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AI-mediated instruction and novice language teachers' identity: reinforcing and disrupting factors

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This study examines how artificial intelligence (AI)-mediated instruction shapes novice language teachers' identity by highlighting both reinforcing and disrupting forces. Seven novice English as a Foreign Language (EFL) teachers at a private language school participated in a three-phase qualitative design: (a) demographic interviews to contextualize backgrounds and expectations; (b) observations of three lessons per teacher from an 18-session course in which AI tools were implemented; and (c) stimulated-recall interviews anchored to recorded AI episodes. Transcripts from all phases were analyzed through iterative open, axial, and selective coding, with reflexive memoing and member checking to enhance credibility. Findings reveal AI as a double-edged driver of identity. Reinforcing factors included enhanced classroom dynamism and efficiency, increased creativity, boosted self-confidence, and the emergence of a tech-savvy teacher identity. Disrupting factors involved challenged pedagogical knowledge, a perceived lack of AI expertise, limited recognition and appreciation within the institution, and moments of professional authenticity crisis. Overall, AI-mediated episodes prompted oscillations rather than linear change in identity, positioning novices alternately as empowered innovators and uncertain practitioners; targeted AI literacy, mentored experimentation, and recognition structures are recommended to stabilize preferable positions.

KEYWORDS

AI-mediated instruction, classroom observation, novice language teacher identity, qualitative analysis, stimulated recall

Introduction

In a multidimensional educational ecosystem, there are many players that contribute to its success, one of which is the competence of novice teachers joining this ecosystem (Barrett et al., 2015; Dooly, 2009; Kamali et al., 2024). Learning emerges from the interplay of multiple parameters (Steenbeek and van Geert, 2013), but as Vygotsky (1978) stated in his cultural-historical theory, learning and teaching occur more through social interactions; that is, interactions with peers, students, and materials greatly influence the thinking patterns and identity formation of teachers.

In the age of artificial intelligence (AI), socio-psychological dynamics are being reshaped by the development and widespread use of AI-based technologies in education (Creely et al., 2025; Zaman et al., 2024; Zhou et al., 2024). Furthermore, AI extends beyond being a direct source of educational material; it enhances teacher-student, student-student, and teacher-teacher interactions, thereby developing and transforming the classroom and extracurricular ecosystems (Su, 2023). Specifically, it creates a new area of decision-making

and competence acquisition that affects the construction processes of novice language teacher identity (LTI) within this ecosystem (Muthmainnah et al., 2024; Wei, 2023).

For example, AI tools such as ChatGPT or Copilot can support teachers in their roles, including lesson planning, material preparation, and providing individualized feedback to students, thereby increasing their professional self-efficacy and self-confidence (Rahimi and Sevilla-Pavón, 2025). In this context, AI-supported teaching can help novice teachers position themselves as more creative, productive, and technologically proficient professionals (Nazim, 2024; Wei, 2023). The rise of AI in education is therefore creating a new socio-technological habitus that novice teachers negotiate while constructing their identities (Gong et al., 2022).

This transformation has even more critical consequences for language teachers, especially those in the early years of their careers. As novice teachers' identities are still in the process of formation, their experiences play a decisive role in determining their long-term professional orientation (Farrell, 2017). As Nazari (2026) also indicates, novice teachers are constantly negotiating with institutional policies, cultural norms, and pedagogical expectations as they develop their agency. AI-supported teaching adds both opportunities and tensions to this negotiation: on the one hand, it equips teachers with more productive and contemporary pedagogies; on the other hand, it can lead to identity conflicts such as concerns about authenticity, feelings of pedagogical inadequacy, and excessive dependence on technology (Kayi-Aydar, 2019; Satvati et al., 2025).

Ghiasvand and Seyri (2025) also state that AI is enabling teachers to transform their roles, refraining from just being knowledge transmitters to orchestra chefs, as they guide and facilitate, analyze data, and collaborate with other teachers via AI-based tools. Yet, the positive transformation also has some tensions, such as those between authenticity and technological competence. In other words, Novice teachers can easily build an identity as technologically proficient and innovative. For instance, novice teachers can easily adopt and use AI-generated materials by disregarding materials created through their own experience and ideas. Furthermore, not receiving sufficient support and recognition at the institutional level weakens teachers' motivation for integrating AI (Satvati et al., 2025; Nazari et al., 2023).

Therefore, a significant gap remains in the literature: comprehensive and context-sensitive studies explaining how novice language teachers' identity construction is shaped in the context of AI-mediated teaching are still limited. Existing studies have primarily focused on the technical benefits of AI or general LTI theories; empirical findings that intersect these two dimensions are relatively scarce (Xu, 2025; Zaman et al., 2024). However, the experiences novice teachers have in the early years of their careers directly affect not only their professional commitment but also their long-term identity construction (Farrell, 2011).

This study addresses this gap by examining how novice English teachers position their identities within the context of AI-supported teaching. Specifically, it explores the factors that contribute to strengthening this process (such as enhanced self-confidence, creativity, and technological literacy) as well as those that potentially undermine it, including authenticity crises, pedagogical tensions, and insufficient institutional support. In doing so, the study integrates the dimension of artificial intelligence into the theoretical literature on LTI and also provides practical insights for developing strategies to foster novice teachers' professional growth and sustainability. Therefore, the research question guiding this study is proposed as follows:

> How do novice English as a Foreign Language (EFL) teachers position their identity in AI-mediated instruction contexts?

Literature review

Theoretical foundations of language teacher identity

Language teacher identity (LTI), which gained prominence over the past two decades (Ho, 2023), is characterized as "the teacher's dynamic self-conceptions and imagination of themselves as teachers, which shift as they participate in varying communities, interact with other individuals, and position themselves (and are positioned by others) in social contexts" (Yazan, 2018, p. 211). In other words, LTI is shaped by the interplay of several fundamental components: teacher learning, teacher cognition, contextual circumstances, teacher biographies, and emotional experiences, all of which substantially influence teachers' self-perception and their responsibilities in educational environments (Yazan, 2018).

While initial research on LTI described it as a fixed, inherent, and personal trait (Day et al., 2006), a number of studies conceptualized it as a dynamic, perpetual process, which is constantly being constructed and reconstructed through social interactions (e.g., Villegas et al., 2020; Wolff and De Costa, 2017). These social interactions are inherent to the settings in which language educators negotiate their self-perception, taking into account personal, institutional, and sociocultural nuances (Nazari et al., 2023; Yazan and Lindahl, 2020).

Although research has demonstrated that contextual factors have a profound impact on language teachers' self-perception (Wenger, 1998), there is a paucity of research examining how novice language teachers, who are concurrently fostering their LTI, perceive and interpret the integration of AI in their pedagogical practices. Addressing this gap is particularly important, given that novice language teachers' early experiences with contextual transformations may have lasting impacts on their LTI.

