

## Critical AI Literacy among English Teachers in Iran: Balancing the Affordances and Challenges of ChatGPT

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### Abstract

The rapid expansion of generative artificial intelligence has sparked renewed debate about its pedagogical, ethical, and cultural implications for language education, particularly in underrepresented contexts. This study examines how preservice and in-service English teachers in Iran perceive and experience the integration of ChatGPT in their practice, focusing on the development of critical AI literacy. Using a qualitative interpretivist approach, data were collected from twenty teachers in Kurdistan Province through semi-structured interviews, focus group discussions, and reflective written tasks. The data were analyzed thematically to explore teachers' practices, concerns, and reflections on AI in English language teaching. The findings suggest that ChatGPT supports lesson planning, learner autonomy, and student engagement by offering flexible language practice and instructional scaffolding. Teachers reported increased confidence in experimenting with communicative and learner-centered pedagogies. However, they expressed concerns about content accuracy, academic integrity, overreliance on AI, and the cultural appropriateness of AI-generated materials. Contextual factors, including limited digital access, rigid curricula, and sociocultural sensitivities, influenced how teachers adopted and adapted the tool. The study concludes that the effective integration of generative AI in language education depends on fostering critical AI literacy that prioritizes ethical awareness, reflective judgment, and contextual sensitivity. By centering teachers' voices in the Iranian EFL context, this research contributes empirical insights to global discussions on the responsible and pedagogically grounded integration of AI in language teacher education.

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## Introduction

The emergence of Generative Artificial Intelligence (GenAI) tools like ChatGPT has sparked a transformative shift in contemporary education. In the realm of language learning, these tools create new spaces where teachers, learners, and algorithmic systems interact to foster personalization, creativity, and learner autonomy. Research suggests that large language models can facilitate feedback generation, scaffold learner interactions, and promote metacognitive awareness, thus supporting more learner-centered and interactive pedagogical practices (Bewersdorff et al., 2023; Bonner, Lege, & Frazier, 2023; Carlson, Pack, & Escalante, 2023; Essel, Vlachopoulos, Essuman, & Amankwa, 2024; Kohnke, Moorhouse, & Zou, 2023). However, studies also highlight ongoing tensions regarding AI integration, as teachers balance its pedagogical potential with concerns about authorship, originality, and the preservation of human judgment in teaching and learning (Hsu & Ching, 2023; Jeon & Lee, 2023).

Empirical research indicates that AI-mediated learning environments are reshaping the role of the teacher from a mere information transmitter to a learning facilitator. Rather than replacing educators, ChatGPT has been found to augment teachers' professional capacity by supporting tasks such as lesson planning, material development, and the design of communicative activities (Bonner et al., 2023; Godwin-Jones, 2023; Jeon & Lee, 2023; Kohnke et al., 2023). However, scholars consistently stress that the successful integration of AI relies not only on technical competence but also on teachers' ability to critically evaluate AI outputs, identify biases or inaccuracies, and adapt content to align with pedagogical goals and classroom realities (Alm & Watanabe, 2023; Bergen & Labonté, 2020; Kasneci et al., 2023). Without such critical engagement, the pedagogical advantages of AI risk being overshadowed by ethical concerns and an overreliance on technology.

These concerns have sparked growing scholarly interest in critical AI literacy within teacher education. Moving beyond functional digital skills, critical AI literacy focuses on educators' awareness of how AI technologies influence knowledge construction, discourse, power dynamics, and cultural representation (Alm & Watanabe, 2023; Godwin-Jones, 2023; Hsu & Ching, 2023; Jeon & Lee, 2023; Kasneci et al., 2023). Grounded in critical pedagogical traditions, this perspective encourages educators and learners to interrogate AI-generated content rather than accepting it as neutral or authoritative (Alm & Watanabe, 2023). In language education, critical AI literacy aligns with broader emphases on teacher agency, reflective practice, and intercultural competence, highlighting the need to balance pedagogical benefits such as adaptive feedback and learner engagement with ethical, cultural, and epistemological considerations (Eren, 2023; Ghafouri, 2024; McCallum, 2024).

While these debates have gained considerable momentum internationally, the Iranian EFL context remains relatively underrepresented in research on critical AI literacy. English language education in Iran is shaped by distinct sociocultural and institutional conditions, including tensions between globalization and local identity, curriculum rigidity, and unequal access to digital resources (Chamani, 2023; Hosseini Goodrich, 2020; Konuralp & Topping, 2023;

Mazlum, 2022). Although Iranian research has extensively examined digital literacy and computer-assisted language learning (CALL), much of this work has focused on functional and motivational aspects of technology use, with limited attention given to the ethical, reflective, and ideological dimensions of generative AI (Akbari et al., 2025; Dashtestani & Hojatpanah, 2022; Fathi & Rahimi, 2022; Foroutan Far & Taghizadeh, 2022; Jafari et al., 2025; Mehranirad, 2025; Meihami, 2021; Saeedi & Soltani, 2025). As a result, there is a notable gap in empirical understanding of how English language teachers in Iran perceive, negotiate, and critically engage with AI technologies within their unique educational contexts (Moulavinafchi & Oroskhan, 2025).

Addressing this gap, the present study explores how critical AI literacy can be cultivated among English teachers in Iran with respect to the use of ChatGPT in language education. Focusing on teachers' perceptions and experiences, the study examines how future educators navigate tensions between their enthusiasm for innovation and concerns about overreliance, as well as the balance between pedagogical experimentation and institutional or curricular constraints (Al-Khresheh, 2024; Jeon & Lee, 2023; Kasneci et al., 2023). By foregrounding the voices of teachers in this underrepresented context, the study offers context-sensitive insights that contribute to global discussions on the responsible, ethical, and reflective integration of generative AI in language teacher education.

## Literature review

Recent empirical research has increasingly examined the role of generative AI tools such as ChatGPT in shaping learner engagement and autonomy in language education. Studies indicate that large language models can provide immediate feedback, adaptive responses, and interactive prompts that support active learner participation. For example, Kohnke, Moorhouse, and Zou (2023) demonstrated that ChatGPT-generated prompts and dialogues can foster communicative interaction and sustained learner engagement in EFL tasks. Similarly, Essel, Vlachopoulos, Essuman, and Amankwa (2024) found that AI-mediated instant responses promoted students' cognitive engagement, particularly when learners used AI as a support for exploration rather than as a substitute for effort. Together, these studies suggest that ChatGPT can function as a scaffold for learner-centered practices when integrated thoughtfully into instructional design.

