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From Local Stories to Global English: A Qualitative Study of Pre-Service English Teachers' Experiences with AI-Assisted Gameful Pedagogy in a Teaching English to Young Learners Course

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Abstract. This qualitative interpretivist case study explored how pre-service English teachers experienced AI-assisted gameful pedagogy in a Teaching English to Young Learners (TEYL) course; how they perceived its pedagogical value; how they negotiated local cultural elements and global English-teaching practices; and how these experiences shaped their professional learning and emerging teacher identities. Participants were 56 pre-service English teachers enrolled in a university-level TEYL course in Türkiye. Data were collected through reflective journals, digital teaching artefacts, semi-structured interviews and focus group discussions and analysed using thematic analysis. The findings revealed four interconnected themes. First, AI-assisted gameful pedagogy fostered active engagement, collaboration, creativity, and reflective participation. Second, participants perceived AI-supported storytelling, material design, and gameful activities as valuable for enhancing instructional creativity, learner motivation, and pedagogical flexibility, while also expressing concerns regarding ethical use, cultural appropriateness, and overreliance on AI-generated content. Third, participants integrated local stories, cultural narratives, and lived experiences into English-language teaching activities, demonstrating a glocal orientation that connected local identities to global English practices.

Finally, engagement with AI-assisted gameful pedagogy strengthened reflective professional learning, pedagogical confidence, and teacher identity development, characterised by creativity, cultural responsiveness, and digital pedagogical awareness. Overall, the findings suggest that AI-assisted gameful pedagogy can support culturally responsive, reflective, and human-centred teacher education in TEYL contexts.

Keywords: Artificial intelligence in ELT, Gameful pedagogy, Teaching English to Young Learners (TEYL), Glocal pedagogy, Teacher identity.

Introduction

The rapid advancement of artificial intelligence (AI) technologies has significantly transformed educational practices across diverse learning contexts, including English Language Teaching (ELT). In recent years, AI-supported tools such as generative chatbots, adaptive learning systems, multimodal content generators, and interactive digital platforms have increasingly entered language education environments, reshaping instructional design, classroom interaction, and learner engagement (Holmes et al., 2019; Kohnke et al., 2023). Within ELT, these developments have generated growing scholarly interest in the pedagogical potential of AI-assisted learning environments for fostering creativity, interaction, personalisation, and reflective learning experiences. In particular, AI-assisted gameful pedagogy has emerged as a promising approach that supports active participation and meaningful engagement in language-learning contexts (Deterding et al., 2011; Zhang & Hasim, 2023).

Gameful pedagogies emphasise creativity, agency, collaboration, storytelling, and meaningful participation rather than relying solely on reward-based instructional systems. In language education, such pedagogies have been associated with increased learner motivation, communicative engagement, and learner autonomy (Zhang & Hasim, 2023). At the same time, AI technologies have created new opportunities for designing adaptive, interactive, and multimodal learning environments. These developments are particularly relevant in Teaching English to Young Learners (TEYL) contexts, where creativity, imagination, storytelling, and experiential learning play central roles in language development (Pinter, 2017).

Within teacher education, pre-service English teachers are increasingly expected to develop not only technological competence but also pedagogically informed and ethically responsible approaches to AI integration. Although previous research has reported generally positive attitudes toward AI-supported learning environments, many pre-service teachers continue to feel insufficiently prepared to integrate AI technologies into meaningful classroom practices (Ayanwale et al., 2024). Consequently, teacher education programs are challenged to provide learning experiences that support digital pedagogical competence, critical awareness, and reflective professional development.

Research Problem

The increasing adoption of AI technologies in language education has generated considerable interest in their potential to enhance learning, engagement, and instructional innovation. However, existing research has predominantly focused on technological affordances, learner motivation, language achievement, and quantitative learning outcomes. Comparatively limited attention has been devoted to understanding how pre-service English teachers experience AI-assisted gameful pedagogies within teacher education contexts. Furthermore, little is known about how future teachers negotiate cultural meanings, reflect on pedagogical practices, and develop professional identities as they engage with AI-supported gameful learning environments. This gap is particularly evident in TEYL contexts, where

creativity, storytelling, cultural responsiveness, and reflective pedagogy are fundamental components of effective teaching and learning.

Research Focus

This study focuses on pre-service English teachers' experiences with AI-assisted gameful pedagogy implemented within a TEYL course. Rather than examining AI solely as a technological innovation, the study explores how participants experience AI-supported gameful learning environments, perceive their pedagogical value, negotiate local cultural elements alongside global English teaching practices, and reflect on their emerging teacher identities. By foregrounding participants' lived experiences and reflective interpretations, the study seeks to contribute to a more nuanced understanding of the pedagogical, cultural, and professional dimensions of AI-assisted learning in teacher education.