In this study, LTI refers to the self-perception of novice language teachers in an AI-mediated instructional setting. It is projected that novice language teachers, who are in the initial phases of identity formation, may encounter certain AI-related elements that either reinforce or impede their LTI development. AI is also defined as the utilization of various bots and chatbots powered by AI technology (e.g., ChatGPT, Copilot, Gemini) that assist language teachers and their students in the teaching and learning process.

Novice language teachers' identity development

Novice language teachers encounter significant hurdles in their initial years of work that can significantly impact their

professional identity and subsequent practices (Gu, 2024). The process of identity construction typically commences before real-time classroom practices, during teacher training courses, and is deeply associated with the novices' emotional experiences (Farrell, 2017; Mehdizadeh et al., 2023). The subsequent success or failure of novice educators is significantly dependent on their initial teaching experiences and the opportunities afforded to them for discussing the challenges they face in the classroom (Pitton, 2006).

These novice language teachers may face several conflicts that affect their LTI development. In an exploratory research undertaken by Stewart and Jansky (2022), the disparity between the student-centered theories acquired in teacher training programs and the standardized prescriptive norms dominating schools was identified as an obstacle to LTI formation. Experiencing these two distinct atmospheres may result in significant dissonance, self-doubt, and diminished confidence, leading to doubts about their ability to survive in the field (Barnes, 2018). Beyond this theory-practice gap, novice teachers also struggle with external mandates and power dynamics, including disparaging remarks from administrators, rigid school policies, conventional syllabi and assessments, as well as concerns related to attire and physical appearance (Nazari et al., 2023; Yang et al., 2022). Additionally, these teachers may encounter difficulties in meeting demands to integrate instructional technologies, manage heterogeneous classes, or handle substantial workloads, all of which exacerbate their internal and external conflicts (Satvati et al., 2025; Yuan, 2018).

Emotional Labor (EL) is another crucial factor in the identity formation of novice teachers (Benesch and Prior, 2023). This notion encompasses regulating emotions while fulfilling the emotional reactions required by the workplace, especially in relation to power relations. This process may result in early burnout, isolation, and diminished autonomy for teachers (Song, 2021). Novices may also experience EL while confronting external stimuli, such as humiliation from mentors or colleagues, or pressure to conform to institutional culture (Nazari et al., 2023).

AI and language teacher education

Artificial intelligence (AI) technology is a pivotal element in the changing landscape of language teacher education (LTE), allowing systems to simulate human intellect for learning, comprehension, problem-solving, decision-making, and creativity (Hockly, 2023). AI-based technologies and applications are primarily used to enhance the learning experience, streamline administrative functions, and provide personalized educational assessments (Zhou et al., 2024).

Regarding language educators, AI tools can serve as a supportive mechanism, offering assistance at any time and in any location through the integration of human expertise (Zhou and Hou, 2025). Additionally, they can enhance the effectiveness of language instruction by alleviating the strain associated with lesson planning, material preparation, assignment marking, and data tracking for learning. This frees up teachers to concentrate on engaging students directly and using innovative teaching strategies (Bekou et al., 2024; Haleem et al., 2022). As a result, language teachers themselves would embrace improved professional expertise and engage in self-reflection practices in the present evolving digital world (Ghiasvand and Seyri, 2025; Satvati et al., 2025).

Antecedents of LTI and AI

Previous research on the impact of AI-related elements on novice LTI can be classified into two categories: factors that reinforce language teachers' identity and those that create disruption for it.

AI and LTI reinforcement

The integration of AI technologies in education has transformed teachers' roles, allowing them to serve as facilitators, guides, providers of personalized feedback, material developers, and constant monitors of the learning process, rather than simply as transmitters of knowledge (Ghiasvand and Seyri, 2025; Huang et al., 2024). This transition is considered essential for the reconstruction and development of language teachers' identities.

This role transformation is further supported by empirical evidence. In a qualitative study on the utilization of AI in writing classes, Nazim's (2024) study findings also demonstrated that AI tools can assist educators in becoming digital navigators. That is to say, they can foster the transition from teacher-centered to student-centered pedagogy, enabling language teachers to utilize technology for enhanced student engagement. This finding was also echoed by Wei's (2023) study, in which AI implementation was found to lead to student autonomy, self-regulation, and ongoing improvement.

Moreover, AI tools can reshape LTI by enhancing language teachers' expertise and providing them with a wealth of resources to better understand English language teaching (Chao and Xiaohong, 2021; Lan, 2024). Given that modern LTI is intricately connected to and influenced by AI literacy (Su, 2023), language teachers have turned into tech-savvy instructors who are transforming the educational world (Golzar et al., 2023).

The professional benefits extend beyond technical benefits. Research has shown that AI-mediated instruction has encouraged self-reflection among language teachers, prompting them to reassess their assumptions about teaching methodologies and consider pedagogical adjustments for ongoing professional development (Robson, 2018). In addition, as Ghiasvand and Seyri (2025) found, AI tools have rendered English language education increasingly data-driven, personalized, and collaborative, requiring teachers to act as data analysts who constantly collaborate with technologies and learners.

Furthermore, regarding the intra- and interpersonal advantages of AI-enhanced education, numerous studies (e.g., Satvati et al., 2025; Tammets and Ley, 2023) demonstrated that these instructors perceive themselves as more self-confident and enjoy an intimate collegial aura in their working milieu.

AI and LTI disruption

Despite these benefits, AI integration also presents significant challenges for LTI formation. Initially, research found that

language teachers encounter some challenges as their roles undergo transformations (Kayi-Aydar, 2019). That is, they experience identity tensions and conflicts as a result of adjusting to new roles, duties, and expectations (Estaji and Ghiasvand, 2023). This has been attributed in some studies (e.g., Almashour et al., 2025; Zaman et al., 2024) to the reconfiguration of teachers' authority and expertise in the classroom.

The incorporation of AI tools has presented language teachers with significant challenges. For instance, they often struggle with technology-related stress, diminished autonomy, and serious ethical concerns about AI utilization (Kamali et al., 2024; Kim, 2024). A primary concern among language teachers is the apprehension of being substituted by AI technologies (Du and Gao, 2022). Having to deal with these professional tensions has resulted in teachers experiencing perplexity, thereby losing control and purpose in their instructional endeavors (Satvati et al., 2025).

While the existing literature on novice language instructors' identity construction is invaluable (e.g., Goktepe and Kunt, 2020; Nazari et al., 2023), to the best of our knowledge, it is deficient in addressing how these educators formulate their identities in relation to AI technology. While some studies characterize novice language teachers' identities as neither fully formed nor stable at the beginning of their careers, implying that it is a barely noticeable phenomenon for investigation (e.g., Ghiasvand and Seyri, 2025), other research has demonstrated that examining these instructors' identities can significantly affect the resolution of challenges related to teacher attrition, wellbeing, and effectiveness (e.g., Rushton et al., 2023; Xu, 2025). In addition, the advent of AI tools in the realm of education and the necessity to integrate them for instructional efficacy (Guo and Wang, 2024) have become significant criteria for assessing the performance of language instructors (Wang et al., 2023). This setting highlights the importance of understanding the AI-related identity formation of novice language teachers within the field.