Beyond engagement, empirical studies have highlighted ChatGPT's potential to enhance learner autonomy and reduce affective barriers in language learning. Al-Khresheh (2024) reported that AI-supported environments allowed learners to practice language independently, experiment with linguistic forms, and receive feedback without fear of negative evaluation. Bonner, Lege, and Frazier (2023) similarly observed that AI-mediated interactions created low-anxiety spaces where learners felt more confident producing extended discourse. These findings align with research suggesting that generative AI can encourage risk-taking and self-directed learning, particularly for learners who may feel constrained in traditional classroom interactions.

Empirical research also suggests that ChatGPT can extend language learning beyond formal classroom boundaries by supporting self-directed exploration and informal learning. McCallum

(2024) and Godwin-Jones (2023) documented how learners used AI tools to seek explanations, examples, and practice opportunities outside instructional time, thereby sustaining motivation and curiosity. Alm and Watanabe (2023) further noted that such extended engagement can promote reflective learning when students critically evaluate AI responses. These studies collectively indicate that generative AI may blur the boundaries between classroom and out-of-class learning, reshaping how learners interact with language resources.

In addition to learner-focused outcomes, a growing body of empirical research has examined ChatGPT's role in supporting teachers' instructional practices. Kohnke, Moorhouse, and Zou (2023) and Carlson, Pack, and Escalante (2023) found that AI tools assisted teachers in lesson planning, material development, and activity design, reducing workload while expanding pedagogical possibilities. Bonner et al. (2023) further reported that preservice teachers, in particular, benefited from AI-generated examples and suggestions that supported their developing instructional confidence. These studies suggest that ChatGPT can function as a pedagogical assistant, especially for teachers navigating complex classroom demands.

Empirical findings also indicate that ChatGPT can encourage instructional experimentation and innovation. Jeon and Lee (2023) showed that teachers used AI-generated suggestions to explore communicative and task-based activities, adapting them to suit learner needs. Similarly, Li, Bonk, and Kou (2023) reported that teachers viewed AI as a source of inspiration for diversifying classroom tasks and experimenting with new pedagogical approaches. These studies highlight AI's potential to act as a catalyst for pedagogical creativity, while also underscoring the importance of teacher mediation in shaping how AI-generated ideas are enacted in practice.

Despite these affordances, empirical research consistently warns against uncritical reliance on generative AI. Kasneci et al. (2023) documented risks associated with large language models, including misinformation, data bias, and superficial learning when AI outputs are accepted without scrutiny. Bannister, Santamaría-Urbieto, and Alcalde-Peñalver (2023) similarly found that in English-Medium Instruction contexts, AI supported multilingual learners but also risked diminishing critical thinking if used unreflectively. These findings emphasize that AI's pedagogical value depends on teachers' ability to guide, contextualize, and critically evaluate AI-generated content.

Ethical challenges surrounding plagiarism and authorship have emerged as a central theme in empirical studies on AI-mediated learning. Essel et al. (2024) and Bonner et al. (2023) reported that students were sometimes tempted to submit AI-generated text as original work, raising concerns about academic honesty. Jeon and Lee (2023) emphasized that teachers play a crucial role in framing AI as a collaborative tool rather than a shortcut. These studies suggest that ethical AI use must be explicitly taught and negotiated within classroom practices, reinforcing the importance of critical AI literacy for both teachers and learners.

Several empirical studies have explored ChatGPT's potential to foster critical thinking and metacognitive awareness. Alm and Watanabe (2023) found that when learners compared AI-generated responses with their own writing, they became more analytical about language choices

and content quality. Bonner et al. (2023) and Jeon and Lee (2023) similarly reported that AI can serve as a reflective partner, prompting learners to evaluate, revise, and justify their linguistic decisions. These findings suggest that AI-mediated activities can support higher-order thinking when learners are encouraged to engage critically rather than passively.

Empirical research also underscores that the effectiveness of AI integration is shaped by contextual and infrastructural factors. Dashtestani and Hojatpanah (2022) and Konuralp and Topping (2023) noted that access to digital resources and digital literacy levels significantly influence technology adoption in language education. Gruba and Chau Nguyen (2019) and Demir and Kayaoglu (2022) further emphasized that institutional support and curricular flexibility are key determinants of successful technology-mediated learning. These findings highlight that AI integration cannot be understood independently of the broader educational context.

Research highlights the importance of cultural and ideological sensitivity in AI-supported language education. Chamani (2023) and Mazlum (2022) documented tensions between globalized English teaching practices and local educational norms in Iran, suggesting that imported technologies require contextual adaptation. Kramsch (2014) and Godwin-Jones (2023) similarly argued that language learning technologies must be critically mediated to avoid cultural misalignment. Taken together, these studies point to critical AI literacy as a necessary framework for integrating generative AI in contextually responsive, ethical, and pedagogically meaningful ways, particularly in underrepresented contexts such as Iranian EFL education.

## Method

This study adopts a qualitative research design to investigate the experiences and perspectives of Iranian English language teachers regarding the integration of Generative Artificial Intelligence (GenAI), specifically ChatGPT, into their teaching practices. The qualitative approach allows for an in-depth exploration of the nuanced ways in which GenAI can influence language education in a context marked by unique educational challenges. The research design is informed by a constructivist paradigm, recognizing that knowledge is co-constructed through interactions between individuals and their environments. This perspective aligns with the study's aim to understand how teachers perceive and utilize GenAI tools within their specific educational contexts. By focusing on the lived experiences of teachers, the study seeks to uncover the affordances and challenges associated with GenAI integration, providing insights that can inform future educational practices and policies.

## Design

To ensure a comprehensive understanding of the topic, the study employs multiple qualitative data collection methods, including focus group sessions, semi-structured interviews, and reflective essays. These methods facilitate the gathering of rich, detailed data that captures the complexity of teachers' experiences and the multifaceted nature of GenAI integration in language education. The research design also considers the socio-political and cultural context



of Iran, acknowledging the impact of factors such as economic sanctions, limited resources, and ideological influences on the adoption and implementation of educational technologies. By situating the study within this context, the research aims to contribute to a broader understanding of how GenAI can be leveraged to address educational challenges in resource-constrained environments.

Overall, the qualitative research design (Lichtman, 2023) employed in this study provides a robust framework for exploring the potential of GenAI in democratizing English language education in Iran. This design aligns with the study's focus on critical AI literacy, as it seeks to uncover the affordances and challenges of GenAI integration in language education, particularly in a context marked by sociocultural sensitivities and resource constraints. The study's insights aim to inform both local teacher education practices and broader global discussions on responsible and pedagogically grounded AI use in language education.

Through a constructivist lens (Mogashoa, 2014), the study seeks to illuminate how teachers engage with GenAI tools, the benefits and challenges they encounter, and the implications for language education in similar socio-political contexts.

