computers and Education: Artificial Intelligence*, 6, 100221. <https://doi.org/10.1016/j.caeai.2024.100221>
- Li, Y., Wu, Y., & Chiu, T. K. (2025). How teacher presence affects student engagement with a generative artificial intelligence chatbot in learning designed with first principles of instruction. *Journal of Research on Technology in Education*, 1-17. <https://doi.org/10.1080/15391523.2025.2493942>
- Lo, C. K., Hew, K. F., & Jong, M. S.-y. (2024). The influence of ChatGPT on student engagement: A systematic review and future research agenda. *Computers & Education*, 219, 105100. <https://doi.org/10.1016/j.compedu.2024.105100>
- Liu, Q., Hu, A., Gladman, T., & Gallagher, S. (2025). Eight months into reality: A scoping review of the application of ChatGPT in higher education teaching and learning. *Innovative Higher Education*. <https://doi.org/10.1007/s10755-025-09790-4>
- Ma, T. (2025). Systematically visualizing ChatGPT used in higher education: Publication trend, disciplinary domains, research themes, adoption and acceptance. *Computers and Education: Artificial Intelligence*, 8, 100336. <https://doi.org/10.1016/j.caeai.2024.100336>

- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). John Wiley & Sons.
- Meşe, E., Kuru, Ö., & Atay, D. (2025). Facilitating student engagement through ChatGPT. *The Journal of Educational Research*, 1-11. <https://doi.org/10.1080/00220671.2025.2510394>
- Muniandy, J., & Selvanathan, M. (2025). ChatGPT, a partnering tool to improve ESL learners' speaking skills: Case study in a Public University, Malaysia. *Teaching Public Administration*, 43(1), 4-20. <https://doi.org/10.1177/01447394241230152>
- Nugroho, A., Putro, N. H. P. S., & Syamsi, K. (2023). The potentials of ChatGPT for language learning: Unpacking its benefits and limitations. *Register Journal*, 16(2), 224-247.
- Oh, C. S., Bailenson, J. N., & Welch, G. F. (2018). A systematic review of social presence: Definition, antecedents, and implications. *Frontiers in Robotics and AI*, 5, 114.
- Payne, L. (2019). Student engagement: Three models for its investigation. *Journal of Further and Higher Education*, 43(5), 641–657. <https://doi.org/10.1080/0309877X.2017.1391186>
- Richardson, J. C., Maeda, Y., Lv, J., & Caskurlu, S. (2017). Social presence in relation to students' satisfaction and learning in the online environment: A meta-analysis. *Computers in Human Behavior*, 71, 402-417.
- Reeve, J., & Tseng, C. M. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary educational psychology*, 36(4), 257-267.
- Roller, M. R., & Lavrakas, P. J. (2015). *Applied qualitative research design: A total quality framework approach*. Guilford Press.
- Shin, D., & Lee, J. H. (2023). Can ChatGPT make reading comprehension testing items on par with human experts. *Language Learning & Technology*, 27(3), 27-40
- Smith, L. T. (2012). *Decolonizing methodologies: Research and Indigenous peoples* (2nd ed.). Zed Books.
- Sonderegger, S., & Seufert, S. (2022). Chatbot-mediated Learning: Conceptual Framework for the Design of Chatbot Use Cases in Education. In *CSEDU (1)* (pp. 207-215).
- Songsienchai, S., Sereerat, B. O., & Watananimitgul, W. (2023). Leveraging artificial intelligence (AI): Chat GPT for effective English language learning among Thai students. *English Language Teaching*, 16(11), 68-79. <https://doi.org/10.5539/elt.v16n11p68>
- Stojanov, A. (2023). Learning with ChatGPT 3.5 as a more knowledgeable other: An autoethnographic study. *International Journal of Educational Technology in Higher Education*, 20(1), 35.
- Su, Y., Lin, Y., & Lai, C. (2023). Collaborating with ChatGPT in argumentative writing classrooms. *Assessing Writing*, 57, 100752. <https://doi.org/10.1016/j.asw.2023.100752>
- Van Horn, K. R. (2024). ChatGPT in English Language Learning: Exploring Perceptions and Promoting Autonomy in a University EFL Context. *TESL-EJ*, 28(1), n1.
- Vilhunen, E., Vesterinen, V. M., Äijälä, M., Salovaara, J., Siponen, J., Lavonen, J., ... & Riuttanen, L. (2025). Promoting university students' situational engagement in online learning for climate education. *The Internet and Higher Education*, 65, 100987. <https://doi.org/10.1016/j.iheduc.2024.100987>
- Wang, T., Lund, B. D., Marengo, A., Pagano, A., Mannuru, N. R., Teel, Z. A., et al. (2023). Exploring the potential impact of artificial intelligence (AI) on international students in higher education: Generative AI, chatbots, analytics, and international student success. *Applied Sciences-Basel*, 13(11), 6716. <https://doi.org/10.3390/app13116716>

- Wang, T., Wu, T., Liu, H., Brown, C., & Chen, Y. (2025). Generative co-Learners: enhancing cognitive and social presence of students in asynchronous learning with generative AI. *Proceedings of the ACM on Human-Computer Interaction*, 9(1), 1-24.
- Warschauer, M., Tseng, W., Yim, S., Webster, T., Jacob, S., Du, Q., & Tate, T. (2023). The affordances and contradictions of AI-generated text for writers of English as a second or foreign language. *Journal of Second Language Writing*, 62.
- You, Y., & Zhang, Y. (2025). Developing AI literacies and negotiating professional identities: a study of pre-service English teachers in a ChatGPT-facilitated pedagogy. *Journal of China Computer-Assisted Language Learning*, (Preprint).
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators?. *International journal of educational technology in higher education*, 16(1), 1-27. <https://doi.org/10.1186/s41239-019-0171-0>
- Zhai, C., Wibowo, S., & Li, L. D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review. *Smart Learning Environments*, 11(1), 28. <https://doi.org/10.1186/s40561-024-00316-7>
- Zhan, Y., & Yan, Z. (2025). Students' engagement with ChatGPT feedback: Implications for student feedback literacy in the context of generative artificial intelligence. *Assessment & Evaluation in Higher Education*. <https://doi.org/10.1080/02602938.2025.2471821>
- Zhang, A., & Rau, P. L. P. (2023). Tools or peers? Impacts of anthropomorphism level and social role on emotional attachment and disclosure tendency towards intelligent agents. *Computers in Human Behavior*, 138, 107415.