Methodology

Study participants and design

The current qualitative case study (Merriam and Tisdell, 2016) seeks to obtain thorough insights regarding novice EFL teachers' experiences with AI-mediated instruction and its potential impacts on their identity. It is worth noting that AI-mediated instruction in this study was considered to utilize AI tools with the aim of enhancing the efficiency of instructional practices. The extent and use of these devices varied among participants, who utilized them for lesson planning, material generation, assessment, and feedback provision. A case study approach was chosen for its capacity to facilitate a comprehensive examination of current phenomena in authentic situations, especially when the borders between the phenomenon and context are hazy (Yin, 2018).

Seven EFL teachers were recruited by means of purposive sampling (Ary et al., 2018) from a private language school in Kermanshah, Iran. This sample size conforms to Creswell's (2013) guidelines for case studies, which recommend 4–10 individuals to achieve adequate depth while ensuring manageability for thorough analysis. Participants were selected based on some specific criteria:

First, their teaching experience was supposed to be no more than 5 years, as novice teachers are typically characterized by having less than 5 years of teaching experience [Organisation for Economic Co-operation and Development (OECD), 2019]. Second, the study participants had to have undergone pre-service teacher training courses. Throughout this course, trainees received instruction on the significance of technology integration in education and were evaluated based on the thorough incorporation of relevant technical tools in their final teaching demonstrations. Although these teachers were just trained on the basics of technology integration during their pre-service course, they were permitted to leverage any AI-related tool (e.g., ChatGPT), provided that such tools do not disrupt the instructional process or impede students' learning.

Third, these teachers were required to possess a minimum of 1 year of experience teaching with AI tools. It is noteworthy that the last criterion was verified through the observation lists supplied by the school's supervisor and participants' declarations during initial interviews. While the degree of their reliance on AI tools was dissimilar, all of them confirmed the incorporation of these tools into their workflow on a daily basis, especially during the lesson planning stage. The participants were of the opinion that the AI-generated outputs need to be modified prior to implementation.

The demographic information illustrates that the participants' ages ranged from 24 to 30, with teaching experience spanning from 2 to 5 years, confirming their early-career involvement. All participants hold English-related academic qualifications at the bachelor's or master's level and have 1–2 years of experience teaching with AI tools, ensuring adequate familiarity with AI-enhanced instruction.

Data collection and analysis

The necessary data for this research were collected utilizing three instruments. In the first phase of the study, demographic interviews were conducted with each participant prior to classroom observations. As Elhami and Khoshnevisan (2022) note, these interviews serve as preliminary data collection tools that help researchers collect participants' background information, experiences, and perspectives in depth, thereby contextualizing the next study stage, in this case, observations, smoothly. In this regard, the first researcher posed some open-ended questions, tailoring the research focus (novice language teachers' LTI development in AI-mediated classrooms) to clarify the research aim and build transparency with the participants. Table 1, which illustrates the participants' detailed profiles, was developed accordingly. These interviews lasted approximately 20–30 min.

During the second phase of the study, three instructional sessions from each EFL teacher's complete 18-session course curriculum were observed by the first researcher as a non-participant observer (Mackey and Gass, 2016) between April and May 2025. Before arranging the observation sessions, the researcher contacted each EFL teacher to confirm the integration of AI-mediated instruction. Each session lasted 90 min, and the researcher had obtained the consent of both students and teachers to record the sessions. Following the transcription of each recorded

TABLE 1 Participants demographic information.

Participants	Age	Gender	Major	Teaching experience	AI-mediated teaching experience
T1	30	Female	MA in ELT	4	2
T2	25	Male	BA in ELT	3	1
T3	27	Male	MA in ELT	5	1
T4	24	Female	BA in ELT	3	1
T5	28	Female	MA in ELT	4	2
T6	27	Male	BA in ELT	3	1
T7	24	Female	MA in ELT	2	2

session, instances of AI-mediated instruction were highlighted and thoroughly studied in relation to the available literature on the effects of AI on language teachers' identities and the participants' prior assertions.

In the third phase, each participant engaged in three post-class stimulated recall interview sessions to elaborate on their self-perception following the implementation of AI-assisted instruction. These sessions were organized based on documented instances of effective or ineffective employment of AI tools and their plausible effects on EFL teachers' self-perception. The interviews, which lasted approximately 60–70 min, were conducted in Farsi, the participants' native language, to facilitate the unrestricted expression of their thoughts. Then they were transcribed verbatim and translated. The first researcher, who is bilingual in Farsi and English, performed all the translations. Being a native speaker of Farsi helped her engage profoundly in language teachers' culturally and linguistically rooted self-expressions. The translation process was conducted using a meaning-based approach, aiming to preserve the participants' intended message. The translated excerpts were reviewed by a second bilingual researcher, who was also a researcher in the field of TEFL. She checked the accuracy and validity of the translations. Finally, discrepancies were discussed and resolved.

The obtained corpus data at the end of this stage included the transcriptions of seven demographic interviews, 21 classroom observations (three per participant), and 21 post-observation stimulated recall interviews (three per participant). All in all, the researchers had 21 observational points and roughly 30 h of interview data. These data were analyzed employing an inductive coding approach grounded in Merriam's (2014) three stages of open, axial, and selective coding.

First, the transcripts were systematically reviewed to identify emerging themes that reflected participants' self-perceptions and practices with AI tools. This stage led to the generation of some descriptive codes, like "being AI-dependent." In the axial coding stage, related codes were then grouped according to their thematic similarities. To ensure the internal coherence of the codes, they were constantly compared (Glaser and Strauss, 1967). Finally, each thematic group was assigned a name based on patterns related to the educators' self-perception as language teachers (See Figure 1).

Throughout this study, the first researcher, who conducted all observations and interviews, acknowledged her positionality and its potential impact on the research process. The researcher had a background in ELT and extensive experience at the same private language school, serving as both a supervisor and teacher trainer. Her prior experience and familiarity with the context could influence data interpretation. However, member checking was utilized to mitigate researcher bias and validate the accuracy of transcriptions and interpretations with the participating teachers (Creswell and Poth, 2018). Concurrently, data source triangulation was employed to compare themes across various data sources to corroborate the findings. All participants provided informed consent for their involvement, classroom recordings, and the use of data for research purposes. Participants were assured of their right to withdraw from the study at any time without repercussions. The data were anonymized, and pseudonyms were used to protect participants' confidentiality.

Findings

Novice EFL teachers' identity (re)construction in AI-mediated contexts

This section delineates notable themes that highlight novice language teachers' self-perception in an AI-mediated instructional environment. These themes are illustrated in Figure 2, which shows the distribution of reinforcing and disrupting factors that novice language teachers encounter. Concise excerpts from the interviews are incorporated to exemplify the findings.