### Participants

The participants of this study comprise preservice and in-service English language teachers in Sanandaj, Iran, selected through purposive sampling (Tajik et al., 2025) to ensure rich, relevant insights into the integration of Generative AI (ChatGPT) in language education. A total of 20 participants were recruited, representing a diverse range of teaching experiences, educational backgrounds, and institutional affiliations, including universities, language institutes, and teacher training centers. The inclusion criteria focused on participants who were either currently enrolled in teacher education programs or actively teaching English at secondary or tertiary levels, and who had some prior exposure to digital technologies in their teaching practices.

The participants' demographic characteristics were intentionally varied to capture a wide spectrum of experiences. Ages ranged from early 20s to mid-40s, and both genders were represented to reflect the diversity of Iran's English teaching community. Participants had different levels of familiarity with AI tools, from novices who had never used ChatGPT in the classroom to those with moderate experience experimenting with AI-assisted lesson planning and student feedback. This heterogeneity was crucial for understanding the breadth of affordances and challenges that GenAI presents in different teaching contexts.

Recruitment was conducted through emails and announcements in teacher education programs and professional networks, emphasizing voluntary participation and confidentiality. Participants were provided with detailed information about the study's objectives, methods, and ethical considerations, including the right to withdraw at any stage. All participants provided informed consent before participating, aligning with ethical research standards. By selecting participants who are actively engaged in language teaching or teacher education, the study ensures that the data reflects real-world perspectives on ChatGPT integration, while also capturing the reflections of those preparing to enter the profession. This participant profile

enables a rich, nuanced exploration of critical AI literacy and its relevance to both teacher education and classroom practice in Iran.

### **Instrumentation**

Data for this study were collected using semi-structured interviews, reflective essays, and focus group discussions. These methods were chosen to allow for a deep, reflective exploration of how preservice and in-service teachers perceive and use Generative AI tools in their teaching. Semi-structured interviews provided an opportunity for participants to share personal insights into their experiences with AI tools, addressing both the pedagogical benefits and ethical challenges they encounter. Reflective essays allowed participants to engage critically with the content, focusing on their evolving perspectives on AI's role in language education, its potential biases, and cultural implications. Focus group discussions facilitated collaborative dialogue, encouraging teachers to compare their views and co-construct knowledge about AI integration in their classrooms. These instruments were selected because they encourage critical thinking and ethical reflection, key components of critical AI literacy (Alm & Watanabe, 2023; Kasneci et al., 2023).

#### *Semi-structured interviews*

Semi-structured interviews were conducted individually with each participant to explore their personal experiences, attitudes, and reflections (Ruslin et al., 2022) regarding the use of ChatGPT in language teaching. The interview guide included open-ended questions addressing teachers' familiarity with AI, their perceived benefits and challenges, ethical considerations, and specific classroom applications. Interviews lasted approximately 45–60 minutes each and were audio-recorded with participants' consent, allowing for verbatim transcription and thorough analysis.

#### *Focus group discussions*

Focus group discussions involved small groups of 4–5 participants to facilitate collaborative reflection and dialogue (Creswell, 2012). These discussions encouraged participants to share experiences, compare strategies, and debate ethical or pedagogical dilemmas associated with AI integration. Focus groups were particularly useful for observing how participants' opinions evolved through peer interaction and for capturing a broader range of perspectives within a condensed timeframe (Cheng, 2007).

#### *Reflective written tasks*

Reflective written tasks were assigned to participants to provide an additional layer of data, encouraging them to articulate personal experiences, challenges, and ethical reflections in their own words (Moon, 2013). Participants were prompted to describe specific instances of AI use in their lesson planning or teaching, comment on the observed impact on student engagement and learning, and reflect on how AI aligns with or challenges traditional pedagogical norms.

### Data Collection Procedure

The study followed a multi-phase qualitative procedure designed to ensure depth, authenticity, and cultural sensitivity in exploring English teachers' perceptions of ChatGPT integration in language education. After obtaining ethical approval from the university's research committee, participants were recruited through purposive sampling from teacher education programs in Kurdistan Province, Iran. Participation was voluntary, and informed consent was obtained both verbally and in writing. To ensure confidentiality, all participants were assigned pseudonyms.

The research procedure unfolded in three main stages: orientation, data collection, and member validation. During the orientation stage, participants attended an online briefing session conducted in Persian, where the researcher explained the study's objectives, confidentiality protocols, and the voluntary nature of participation. Teachers were also given a short demonstration of ChatGPT's affordances and limitations in EFL teaching to establish a shared understanding of the tool's functions. This stage was critical in creating a safe space for participants to articulate their genuine experiences and concerns without fear of judgment, reflecting the trust-based ethos recommended in qualitative educational research (Braun & Clarke, 2006; Creswell, 2012; Lichtman, 2023).

The data collection stage involved semi-structured interviews conducted over six weeks. Each participant was interviewed individually in Kurdish or Persian, depending on preference, and interviews lasted between 45 and 70 minutes. Conversations were recorded with participants' permission and later transcribed verbatim for analysis. Questions focused on participants' experiences using ChatGPT for lesson planning, teaching practice, and student engagement. The flexible structure allowed participants to elaborate on specific moments, dilemmas, or reflections, ensuring that their voices remained central to the narrative (Czarniawska, 2004).

Finally, a member validation stage was conducted to enhance the credibility and trustworthiness of the findings. Participants were provided with summary transcripts and preliminary themes for feedback and clarification. This step allowed them to confirm, refine, or elaborate on their initial statements, ensuring that interpretations accurately reflected their lived experiences. The iterative process of returning to participants helped strengthen interpretive validity and align the analysis with the participatory spirit of teacher education research (Bergen & Labonté, 2020; Braun & Clarke, 2006).

### Data analysis

The data collected through interviews, focus groups, and reflective written tasks were analyzed using thematic analysis, following the framework outlined by Braun and Clarke (2006) and widely adopted in educational research. This approach allowed for the identification, analysis, and reporting of patterns or themes within the data, providing a structured yet flexible means to explore the affordances and challenges of ChatGPT in language education. The analysis process began with familiarization, in which all audio recordings and written reflections were transcribed verbatim and read multiple times to gain an overall understanding of the content.



During this phase, initial notes and observations were made regarding recurring ideas, interesting insights, and potential patterns related to participants' experiences with AI.

Next, coding was conducted systematically across the entire dataset. The data were analyzed using thematic analysis, following the approach outlined by Braun and Clarke (2006). The first stage involved an initial open coding of all interview transcripts, reflective essays, and focus group discussion notes. Inductive coding was used to identify emerging themes, particularly focusing on critical AI literacy including issues related to ethical concerns, pedagogical adaptation, and cultural sensitivity in AI integration. Each of the data sources was analyzed separately at first, then cross-checked for recurring patterns across all data sets. To ensure consistency and transparency, inter-coder reliability was established by having a second researcher independently code a subset of the data. Discrepancies between the initial and second coder were discussed and resolved to ensure that the final coding accurately represented the data.