AI-related factors reinforcing LTI (re)construction

Six out of seven novice language teachers maintained that they were more dynamic and efficient when developing lesson plans with AI technologies (e.g., Copilot) and implementing them in the classrooms. This was apparent during the pre-reading phase of a reading lesson in T7's class, where she supplied her students with AI-generated visuals associated with the written text. Her students engaged effectively with the material and willingly discussed the topic under consideration. While reflecting on this experience, T7 remarked that

> "observing my students participating enthusiastically in classroom discussions has enhanced my sense of efficacy." (T7, SRI1)

Her noticeable satisfaction (i.e., manifested through her smile and confident posture while teaching using AI tools) from students' participation and the suitability of AI-generated content marked a turning point in reinforcing her self-perception, more specifically, enhancing her sense of efficiency and dynamism.

Five out of seven language teachers acknowledged perceiving themselves as creative instructors due to the integration of AI tools in their classrooms. They asserted that this technology has enabled them to devise various tasks that are both pedagogically sound and engaging for the students. This was especially evident in T4's class, where she instructed her students based on the stages outlined by Copilot for her lesson on "Teens and Technology." This AI-generated lesson plan commenced with a preparatory task, instructing the learners to stand, mingle in the room, and engage with different classmates to solicit their ideas on the appropriateness of screen reliance for adolescents. T4's non-verbal cues, such as smiling and nodding at certain students, indicated appreciation for the lesson she had designed. Upon being presented with the purported episode, she stated that when she leverages AI tools for task development, she encounters concepts she has never encountered before. This novelty sparked her interest and prompted her to incorporate and apply the AI-generated task in her classroom. As she stated,

> "I have gradually compiled a collection of diverse ideas for the different stages of my class. In the absence of AI technologies, I can promptly generate ideas by drawing from my extensive reservoir of concepts." (T4, SRI3)

This process of AI-mediated inspiration consolidated her creativity as a language teacher.

Three out of seven language teachers demonstrated a noticeable increase in their self-confidence following the integration of AI. These educators contended that AI technologies have provided them with constant support during various stages of planning and practice, instilling a sense of confidence in their teaching abilities. This was apparent during the vocabulary instruction session held by T5, where she utilized AI-generated visuals to elicit new terms such as "biodiversity" and "ecosystem" in the pre-teaching vocabulary stage of a reading lesson about "environmental preservation." The learners were fully engaged, responding appropriately to the prompts. While reflecting on her experience, T5 stated that she deemed herself "an effective instructor" and assumed she could "bring about change through the utilization of AI" (T5, SRI2).

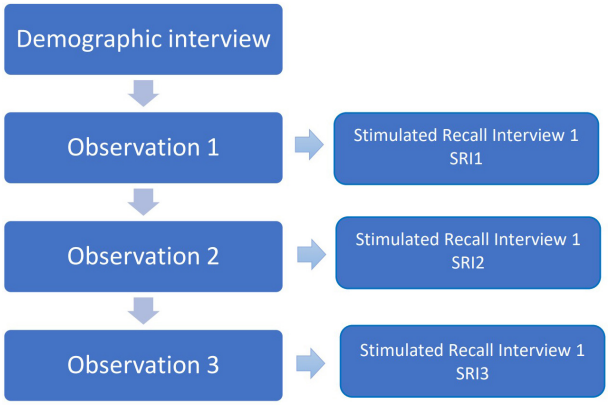

FIGURE 1
Schematic representation of data collection.

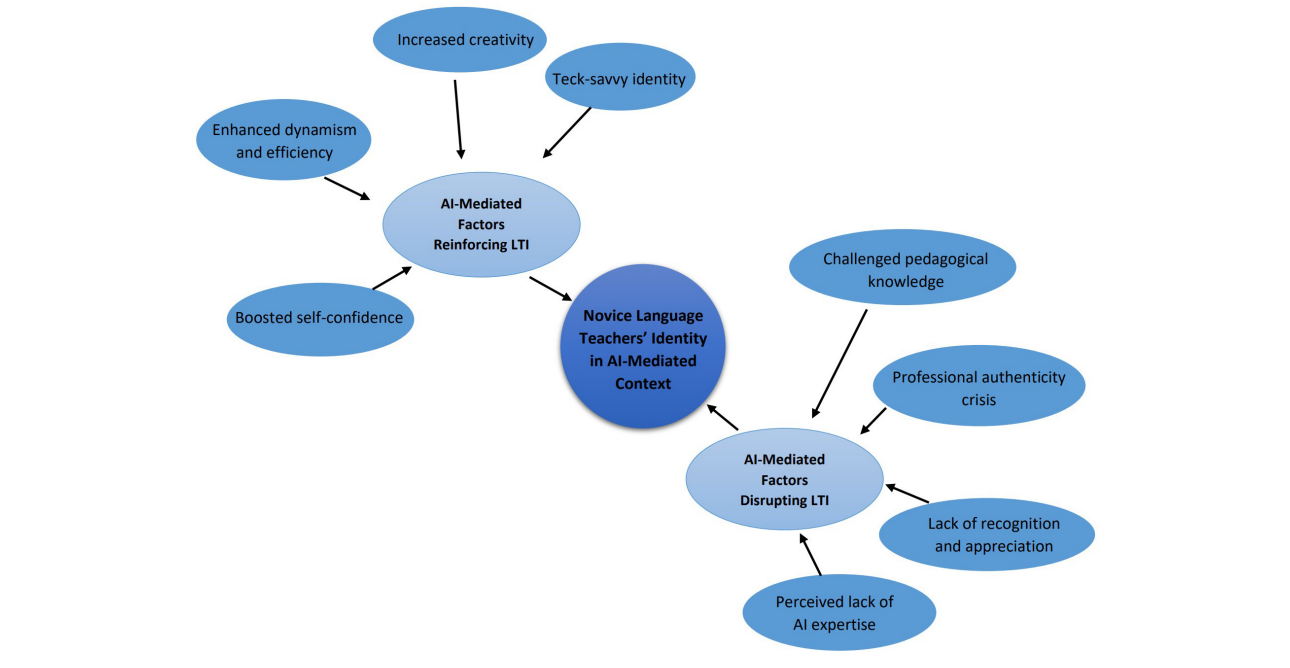

FIGURE 2
AI-mediated reinforcing and disrupting themes in novice language teachers' LTI.

Similarly, T7 characterized her experience of leading a class by means of AI tools as "a positive outcome that was worth all the effort invested in the planning stage" (T7, SRI2). She believed that she owed this feeling to AI tools since they had helped her identify her weaknesses and rectify them effectively. This experience, as she expounded, had instilled that "I can be a leading teacher" (T7, SRI2).

Five out of seven language teachers asserted that employing AI tools has boosted their perception as more qualified and technologically updated instructors. These educators maintained that lesson planning was formerly a laborious process, sometimes fraught with errors stemming from incompetence or inexperience. However, the precision of AI has successfully solved this issue by formulating a relevant prompt. T1 demonstrated this AI-related expertise by creating a short story, animating the characters, and assigning distinct voices to each one, which sparked enthusiasm and admiration among learners, thereby improving their participation. Upon recalling this episode, she smiled contentedly and remarked that the educational diversity she could present to the language learners by the application of AI technology has resulted in her feeling like a "tech-savvy instructor" (T1, SRI1). T3 portrayed himself as a "techie teacher" while recounting a classroom episode in which he showcased the Graphic Interchange Format (GIF) to students. He explained that he has chosen this approach since GIFs have motion, in contrast to static imagery, which might facilitate a more effective educational concept transfer.

The identified themes reveal that effective AI integration, especially when it corresponds to educational objectives and yields favorable student outcomes, bolsters novice language teachers' emerging identities. This reinforcement manifests in several ways: improved productivity and dynamism, heightened creativity, enhanced self-confidence, and the development of a tech-savvy instructor's self-perception. These positive factors appear to be closely attributed to successful student engagement and novice language teachers' ability to surmount previous constraints in lesson planning and implementation.

AI-related factors disrupting language teachers' identity

While acknowledging the fortifying impact of AI tools on their self-image, some of the participants maintained that, under specific circumstances, their identity has undergone significant challenges. These disrupting factors emerged through several distinct yet interconnected themes that complicated novice language teachers' positioning in AI-mediated contexts.

Four out of seven language teachers reported that there have been times when their pedagogical knowledge was challenged due to allocating unrealistic time frames to AI-generated tasks. Occasionally, this had resulted in classroom turmoil as language teachers were unable to timely achieve their educational objectives. This was obviously visible in T6's experience when she intended to arrange a role play to wrap up her class. The allocated time for this activity was 15 min; nevertheless, it took her over 7 min merely to group the learners and provide instructions. Consequently, students did not have sufficient time for group practice and subsequent feedback. Upon recalling this recorded episode, T6 expressed her distress and explained:

> "I could not complete a crucial component of my lesson plan because I had overly leaned on AI and failed to maintain a realistic perspective on my class." (T6, SRI3)

This unpleasant experience, arising from an overreliance on AI-generated material, had eroded her initial confidence, replacing it with frustration and a sense of professional inadequacy.

Three out of seven language teachers elaborated on a troubling transformation in their self-perception during the lesson compared to their impression upon departing the classroom. These language teachers expressed that while in the classroom, they were satisfied and perceived themselves as professional educators; yet, upon stepping out, this feeling faded away, yielding dissatisfaction and diminished self-efficacy. Language teachers attributed this shift in identity to their failure to utilize their own ideas and creativity in the classroom. In this regard, T2 explained,

> "I was the performer of AI ideas, rather than my own. This has raised a sense of inadequacy in me." (T2, SRI1)

Likewise, T4 expressed experiencing "self-doubt" while adhering to AI-mediated instruction, stating,

> At times, I feel inundated, uncertain of my position within the educational sphere. I am dependent on AI tools for my instruction. However, I have completed courses in pedagogy. Should I depend exclusively on AI to be seen as an updated, competent language teacher? (T4, SRI2)

This identity fragmentation highlights a conflict between technical competence and professional authenticity that challenges teachers' self-perception of their expertise.

Three out of seven language teachers expressed their weakness and lack of expertise in employing AI within their instructional process, attributing this shortcoming to insufficient training in this regard. T3's statements were particularly illuminating in this regard:

> "The teacher training course we completed addressed the topic of technology integration, including AI, in a superficial and theoretical manner. However, we are dealing with this issue at every step of the lesson and with the students consistently." (T3, SRI2)

As language teachers further elaborated on this matter, it became evident that they felt profoundly unsupported in navigating digitally progressive educational landscape. T2's reflection was particularly revealing:

> "When I do not use AI tools, I think that I have fallen behind the effective teachers of my time." (T2, SRI3)

Similarly, T1 perceived herself as if she

> "cannot keep up with the changes at this speed without receiving ongoing support from an expert in this domain." (T1, SRI2)

These identified deficiencies in raising language teachers' awareness of AI tools' application have provoked unfavorable self-perceptions, including feelings of incompetence and technological illiteracy.

Four out of seven language teachers stated that their efforts concerning AI integration were not properly appreciated by both students and institutional authorities. This was apparent in an episode from T5's session, where her students seemed disinterested in the AI-generated reading comprehension task she had prepared by the use of ChatGPT. Reflecting on this experience, T5 explained:

> "Given that students are immersed in a realm of animated visuals outside the classroom and dedicate substantial time to screens, our newly AI-generated screen-based instruction appears to be exhausting for them."

She further elaborated:

> "At times, I feel reluctant to invest time in developing updated lesson plans when my efforts are neither recognized nor valued." (T5, SRI2)

T6 articulated similar resentment, stating:

> "Why should I invest my efforts in developing AI-mediated lesson plans or creating animations for the tasks while my attempts are overlooked or taken for granted in my workplace?" (T6, SRI3)

This lack of acknowledgment for their technological integration efforts contributed to feelings of devaluation and questioning of their investment in AI-mediated teaching practices.

All in all, novice language teachers' self-perception of AI-mediated instruction appeared to be influenced by the context in which they teach or the discrepancies they detect between their preconceived notions and this instructional approach. These disrupting factors reveal that AI integration, while potentially beneficial, can simultaneously challenge teachers' identities through pedagogical misjudgments, authenticity concerns, inadequate preparation, and insufficient institutional recognition.

Discussion

The findings of this study shed light on the complex nature of AI-mediated instruction's impact on novice EFL teachers' identity (re)construction, revealing both reinforcing and disrupting factors. In particular, the obtained results provide critical insights into how AI may transform the dynamic process of identity formation among novice language teachers, confirming Yazan's (2018) assertion that LTI is continuously reconstructed through social interactions and contextual circumstances.

The findings of this study indicate that the integration of AI significantly improves novice language teachers' sense of dynamism and productivity, corroborating prior research by Ghiasvand and Seyri (2025) and Huang et al. (2024) on teachers' evolving roles as facilitators and digital navigators. The way that language teachers dealt with AI-generated materials, notably 7's successful implementation of visuals and 4's innovative task design, corresponds with Nazim's (2024) findings on the impact of AI tools in fostering the transition from teacher-centered to student-centered pedagogy. However, this study further develops these findings by demonstrating how such successful implementations directly contribute to novice language teachers' emerging identity, creating positive feedback loops that consolidate their self-perception as effective teachers.

One important finding of this study was the emergence of a "tech-savvy identity" among novice language teachers. The development of this nascent identity dimension bridges the gap between AI literacy and LTI (Su, 2023). The metamorphosis (Kamali, 2014, 2021, 2023) that T1 and T3 underwent, when they called themselves "tech-savvy instructors" and "techie teachers," respectively, supports Golzar et al.'s (2023) claim that language teachers are becoming technological transformers of education. This finding is particularly important for novice language teachers, whose identities are still in the process of formation. It suggests that successful AI integration can surge their LTI development and make them feel like they belong to the contemporary educational environment.