After the initial codes were developed, they were grouped into broader themes that captured the participants' perceptions of AI in language education. Reflective essays, in particular, were analyzed for participants' personal reflections on their AI-related experiences, which provided valuable insights into their self-reported growth and ethical considerations regarding AI integration. To ensure the rigor of the analysis, peer debriefing was conducted, and member checks were used to validate interpretations of the data. This process helped refine the themes and confirm that the findings accurately reflected participants' experiences and perspectives. Segments of data that represented meaningful concepts such as perceived benefits of ChatGPT, ethical concerns, pedagogical strategies, and barriers to AI integration were assigned descriptive codes. Coding was iterative, with codes refined and combined as the analysis progressed, ensuring that the emerging framework accurately captured the complexity of participants' perspectives (O'Connor & Joffe, 2020).

Once coding was complete, codes were organized into themes and subthemes that reflected the central patterns in the data. For instance, themes such as enhancing learner autonomy, ethical dilemmas in AI use, challenges in digital literacy, and contextual constraints in Iran emerged from multiple sources and were cross-validated across interviews, focus groups, and written reflections. The final step involved reviewing and defining the themes to ensure clarity, coherence, and relevance to the research questions, while providing illustrative quotations and examples to support each theme.

Throughout the analysis, attention was paid to reflexivity and researcher positionality, recognizing that the researcher's own experiences and perspectives could influence interpretation. Member checking and peer debriefing were employed to enhance trustworthiness and credibility, ensuring that the findings accurately represented participants' voices and experiences.

## Findings

### Enhancing Learner Autonomy and Engagement

Participants consistently highlighted that ChatGPT can promote learner autonomy by providing students with opportunities to practice English independently and experiment freely with language use. Many teachers noted that students seemed more confident when interacting with ChatGPT than when engaging in traditional classroom tasks. The instant feedback reduced learners' fear of making mistakes, allowing them to take linguistic risks and develop self-directed learning habits. Shirin, an in-service teacher with six years of experience, reflected,

*"I noticed that my students felt less nervous about making mistakes when they knew ChatGPT could suggest corrections immediately. They started trying longer sentences and new words without waiting for me to check."*

Teachers also emphasized that ChatGPT allows students to explore topics beyond the textbook, fostering curiosity and intrinsic motivation. Several participants observed that the tool helped learners connect classroom content with real-world contexts, making English learning more meaningful. Aram, explained,

*"Sometimes students ask questions I don't have time to answer in class. ChatGPT can explain complex ideas in simple English, and they come back excited to tell me what they discovered. One of my students learned about Kurdish poets through ChatGPT and later wrote an essay comparing their style with Shakespeare's."*

Another key point raised was that engaging with ChatGPT encouraged students to reflect more deeply on their learning process. By comparing their ideas and writing with AI-generated content, students developed greater awareness of language form, coherence, and tone. Teachers saw this as an opportunity to blend AI's analytical power with human judgment and creativity. Delara, an experienced instructor in a teacher training program, shared,

*"I asked my students to rewrite a paragraph generated by ChatGPT in their own words. They spent a long time thinking about what sounded natural and what didn't. One student said, 'It's like ChatGPT gives me bones, but I have to put the flesh on them myself.'"*

Despite these clear benefits, participants also expressed caution about the risk of students becoming overly dependent on ChatGPT. Teachers observed that without proper guidance, some learners might use AI as a shortcut rather than a tool for genuine engagement. Shaho, a high school teacher, warned,

*"Some students just copy ChatGPT answers without thinking. I have to remind them that learning happens when they question and adapt the response. I tell them, 'Don't let ChatGPT do your homework.'"*

### Facilitating Lesson Planning and Teacher Support

Participants frequently discussed how ChatGPT served as a valuable assistant for lesson planning and classroom preparation. Teachers, especially those in their early stages of professional development, found that the tool offered creative prompts, activity templates, and language examples tailored to learners' varying proficiency levels. It eased the overwhelming task of lesson design while inspiring new teaching ideas. Shwan, a preservice teacher completing his practicum in Sanandaj, shared,

*"Sometimes I spend hours thinking about how to make my lessons more engaging for mixed-ability groups. When I ask ChatGPT for help, it gives me options I never considered—like role-play ideas, vocabulary games, or warm-up discussions connected to students' real lives."*

Teachers also found ChatGPT particularly useful for revising and improving their own teaching materials. They mentioned that the AI's instant feedback on grammar, coherence, or instructional clarity helped them refine their content before presenting it to students. Zara, an in-service teacher working at a private English institute, explained,

*"I wrote a short reading passage about environmental issues and asked ChatGPT to check it for clarity and difficulty. It suggested replacing some advanced vocabulary and simplifying sentences. When I tried the revised version in class, students understood better and participated more."*

Beyond saving time, participants reported that ChatGPT encouraged them to experiment with more communicative and interactive pedagogies. Many felt it reduced their hesitation to try new methods, offering structured guidance for unfamiliar approaches such as task-based or collaborative learning. Hawar, an in-service teacher with over a decade of experience, shared,

*"I've always wanted to use more project-based learning, but I wasn't sure how to plan it. ChatGPT walked me through each stage; brainstorming, peer feedback, final reflection. I adapted it for my students and was amazed by how well it worked."*

Despite these benefits, participants also expressed concern about overdependence on AI for instructional creativity. Some worried that the ease of generating materials might limit their own pedagogical imagination or contextual sensitivity. Kawa, a high school in-service teacher from Saqqez, reflected,

*"It's very convenient, but I sometimes feel I rely too much on it. When ChatGPT gives me a full plan, I follow it exactly instead of thinking deeply about what my own students need."*

Together, these reflections illustrate that ChatGPT can be a powerful pedagogical partner supporting lesson design, innovation, and reflection when used consciously and adaptively. However, its effectiveness ultimately depends on teachers' critical awareness and ability to contextualize AI-generated ideas within local educational realities.