The improved self-confidence reported by participants lends empirical support to the findings of Satvati et al. (2025) and Tammets and Ley (2023) regarding AI's positive impact on teachers' intrapersonal development. According to the present study, teachers' fundamental beliefs about their efficacy and capacity to design meaningful learning experiences are at the heart of this confidence boost, which goes beyond technical proficiency. 5's perception of herself as "an effective instructor" who can "bring about change through the utilization of AI" exemplifies how successful AI implementation reinforces the fundamental aspects of teacher identity related to agency and impact.

In addition to the technology-related findings obtained in earlier research (e.g., Du and Gao, 2022; Estaji and Ghiasvand, 2023), the study's identification of challenged pedagogical knowledge as a disrupting factor offers fresh perspectives on the intricacy of integrating AI. While existing research has focused on the benefits of AI for lesson planning and material preparation (Bekou et al., 2024; Haleem et al., 2022), this study reveals that over-reliance on AI-generated content can undermine novice teachers' developing pedagogical judgment. 6's experience with unrealistic time allocation demonstrates how AI tools, while efficient, may not adequately account for the nuanced understanding of classroom dynamics that seasoned teachers possess intuitively. This finding extends Kayi-Aydar's (2019) work on identity tensions by showing how technological dependence can create specific conflicts in pedagogical decision-making.

One of the most significant contributions of this study is the identification of professional authenticity concerns among novice teachers using AI. Some language teachers, such as T2, articulated that "I was the performer of AI ideas, rather than my own," highlighting a previously unexplored dimension of AI's impact on teacher identity. This finding challenges the predominantly positive portrayal of AI integration in existing literature (e.g., Hockly,

2023; Zhou and Hou, 2025) and aligns with broader concerns about authenticity in digitally mediated professional practices. The temporal nature of this identity conflict (feeling professional during class but experiencing doubt afterward) suggests that the immediate feedback from successful AI implementation may conceal concerns about professional authenticity that emerge during reflection.

A significant discrepancy between pre-service training and in-service reality is highlighted by the participants' statements of insufficient AI expertise, especially 3's criticism of cursory training and 1's request for continuous expert assistance. This finding adds to the body of research on novice teacher challenges (Satvati et al., 2025; Stewart and Jansky, 2022) by identifying a new dimension of the theory-practice gap specific to AI integration. The emotional labor (Benesch and Prior, 2023) associated with navigating this technological landscape without adequate preparation represents an additional burden for novice teachers, who are already managing multiple challenges related to identity construction.

Conclusions and implications

The findings of the current study shed light on the impact of AI-mediated instruction on the identity formation of novice language teachers, displaying its dual nature. Four primary themes were discerned for each aspect of this dual phenomenon. The first category of the obtained themes pertains to the factors that contribute to language teachers' LTI through amplified dynamism, creativity, confidence, and technological proficiency. The second category pertains to the tensions arising from challenges related to pedagogical authenticity, professional adequacy, institutional recognition, and perceived deficiencies in AI expertise.

The conclusions derived from this research embrace both theoretical and practical implications. At the theoretical level, the results contribute to LTI theory (Yazan, 2018) by elucidating the challenges that novice language teachers face in an AI-mediated instructional setting. That is, they are constantly negotiating their identity in relation to their technological competence and the authenticity of their classroom practices. Being engaged in simultaneous strengthening and disrupting factors indicates that novice LTI is inherently contradictory, necessitating a continual navigation between their self-perception and career-related demands. This study also underscores the temporal nature of LTI for novice language teachers, wherein immediate classroom perceptions may conflict with subsequent thoughts.

With regard to practical implications, this study emphasizes the significance of context in LTI formation and extends it to AI-mediated instructional environments. Participants' lived experiences revealed that contextual factors, such as the availability of support systems, student reactions, and institutional acknowledgment, can have a significant impact on LTI. Consequently, if language teachers are to establish a robust identity early on, it is crucial for stakeholders to supply the requisite resources for AI integration and consider having a technical expert available inside the working environment. In addition, institutions can hold workshops on integrating AI in pedagogical practices and provide ongoing support even after the course is completed. This could actually be done by forming an online forum where participants can share their experiences. Moreover, novice teachers can collaborate with experts in the AI-integration domain and prepare the lesson plans several times. Language teachers can also cultivate students' awareness of the importance of teaching through cutting-edge technology by accentuating the positive outcomes that can result from their integration. Otherwise, these contradictory experiences stemming from iterative exposure to satisfaction and frustration, potentially lead to AI-integration reluctance in the long term.

The limitations of this study should be noted, as is the case with every other research study. The restricted sample size, combined with the study's focus on a specific institutional context, limits the generalizability of the findings to broader populations or other educational settings. These limitations suggest that the findings should be interpreted cautiously, as they may predominantly reflect the specific traits of the participants and the institutional setting rather than the experiences of other language instructors in different instructional contexts.

Furthermore, the 1-year minimum criterion for AI experience may have precluded language teachers who are in the initial phases of AI integration. Future studies may investigate longitudinal variations in LTI as AI tools are becoming more sophisticated and integrated into educational processes. Additionally, cross-cultural studies can yield comparative insights by examining AI-mediated identity formation across other contexts.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Ibn Haldun University Ethical Committee. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

SH: Writing – original draft, Conceptualization, Writing – review & editing, Formal analysis, Methodology, Data curation. MA: Resources, Writing – review & editing, Data curation, Writing – original draft. JK: Methodology, Conceptualization, Supervision, Writing – review & editing, Writing – original draft, Visualization.

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Generative AI statement

The author(s) declared that generative AI was used in the creation of this manuscript. Generative AI (specifically ChatGPT-5) was used to polish language (grammar/clarity), rephrase limited sentences, suggest headings/outline options, and proofread; it did not generate or analyze data or determine findings, and the author(s) verified all content and take full responsibility.

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References

Almashour, M., Aldamen, H. A. K., and Jarrah, M. (2025). They know AI, but they also know us: student perceptions of EFL teacher identity in AI-enhanced classrooms in Jordan. *Front. Educ.* 10:1611147. doi: 10.3389/feduc.2025.1611147

Ary, D., Jacobs, L. C., Irvine, C. K. S., and Walker, D. (2018). *Introduction to Research in Education*. Boston, MA: Cengage Learning.

Barnes, M. E. (2018). Conflicting conceptions of care and teaching and pre-service teacher attrition. *Teach. Educ.* 29, 178–193. doi: 10.1080/10476210.2017.1372411

Barrett, P., Zhang, Y., Moffat, J., and Kobbacy, K. (2015). The impact of classroom design on pupils' learning: final results of a holistic, multi-level analysis. *Build. Environ.* 89, 118–133. doi: 10.1016/j.buildenv.2015.02.013

Bekou, A., Ben Mhamed, M., and Assissou, K. (2024). Exploring opportunities and challenges of using ChatGPT in English language teaching (ELT) in Morocco. *Focus ELT J.* 6, 87–106. doi: 10.14744/felt.6.1.7

Benesch, S., and Prior, M. T. (2023). Rescuing "emotion labor" from (and for) language teacher emotion research. *System* 113:102995. doi: 10.1016/j.system.2023.102995

Chao, W. A. N. G., and Xiaohong, T. I. A. N. (2021). Teachers' professional identity in the age of artificial intelligence: challenges and constructions. *J. Teach. Educ.* 8, 66–75. doi: 10.13718/j.cnki.jsjy.2021.02.009

Creely, E., Barnes, M., Tour, E., Henderson, M., Waterhouse, P., Pena, M. A., et al. (2025). Exploring attitudes to generative AI in education for English as an additional language (EAL) adult learners. *ReCALL* 37, 174–190. doi: 10.1017/S0958344024000314

Creswell, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches, 3rd Edn*. Los Angeles, CA: SAGE Publications.

Creswell, J. W., and Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches, 4th Edn*. Los Angeles, CA: SAGE Publications.

Day, C., Kington, A., Stobart, G., and Sammons, P. (2006). The personal and professional selves of teachers: stable and unstable identities. *Br. Educ. Res. J.* 32, 601–616. doi: 10.1080/01411920600775316

Dooly, M. (2009). New competencies in a new era? Examining the impact of a teacher training project. *ReCALL* 21, 352–369. doi: 10.1017/S0958344009990085

Du, Y., and Gao, H. (2022). Determinants affecting teachers' adoption of AI-based applications in EFL context: an analysis of analytic hierarchy process. *Educ. Inf. Technol.* 27, 9357–9384. doi: 10.1007/s10639-022-11001-y

Elhami, A., and Khoshnevisan, B. (2022). Conducting an interview in qualitative research: the modus operandi. *MEXTESOL J.* 46, 1–7. doi: 10.61871/mj.v46n1-3

Estaji, M., and Ghiasvand, F. (2023). Tracing the dynamics of teacher assessment identity (TAI) through web-based audio diaries. *Qual. Rep.* 28, 2681–2715. doi: 10.46743/2160-3715/2023.5903

Farrell, T. S. C. (2011). Exploring the professional role identities of experienced ESL teachers through reflective practice. *System* 39, 54–62. doi: 10.1016/j.system.2011.01.012

Farrell, T. S. C. (2017). "'Who I am is how I teach': reflecting on teacher role identity," in *Reflections on Language Teacher Identity Research*, ed. G. Barkhuizen (London: Routledge), 183–189.

Ghiasvand, F., and Seyri, H. (2025). A collaborative reflection on the synergy of artificial intelligence (AI) and language teacher identity reconstruction. *Teach. Teach. Educ.* 160:105022. doi: 10.1016/j.tate.2025.105022

Glaser, B. G., and Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine.

Goktepe, F., and Kunt, N. (2020). "I'll do it in my own class": novice language teacher identity construction in Turkey. *Asia-Pac. J. Educ.* 41, 472–487. doi: 10.1080/02188791.2020.1815648

Golzar, J., Sarwarzada, T., and Miri, M. A. (2023). Coping with teacher professional identity tensions: using TPACK during global crisis time. *J. Lang. Identity Educ.* 24, 1208–1226. doi: 10.1080/15348458.2023.2281952

Gong, Y. F., Gao, X. A., and Lai, C. (2022). "Novice teachers' technology integration and professional identity reframing in the Chinese as an additional language classroom," in *Theory and Practice in Second Language Teacher Identity*, eds. K. Sadeghi, and F. Ghaderi (Berlin: Springer), 195–210. doi: 10.1007/978-3-031-13161-5_14

Gu, Y. (2024). A study of the identity process of novice teachers and their professional adaptation. *J. Educ. Humanit. Soc. Sci.* 40, 214–220. doi: 10.54097/bcwcca80

Guo, Y., and Wang, Y. (2024). Exploring the effects of artificial intelligence application on EFL students' academic engagement and emotional experiences: a mixed-methods study. *Eur. J. Educ.* 60:e12812. doi: 10.1111/ejed.12812

Haleem, A., Javaid, M., and Singh, R. P. (2022). An era of ChatGPT as a significant futuristic support tool: a study on features, abilities, and challenges. *BenchCouncil Trans. Benchmarks Stand. Eval.* 2:100089. doi: 10.1016/j.tbench.2023.100089

Ho, W. Y. J. (2023). Discursive construction of online teacher identity and legitimacy in English language teaching. *Learn. Media Technol.* 50, 219–234. doi: 10.1080/17439884.2023.2259295

Hockly, N. (2023). Artificial intelligence in English language teaching: the good, the bad and the ugly. *RELC J.* 54, 445–451. doi: 10.1177/00336882231168504

Huang, F., Wang, Y., and Zhang, H. (2024). Modeling generative AI acceptance, perceived teachers' enthusiasm, and self-efficacy to English as foreign language learners' well-being in the digital era. *Eur. J. Educ.* 59, 1–14. doi: 10.1111/ejed.12770

Kamali, J. (2014). Post method survival. *Procedia Soc. Behav. Sci.* 98, 824–829. doi: 10.1016/j.sbspro.2014.03.487

Kamali, J. (2021). Teachers' beliefs about teacher metamorphosis. *MEXTESOL J.* 45:n1. doi: 10.61871/mj.v45n1-7

Kamali, J. (2023). Metamorphosis of a teacher educator: a journey towards a more critical self. *J. Appl. Learn. Teach.* 6, 252–259. doi: 10.37074/jalt.2023.6.2.8

Kamali, J., Freeman, D., Larsen-Freeman, D., Norton, B., and Farrell, T. S. C. (2024). Editorial: Language teacher education research – key trends, challenges, and questions. *Lang. Teach. Educ. Res.* 1, 1–16. doi: 10.32038/lter.2024.01.01

Kayi-Aydar, H. (2019). Language teacher identity. *Lang. Teach.* 52, 281–295. doi: 10.1017/S0261444819000223

Kim, J. (2024). Leading teachers' perspective on teacher-AI collaboration in education. *Educ. Inf. Technol.* 29, 8693–8724. doi: 10.1007/s10639-023-12109-5

Lan, Y. (2024). Through tensions to identity-based motivations: exploring teacher professional identity in artificial intelligence-enhanced teacher training. *Teach. Teach. Educ.* 151:104736. doi: 10.1016/j.tate.2024.104736

Mackey, A., and Gass, S. M. (2016). *Second Language Research: Methodology and Design, 2nd Edn*. London: Routledge.

Mehdizadeh, M., Pourhaji, M., and Derakhshan, A. (2023). Evolution of communities of practice, realignment of possible selves, and repositionings in EFL teacher professional identity development: a longitudinal case study. *Lang. Learn. J.* 52, 336–348. doi: 10.1080/09571736.2022.2163685

Merriam, S. B. (2014). *Qualitative Research: A Guide to Design and Implementation*. Hoboken, NJ: Jossey-Bass.