### Ethical and Accuracy Concerns in AI Integration

Participants consistently raised concerns about the reliability and ethical use of ChatGPT in educational contexts. While they acknowledged the tool's potential for generating engaging and personalized materials, many cautioned that AI responses were not always accurate, contextually appropriate, or aligned with classroom objectives. Teachers emphasized the importance of verifying information and exercising critical judgment before integrating AI-generated content into lessons. Shahram, reflected,

*“Sometimes ChatGPT gives examples that sound fluent but are grammatically or factually wrong. Once, it gave me an incorrect cultural reference about Kurdish New Year, which could have confused my students.*

Ethical issues surrounding plagiarism, authorship, and academic honesty were among the most pressing concerns raised by participants. Teachers observed that students sometimes relied too heavily on ChatGPT for writing assignments, blurring the line between support and substitution. Rojin described a recurring challenge:

*“A few students copied ChatGPT’s essays word for word. When I asked them to explain their writing, they couldn’t. It made me realize we need to teach digital ethics explicitly. I tell my students: using ChatGPT is like using a calculator.*

Participants also voiced concerns about cultural and ideological mismatches between AI-generated content and the Iranian-Kurdish educational context. Several noted that examples or topics provided by ChatGPT sometimes reflected Western assumptions, requiring teachers to adapt them carefully to local values and norms. Karwan, an in-service teacher with experience in rural schools, shared,

*“Sometimes ChatGPT gives examples about dating, drinking, or politics that don’t fit our classroom culture. I always read through everything and change what doesn’t make sense for our students. I’ve learned that technology isn’t neutral.*

Despite these challenges, many participants maintained a balanced optimism toward integrating AI responsibly in education. They argued that ethical concerns should not lead to rejection of the technology but to more conscious and guided use. Berivan, reflected thoughtfully:

*“If we teach students how to use ChatGPT critically, checking facts, rewriting ideas, and citing sources. It becomes a partner in learning, not a threat. The problem isn’t the tool itself; it’s how we use it.”*

Overall, this theme highlights that accuracy and ethics form the backbone of sustainable AI integration. Teachers recognized that cultivating critical AI literacy among both educators and students is essential to avoid misinformation, preserve academic integrity, and respect cultural boundaries while embracing innovation.

### Developing Critical Thinking and Reflective Skills Among Students

Participants repeatedly emphasized that integrating ChatGPT into language classrooms encouraged students to engage in deeper analysis of language and meaning. They observed that when learners compared AI-generated texts with their own work, they became more aware of nuances in vocabulary, grammar, and tone. The process of evaluating and revising AI responses appeared to foster critical thinking, metacognitive reflection, and learner independence. Seywan, explained,

*“I often ask my students to edit a paragraph written by ChatGPT and make it sound more natural. They spend time discussing which words fit better or which sentences sound strange.”*

Teachers also found that ChatGPT-generated discussions stimulated students’ curiosity and prompted them to question language use in a more investigative way. By observing how AI formulated responses, students learned to reflect on stylistic choices and communication strategies, which deepened their understanding of English as a dynamic, context-driven language. Zana, remarked,

*“When students see how ChatGPT organizes ideas differently, they start asking why it used certain connectors or expressions. We often pause and compare: ‘Would a native speaker say it this way?’.”*

Participants further noted that ChatGPT encouraged self-assessment and metacognitive awareness among learners. Students became more conscious of their own mistakes and strategies when interacting with the tool, which allowed them to take greater responsibility for their progress. Rojan, shared,

*“After using ChatGPT for writing practice, my students began noticing patterns in their errors, especially in verb tenses and prepositions. They started saying things like, ‘Oh, I always forget this!’ and then trying to fix it on their own.”*

However, participants cautioned that without structured guidance, students might fall into passive acceptance of AI-generated language instead of engaging critically. Teachers stressed the need to scaffold AI-based tasks carefully to ensure students remained active participants in meaning-making. Baran, an experienced in-service teacher from Sanandaj, reflected,

*“Some students just accept everything ChatGPT writes because it sounds fluent. I have to remind them that fluency doesn’t always mean accuracy or appropriateness. I design follow-up questions like ‘Why do you think ChatGPT chose this word?’ to make them reflect. When used this way, AI can sharpen their analytical skills instead of dulling them.”*

### Contextual Challenges and Constraints in EFL Classrooms

Participants frequently highlighted the practical and systemic challenges that shape the integration of ChatGPT in Iranian classrooms, particularly in Kurdistan Province. Limited access to reliable internet and digital devices was a recurring concern, which affected both teachers' planning and students' ability to engage with AI consistently. Shahbaz, explained,

*"In my school, only half the students have smartphones or laptops. Even if ChatGPT is available, many can't use it regularly. Sometimes I assign an AI-based task, and only a few can participate. It's frustrating because it could be so helpful, but the infrastructure isn't there. I spend extra time preparing offline alternatives so no one falls behind."*

Institutional constraints and rigid curricula were also frequently mentioned as barriers to experimentation with AI-supported activities. Teachers noted that standardized syllabi, exam-oriented teaching, and time pressures often limited opportunities to incorporate AI meaningfully into lessons. Rojin, shared,

*"I wanted to try a ChatGPT-supported project where students co-write a story, but the curriculum is strict and only allows me to cover certain grammar points. I could only use it for small exercises, not full lessons. The students loved it and asked for more, but I had to manage expectations carefully. It's a constant push-and-pull between innovation and curriculum rules."*

Cultural and ideological considerations further shaped AI integration. Participants emphasized that AI-generated content often required adaptation to align with local norms, values, and sociocultural expectations. Teachers reported that failing to adjust content could lead to misunderstandings or disengagement among students. Soran explained,

*"Sometimes ChatGPT gives examples that don't fit our context or culture, like situations involving dating or western pop culture references. I always have to review and modify them before students see them. I remind myself and my students that technology is a tool, not a replacement for human judgment or cultural sensitivity."*

Despite these challenges, participants expressed optimism about ChatGPT's potential in EFL classrooms when used thoughtfully and critically. Teachers emphasized that with guidance, scaffolding, and adaptation to local realities, AI could significantly enhance student engagement and learning outcomes. Hema reflected,

*"Even with constraints like limited devices or strict curricula, students are curious and motivated by AI activities. When we provide guidance and adapt tools to our reality, it really enhances learning. It gives them a glimpse of what language can do beyond the textbook, and that's inspiring for both teachers and learners."*



Overall, this theme illustrates that while Generative AI offers substantial affordances, its successful implementation in Iranian EFL classrooms requires careful consideration of infrastructure, curriculum limitations, and sociocultural factors. Teachers must mediate technology use thoughtfully to ensure equity, relevance, and meaningful engagement.

## Discussion

The findings indicate that ChatGPT can significantly enhance learner autonomy and engagement, providing students with opportunities to practice language independently while reducing anxiety about making mistakes. This aligns with previous research emphasizing the role of GenAI in fostering learner-centered environments where students actively construct knowledge (Al-Khresheh, 2024; Bonner, Lege, & Frazier, 2023; Ghafouri, 2024; Jeon & Lee, 2023; Kohnke, Moorhouse, & Zou, 2023; Li, Bonk, & Kou, 2023). Participants reported that students experimented with longer sentences, explored new vocabulary, and engaged more actively with tasks when supported by ChatGPT, reflecting the tool's potential to scaffold independent learning. This resonates with findings by Essel, Vlachopoulos, Essuman, and Amankwa (2024), who noted that immediate AI feedback can promote cognitive engagement and learner initiative.

In addition, the study highlights that ChatGPT can extend learning beyond classroom boundaries, offering explanations and resources for self-directed exploration, which mirrors prior research on AI-mediated language learning (Alm & Watanabe, 2023; Bonner et al., 2023; Godwin-Jones, 2023; Hsu & Ching, 2023; Kasneci et al., 2023; McCallum, 2024). Participants' observations that students returned to class motivated and curious after interacting with AI indicate that generative tools can encourage intrinsic motivation and active engagement. However, teachers also expressed concerns about overreliance, which aligns with Jeon and Lee's (2023) caution that AI must complement rather than replace human guidance. The findings suggest that fostering learner autonomy with AI requires careful scaffolding to ensure students use these tools reflectively rather than passively.

The findings show that ChatGPT can serve as a valuable support tool for teachers, particularly in lesson planning and instructional preparation. Participants emphasized how AI-generated materials, activity ideas, and examples saved time and provided creative options for diverse learner levels. This echoes the work of Kohnke, Moorhouse, and Zou (2023), Bonner, Lege, and Frazier (2023), and Carlson, Pack, and Escalante (2023), who highlighted the potential of GenAI to reduce teacher workload while fostering innovation in lesson design. The participants' reflections suggest that AI not only aids in material creation but also helps teachers gain confidence in their pedagogical decisions, especially for preservice educators still developing instructional skills.

Furthermore, the use of ChatGPT to scaffold new teaching strategies resonates with research emphasizing AI's role in enabling teachers to experiment with communicative and task-based activities (Al-Khresheh, 2024; Demir & Kayaoglu, 2022; Godwin-Jones, 2023; Jeon & Lee, 2023; Li, Bonk, & Kou, 2023; McCallum, 2024). Participants reported that AI suggestions acted

like a virtual mentor, helping them structure collaborative tasks or adapt lesson plans creatively. However, they also cautioned against overreliance, highlighting the importance of maintaining human creativity and critical judgment in instructional design, as discussed by Kasneci et al. (2023) and Bannister, Santamaría-Urbieto, and Alcalde-Peñalver (2023). The findings reinforce the notion that while AI can enhance teacher capacity, critical engagement remains essential for effective and ethical integration.

Participants' reflections on the ethical and accuracy challenges of ChatGPT highlight the need to develop critical AI literacy among teachers. Many reported that AI-generated content sometimes contained inaccuracies or culturally inappropriate examples, requiring scrutiny before classroom use. This aligns with Kasneci et al. (2023), Bannister, Santamaría-Urbieto, and Alcalde-Peñalver (2023), and Jeon and Lee (2023), who emphasize that large language models, while powerful, are not infallible and necessitate teacher mediation to ensure reliability. Similarly, Al-Khreshah (2024) and Alm and Watanabe (2023) caution that uncritical use of AI may perpetuate misinformation or misalign with pedagogical and cultural goals. The participants' practice of verifying AI output before sharing it with students reflects a proactive approach to maintaining educational integrity.

Ethical concerns also extended to student use of AI, particularly regarding plagiarism and authorship. Participants noted that some students were tempted to submit AI-generated content as their own, echoing findings by Essel, Vlachopoulos, Essuman, and Amankwa (2024) and Bonner, Lege, and Frazier (2023), who identify academic honesty as a critical challenge in AI-mediated learning environments. Teachers emphasized the importance of guiding students to use AI as a collaborative tool rather than a shortcut, reinforcing critical reflection and ethical decision-making (Godwin-Jones, 2023; Hsu & Ching, 2023; Jeon & Lee, 2023; McCallum, 2024). This suggests that integrating AI responsibly requires both teacher and learner awareness of its limitations, underscoring the centrality of critical AI literacy in language education.

The findings suggest that ChatGPT can be an effective tool for fostering students' critical thinking and reflective skills. Participants reported that when students compared AI-generated outputs with their own work, they became more analytical about language, style, and content. This resonates with research by Alm and Watanabe (2023), Bonner, Lege, and Frazier (2023), and Jeon and Lee (2023), who argue that AI can serve as a reflective partner in learning, prompting students to question, evaluate, and refine their ideas. Similarly, Godwin-Jones (2023) highlights the potential of AI to create interactive learning environments where learners critically engage with content rather than passively consume it. The participants' observations indicate that AI-mediated activities can cultivate metacognition, encouraging students to monitor their own learning and develop independent problem-solving skills.

Moreover, teachers emphasized that ChatGPT can enhance engagement with tasks that require evaluation, adaptation, and synthesis of information. Participants described how students reflected on AI suggestions, deliberating on what sounded natural or appropriate in context, which aligns with findings from Hsu and Ching (2023) and Kasneci et al. (2023). This reflective interaction mirrors the principles of critical pedagogy discussed by Alm and Watanabe (2023)

and Eren (2023), where learners are encouraged to actively interpret, negotiate, and co-construct knowledge. However, participants also noted that scaffolding was necessary to prevent superficial engagement, highlighting that the tool's effectiveness depends on thoughtful instructional design. Overall, these findings reinforce that AI can be a catalyst for deeper learning, but only when integrated with teacher guidance and reflective practice.

The findings reveal that the integration of ChatGPT in Iranian EFL classrooms is strongly shaped by contextual challenges, including limited access to reliable internet and digital devices. Participants reported that infrastructural limitations often restricted students' opportunities to engage with AI consistently. This aligns with Dashtestani and Hojatpanah (2022) and Konuralp and Topping (2023), who noted that digital literacy and resource access are critical determinants of technology integration in Iranian educational settings. Similarly, Gruba and Chau Nguyen (2019) and Demir and Kayaoglu (2022) emphasize that the effectiveness of technology-mediated learning is contingent on institutional and infrastructural support. The findings underscore that without addressing these systemic constraints, the potential benefits of AI tools may be unevenly realized among learners.

Institutional and cultural factors also played a significant role in shaping AI use. Participants described how rigid curricula, exam-focused teaching, and sociocultural expectations sometimes limited experimentation with ChatGPT-based activities. This resonates with Chamani (2023) and Mazlum (2022), who highlight the tension between globalized English teaching practices and local educational norms in Iran. Teachers also noted the need to adapt AI-generated content to align with cultural and linguistic contexts, echoing Kramsch (2014) and Godwin-Jones (2023), who stress the importance of contextually sensitive pedagogy. Collectively, these findings suggest that successful AI integration requires not only technical skills but also nuanced understanding of local constraints, highlighting the necessity of developing contextually aware critical AI literacy among teachers.