Merriam, S. B., and Tisdell, E. J. (2016). *Qualitative Research: A Guide to Design and Implementation, 4th Edn*. Hoboken, NJ: Jossey-Bass.

Muthmainnah, M., Cardoso, L., Alsbbagh, Y. A. M. R., and Apriani, E. (2024). "Advancing sustainable learning by boosting student self-regulated learning and feedback through AI-driven personalized learning in EFL education," in *Explainable Artificial Intelligence in the Digital Transformation of Industry 4.0, Lecture Notes in Networks and Systems, Vol. 734*, ed. A. Alnoor (Berlin: Springer), 115–128.

Nazari, M. (ed.). (2026). *Novice Non-Native English Language Teachers Navigating Agency: International Perspectives, 1st Edn*. London: Routledge. doi: 10.4324/9781003493235-1

Nazari, M., De Costa, P. I., and Karimpour, S. (2023). Novice language teacher identity construction: similarities, differences, and beyond. *Educ. Linguist.* 2, 1–28. doi: 10.1515/eduling-2022-0013

Nazim, M. (2024). Exploring EFL teachers' insights regarding artificial intelligence driven tools in student-centered writing instructions. *Int. J. Engl. Linguist.* 14, 1–18. doi: 10.5539/ijel.v14n3p90

Organisation for Economic Co-operation and Development (OECD) (2019). *Supporting and Guiding Novice Teachers: Evidence from TALIS 2018* (Teaching in Focus No. 29). Available online at: https://www.oecd.org (Accessed September 29, 2025).

Pitton, D. E. (2006). *Mentoring Novice Teachers: Fostering a Dialogue Process*. Thousand Oaks, CA: Corwin Press.

Rahimi, A. R., and Sevilla-Pavón, A. (2025). The role of design thinking skills in artificial-intelligence language learning (DEAILL) in shaping language learners' L2 grit: the mediator and moderator role of artificial intelligence L2 motivational self-system. *Comput. Assist. Lang. Learn.* 38, 765–784. doi: 10.1080/09588221.2025.2477710

Robson, J. (2018). Performance, structure and ideal identity: reconceptualizing teachers' engagement in online social spaces. *Br. J. Educ. Technol.* 49, 439–450. doi: 10.1111/bjet.12551

Rushton, E. A., Rawlings Smith, E., Steadman, S., and Towers, E. (2023). Understanding teacher identity in teachers' professional lives: a systematic review of the literature. *Rev. Educ.* 11:e3417. doi: 10.1002/rev3.3417

Satvati, N., Kamali, J., Safian Boldaji, F., Khodadadi, M., and Akhondi, S. (2025). AI Integration into language education and teacher identity: an ecological perspective. *Lang. Teach. Res. Q.* 47, 1–19. doi: 10.32038/ltrq.2025.47.01

Song, J. (2021). Expanding teacher reflection on emotions in online teaching: Grappling with teacher identity and student (non)participation. *Iran. J. Lang. Teach. Res.* 9, 77–91. doi: 10.30466/ijltr.2021.121077

Steenbeek, H. W., and van Geert, P. L. C. (2013). The emergence of learningteaching trajectories in education: a complex dynamic systems approach. *Nonlinear Dyn. Psychol. Life Sci.* 17, 233–267.

Stewart, T. T., and Jansky, T. A. (2022). Novice teachers and embracing struggle: dialogue and reflection in professional development. *Teach. Teach. Educ.: Leadersh. Prof. Dev.* 1:100002. doi: 10.1016/j.tatelp.2022.100002

Su, Y. (2023). Delving into EFL teachers' digital literacy and professional identity in the pandemic era: technological pedagogical content knowledge (TPACK) framework. *Heliyon* 9:e16361. doi: 10.1016/j.heliyon.2023.e16361

Tammets, K., and Ley, T. (2023). Integrating AI tools in teacher professional learning: a conceptual model and illustrative case. *Front. Artif. Intell.* 6:1255089. doi: 10.3389/frai.2023.1255089

Villegas, D. F., Varona, W. H., and Sanchez, A. G. (2020). Student teachers' identity construction: a socially constructed narrative in a second language teacher education program. *Teach. Teach. Educ.* 91:103055. doi: 10.1016/j.tate.2020.103055

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Wang, X., Li, L., Tan, S. C., Yang, L., and Lei, J. (2023). Preparing for AI-enhanced education: conceptualizing and empirically examining teachers' AI readiness. *Comput. Human Behav.* 146:107798. doi: 10.1016/j.chb.2023.107798

Wei, L. (2023). Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning. *Front. Psychol.* 14:1261955. doi: 10.3389/fpsyg.2023.1261955

Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press. doi: 10.1017/CBO9780511803932

Wolff, D., and De Costa, P. I. (2017). Expanding the language teacher identity landscape: an investigation of the emotions and strategies of a NNEST. *Mod. Lang. J.* 101, 76–90. doi: 10.1111/modl.12370

Xu, J. (2025). Exploring language teacher identity development in a teacher professional learning programme. *Asian-Pac. J. Second Foreign Lang. Educ.* 10:36. doi: 10.1186/s40862-025-00327-y

Yang, H., Kim, H., Lee, J. H., and Shin, D. (2022). Implementation of an AI chatbot as an English conversation partner in EFL speaking classes. *ReCALL* 34, 327–343. doi: 10.1017/S0958344022000039

Yazan, B. (2018). A conceptual framework to understand language teacher identities. *J. Second Lang. Teach. Educ.* 1, 21–48. doi: 10.1558/slte.24908

Yazan, B., and Lindahl, K. (2020). *Language Teacher Identity in TESOL: Teacher Education and Practice as Identity Work*. London: Routledge. doi: 10.4324/9780429342875

Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods, 6th Edn*. Los Angeles, CA: SAGE Publications.

Yuan, R. (2018). A critical review on nonnative English teacher identity research: from 2008 to 2017. *J. Multiling. Multicult. Dev.* 40, 517–538. doi: 10.1080/01434632.2018.1533018

Zaman, S., Hussain, M. S., and Tabassam, M. (2024). Use of artificial intelligence in education: English language teachers' identity negotiation in higher education. *J. Asian Dev. Stud.* 13, 861–869. doi: 10.62345/jads.2024.13.3.70

Zhou, C., and Hou, F. (2025). How do EFL teachers utilize AI tools in their language teaching? *Theory Pract. Lang. Stud.* 15, 403–413. doi: 10.17507/tpls.1502.10

Zhou, Q., Hashim, H., and Sulaiman, N. A. (2024). Digital echoes: crafting Chinese EFL teacher identity in the era of AI-enhanced instruction—a qualitative exploration. *Forum Linguist. Stud.* 6, 32–50. doi: 10.30564/fls.v6i5.6864