Taken together, the findings illustrate that ChatGPT offers substantial pedagogical affordances, including fostering learner autonomy, engagement, and reflective thinking, while also supporting teachers in lesson planning and instructional creativity. These affordances resonate with prior studies emphasizing the transformative potential of AI in language education (Al-Khresheh, 2024; Bonner, Lege, & Frazier, 2023; Godwin-Jones, 2023; Jeon & Lee, 2023; Kohnke, Moorhouse, & Zou, 2023; Li, Bonk, & Kou, 2023). Participants' experiences indicate that AI can act as both a cognitive scaffold for learners and a pedagogical assistant for teachers, enhancing instructional quality and learner engagement when thoughtfully integrated into classroom practice.

At the same time, ethical, accuracy, and contextual challenges emerged as critical considerations, highlighting the necessity of critical AI literacy. Teachers' reflections regarding plagiarism, culturally inappropriate content, and misinformation align with Kasneci et al. (2023), Bannister, Santamaría-Urbieto, and Alcalde-Peñalver (2023), and Alm and Watanabe (2023), who caution that AI is not inherently neutral and requires human mediation. These insights underscore that fostering reflective and ethical use of AI among both teachers and

students is essential, particularly in contexts where sociocultural norms, curricula, and institutional policies shape classroom practices (Hsu & Ching, 2023; McCallum, 2024; Chamani, 2023).

The study also highlights that AI-mediated tasks can significantly enhance critical thinking, metacognitive awareness, and reflective skills, echoing previous research on AI as a co-constructive tool in language learning (Alm & Watanabe, 2023; Bonner et al., 2023; Eren, 2023; Ghafouri, 2024; Godwin-Jones, 2023; Jeon & Lee, 2023). When students critically evaluate AI-generated outputs, they develop analytical skills that extend beyond language proficiency, demonstrating the potential of AI to support higher-order thinking in EFL contexts. Participants emphasized that scaffolding and teacher guidance are key to ensuring meaningful engagement with AI, reinforcing findings by Kasneci et al. (2023) and Bonner et al. (2023) on the interplay between human pedagogy and AI assistance.

Finally, the contextual challenges identified such as digital access limitations, curriculum rigidity, and the need for culturally adapted content underscore the specific constraints of implementing AI in Iran, particularly in Kurdistan Province (Chamani, 2023; Dashtestani & Hojatpanah, 2022; Godwin-Jones, 2023; Kramsch, 2014; Konuralp & Topping, 2023; Mazlum, 2022). These findings suggest that teacher education programs in Iran should prioritize developing critical AI literacy, combining technical competence with reflective, ethical, and culturally responsive practices. Integrating AI-focused modules, collaborative projects, and guided reflection into teacher training could equip future English teachers to leverage AI's affordances while navigating the practical, ethical, and sociocultural complexities of local classrooms.

## Conclusion

This study explored the affordances and challenges of ChatGPT integration in English language education from the perspectives of preservice and in-service teachers in Kurdistan Province, Iran. The findings reveal that ChatGPT can enhance learner autonomy, engagement, and critical thinking, while providing teachers with practical support for lesson planning and instructional innovation. At the same time, ethical concerns, accuracy issues, and contextual constraints were identified as significant factors that require careful management. These results underscore the dual nature of AI as both a powerful pedagogical tool and a potential source of challenges that must be navigated thoughtfully.

The study highlights the importance of developing critical AI literacy among preservice and inservice teachers, emphasizing not only technical competence but also ethical, reflective, and culturally responsive practices. Teachers play a crucial role in mediating AI use, ensuring that students engage critically with AI-generated content rather than relying on it uncritically. Integrating AI-focused modules, collaborative projects, and reflective exercises into teacher education programs could equip future teachers with the skills needed to harness AI effectively while maintaining pedagogical and ethical integrity.

The findings also have broader implications for policy and curriculum design in Iran. Addressing infrastructural limitations, promoting flexible curriculum approaches, and providing ongoing professional development for teachers are essential steps to create an environment in which AI tools can be used meaningfully and equitably. Moreover, the study emphasizes that sociocultural considerations must be incorporated into AI-mediated activities to ensure relevance and appropriateness for local learners.

Finally, this study points to several directions for future research. Longitudinal studies could examine the sustained impact of AI integration on student learning outcomes, while comparative studies across different provinces or educational levels could provide insight into contextual variations. Additionally, research exploring students' perspectives on AI use, combined with teacher reflections, could offer a more holistic understanding of the affordances and challenges of generative AI in Iranian EFL classrooms. Overall, the study contributes to a growing body of knowledge on AI in language education and provides practical guidance for developing critically literate, ethically aware, and contextually responsive English teachers in Iran.

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**First Author:** collected data, designed, conducted the procedure, and wrote the first draft.

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### References

- Akbari, F., Amirian, S. M. R., Zareian, G., & Ghaniabadi, S. (2025). The Effect of Artificial Intelligence and Dynamic Assessment Synergy on Writing Development of Iranian Nursing Students. *International Journal of Language Testing*, 84-99.
- Al-khresheh, M. H. (2024). Bridging technology and pedagogy from a global lens: Teachers' perspectives on integrating ChatGPT in English language teaching. *Computers and Education: Artificial Intelligence*, 6, 100218. <https://doi.org/10.1016/j.caeai.2024.100218>
- Alm, A., & Watanabe, Y. (2023). Integrating ChatGPT in language education: A Freirean perspective. *Iranian Journal of Language Teaching Research*, 11(3), 19–30. <https://doi.org/10.30466/ijltr.2023.121404>
- Bannister, P., Urbieto, A. S., & Peñalver, E. A. (2023). A systematic review of generative AI and (English medium instruction) higher education. *Aula Abierta*, 52(4), 401-409.
- Bergen, N., & Labonté, R. (2020). “Everything is perfect, and we have no problems.”: Detecting and limiting social desirability bias in qualitative research. *Qualitative Health Research*, 30(5), 783–792. <https://doi.org/10.1177/1049732319889354>
- Bewersdorff, A., Seßler, K., Baur, A., Kasneci, E., & Nerdel, C. (2023). Assessing student errors in experimentation using artificial intelligence and large language models: A comparative study with human raters. *Computers and Education: Artificial Intelligence*, 5, Article 100177. <https://doi.org/10.1016/j.caeai.2023.100177>



- Bonner, E., Lege, R., & Frazier, E. (2023). Large language model-based artificial intelligence in the language classroom: Practical ideas for teaching. *Teaching English with Technology*, 23(1), 23–41. <https://files.eric.ed.gov/fulltext/EJ1383526.pdf>.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Carlson, M., Pack, A., & Escalante, J. (2023). Utilizing OpenAI's GPT-4 for written feedback. *TESOL Journal*, e759. <https://doi.org/10.1002/tesj.759>
- Chamani, F. (2023). Alternative futures of English language education in Iran in the era of globalization. *Linguistics and Education*, 73, Article 101146. <https://doi.org/10.1016/j.linged.2023.101146>
- Cheng, K. W. (2007). A study on applying focus group interview on education. *Reading Improvement*, 44(4), 194-199.
- Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Dashtestani, R., & Hojatpanah, S. (2022). Digital literacy of EFL students in a junior high school in Iran: Voices of teachers, students, and ministry directors. *Computer Assisted Language Learning*, 35(4), 635–665. <https://doi.org/10.1080/09588221.2020.1744664>
- Demir, N., & Kayaoğlu, M. N. (2022). Multi-dimensional foreign language education: The case of an eTwinning project in Turkey. *Computer Assisted Language Learning*, 35(9), 2201–2238. <https://doi.org/10.1080/09588221.2020.1871027>
- Eren, Ö. (2023). Raising critical cultural awareness through telecollaboration: Insights for pre-service teacher education. *Computer Assisted Language Learning*, 36(3), 288–311. <https://doi.org/10.1080/09588221.2021.1916538>
- Essel, H. B., Vlachopoulos, D., Essuman, A. B., & Amankwa, J. O. (2024). ChatGPT effects on cognitive skills of undergraduate students: Receiving instant responses from AI-based conversational large language models (LLMs). *Computers and Education: Artificial Intelligence*, 6, Article 100198. <https://doi.org/10.1016/j.caeai.2023.100198>
- Fathi, J., & Rahimi, M. (2022). Electronic writing portfolio in a collaborative writing environment: Its impact on EFL students' writing performance. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2022.2097697>
- Foroutan Far, F., & Taghizadeh, M. (2022). Comparing the effects of digital and nondigital gamification on EFL learners' collocation knowledge, perceptions, and sense of flow. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2022.2146724>
- Ghafouri, M. (2024). ChatGPT: The catalyst for teacher-student rapport and grit development in L2 class. *System*, 120, Article 103209. <https://doi.org/10.1016/j.system.2023.103209>
- Godwin-Jones, R. (2023). Emerging spaces for language learning: AI bots, ambient intelligence, and the metaverse. *Language, Learning and Technology*, 27(2), 6–27. <https://hdl.handle.net/10125/73501>
- Gruba, P., & Chau Nguyen, N. B. (2019). Evaluating technology integration in a Vietnamese university language program. *Computer Assisted Language Learning*, 32(5–6), 619–637. <https://doi.org/10.1080/09588221.2018.1527365>
- Hosseini Goodrich, N. (2020). English in Iran. *World Englishes*, 39(3), 482–499. <https://doi.org/10.1111/weng.12491>



- Hsu, Y. C., & Ching, Y. H. (2023). Generative artificial intelligence in education, part one: The dynamic frontier. *TechTrends*, 67, 603–607. <https://doi.org/10.1007/s11528-023-00863-9>
- Jafari, S., Fakhraee, L., & Teimourash, M. (2025). The Impact of Artificial Intelligence (chat GPT) on Writing Accuracy of Iranian Intermediate EFL Learners and Their Level of Motivation. *Technology Assisted Language Education*, 3(1), 90-109.
- Jeon, J., & Lee, S. (2023). Large language models in education: A focus on the complementary relationship between human teachers and ChatGPT. *Education and Information Technologies*, 28, 15873–15892. <https://doi.org/10.1007/s10639-023-11834-1>
- 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). ChatGPT for language teaching and e-learning. *RELC Journal*, 54(2), 537–550. <https://doi.org/10.1177/00336882231162868>
- Konuralp, H., & Topping, K. J. (2023). Underlying factors influencing the quality of online EFL teaching in higher education: An Iranian case study. *Interchange*, 54, 353–377. <https://doi.org/10.1007/s10780-023-09499-3>
- Kramsch, C. (2014). Language and culture. *AILA Review*, 27(1), 30–55. <https://doi.org/10.1075/aila.27.02kra>
- Li, B., Bonk, C. J., & Kou, X. (2023). Exploring the multilingual applications of ChatGPT: Uncovering language learning affordances in YouTube videos. *International Journal of Computer-Assisted Language Learning and Teaching*, 13(1). <https://doi.org/10.4018/IJCALLT.326135>
- Lichtman, M. (2023). *Qualitative research in education: A user's guide*. Routledge.
- Mazlum, F. (2022). Is English the world's lingua franca or the language of the enemy? Choice and age factors in foreign language policymaking in Iran. *Language Policy*, 21, 261–290. <https://doi.org/10.1007/s10993-021-09613-0>
- McCallum, L. (2024). New takes on developing intercultural communicative competence: Using AI tools in telecollaboration task design and task completion. *Journal for Multicultural Education*. <https://doi.org/10.1108/JME-06-2023-0043>
- Mehranirad, M. (2025). Exploring the Impact of an AI-oriented Teacher Education Program on EFL Teachers' Professional Development. *Technology Assisted Language Education*, 3(1), 1-23.
- Meihami, H. (2021). A narrative inquiry into Iranian EFL teachers' voice about challenges of CALL teacher education. *Teaching English with Technology*, 21(2), 92–111.
- Mogashoa, T. (2014). Applicability of constructivist theory in qualitative educational research. *American International Journal of Contemporary Research*, 4(7), 51-59.
- Moon, J. A. (2013). *A handbook of reflective and experiential learning: Theory and practice*. Routledge.
- Moulavinafchi, A., & Oroskhan, M. H. (2025). Exploring the Ethical Issues of Using ChatGPT in Language Learning among Iranian EFL University Students. *Technology Assisted Language Education*, 3(3), 86-108
- O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and practical guidelines. *International journal of qualitative methods*, 19, 1609406919899220.

- Ruslin, R., Mashuri, S., Rasak, M. S. A., Alhabsyi, F., & Syam, H. (2022). Semi-structured Interview: A methodological reflection on the development of a qualitative research instrument in educational studies. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 12(1), 22-29.
- Saeedi, Z., & Soltani, M. (2025). Developing an AI chatbot for language pragmatics instruction: from algorithms to dynamic assessment in an EFL context. *Computer Assisted Language Learning*, 1-22. <https://doi.org/10.1080/09588221.2025.2532014>
- Tajik, O., Golzar, J., & Noor, S. (2025). Purposive sampling. *International Journal of Education & Language Studies*, 1-9. <https://doi.org/10.1186/s40862-024-00299-5>