Research Aim and Research Questions

This study aims to explore pre-service English teachers' experiences with AI-assisted gameful pedagogy implemented in a Teaching English to Young Learners (TEYL) course through a glocal pedagogical perspective. More specifically, the study investigates how AI-assisted gameful learning environments mediate pedagogical engagement, cultural meaning-making, reflective learning, and emerging teacher identities within digitally mediated TEYL contexts.

The study addresses the following research questions:

1. How do pre-service English teachers experience AI-assisted gameful pedagogy in a TEYL course?
2. How do they perceive the pedagogical value of AI-assisted gameful learning for teaching English to young learners?
3. How do pre-service teachers negotiate local cultural elements and global English teaching practices through AI-assisted gameful activities?
4. In what ways do these experiences influence their professional learning and emerging teacher identities?

Literature Review

Artificial Intelligence in ELT and Teacher Education

The increasing integration of artificial intelligence (AI) into educational environments has transformed contemporary approaches to teaching and learning across multiple disciplines, including English Language Teaching (ELT). Recent developments in generative AI, adaptive learning systems, intelligent tutoring technologies, and multimodal digital platforms have expanded opportunities for personalised instruction, interactive learning experiences, and digitally mediated pedagogical practices (Holmes et al., 2019). Within ELT contexts, AI-supported tools such as ChatGPT, Gemini, automated feedback systems, and AI-powered content generators have increasingly been used to support language practice, lesson planning, assessment, and learner engagement (Kohnke et al., 2023).

Despite the growing interest in AI within language education, scholars have argued that much of the existing literature remains predominantly technology-centred and insufficiently grounded in pedagogical theory (Holmes et al., 2019). Previous studies have often focused on technological efficiency, language achievement, or automated instructional systems. At the same time, comparatively less attention has been devoted to teachers' reflective experiences, pedagogical decision-making, and

professional learning within AI-mediated educational environments. In particular, pre-service teachers' lived experiences with AI-assisted pedagogies remain underexplored in ELT teacher education research.

Recent research suggests that although pre-service teachers generally demonstrate positive attitudes toward AI technologies, many report limited confidence and insufficient pedagogical preparation regarding meaningful AI integration into classroom practices (Ayanwale et al., 2024). Accordingly, teacher education programs are increasingly expected to support not only technological competence but also reflective, ethical, and pedagogically informed use of AI. In this respect, AI literacy extends beyond technical knowledge and includes critical awareness, pedagogical reasoning, adaptability, and reflective digital competence (Ayanwale et al., 2024). Consequently, AI in teacher education should not be conceptualised as a replacement for teachers, but rather as a means of supporting reflective pedagogical engagement and professional learning.

From a sociocultural perspective, digital technologies and AI-supported platforms may serve as mediational tools that shape interaction, collaboration, and meaning-making processes in educational settings (Vygotsky, 1978). AI-assisted gameful pedagogies may therefore create opportunities for pre-service teachers to experiment with instructional practices, negotiate pedagogical beliefs, and construct professional knowledge through collaborative learning experiences. Such pedagogical experiences are particularly significant in TEYL contexts, where creativity, imagination, interaction, and multimodal engagement play central roles in language learning.

Recent scholarship has further emphasised that AI integration in language education should be situated within broader discussions of digital literacy, teacher agency, and technology-enhanced language learning. Rather than viewing AI solely as a technological innovation, researchers argue that teachers need to develop critical digital literacies to evaluate, adapt, and pedagogically integrate emerging technologies into meaningful learning experiences (Kessler, 2018; Pegrum et al., 2018). Similarly, research in Computer-Assisted Language Learning (CALL) highlights that successful technology integration depends on teachers' pedagogical decision-making, contextual awareness, and reflective professional judgment rather than technological proficiency alone (Reinders & White, 2016). These perspectives further support the argument that AI literacy in teacher education should encompass pedagogical, ethical, and critical dimensions alongside technical competence.

Gamification and Gameful Pedagogy in Language Learning

Gamification has become one of the most widely discussed approaches in digital language education over the past decade. Deterding et al. (2011) define gamification as the integration of game design elements into non-game contexts. In educational settings, gamification commonly involves elements such as challenges, storytelling, quests, feedback systems, collaboration, and progress indicators to increase learner participation and engagement.

Contemporary scholarship, however, increasingly distinguishes between gamification and gamefulness. While gamification broadly refers to the incorporation of game-related mechanics into instructional environments, gamefulness emphasises the experiential dimension of learning characterised by creativity, agency, immersion, interaction, and meaningful participation (Deterding et al., 2011). Rather than relying solely on reward-oriented or competition-based systems, gameful pedagogies seek to create reflective, collaborative, and communicative learning experiences. Accordingly, the present study conceptualises AI-assisted pedagogy not merely as a set of gamified instructional techniques but as a gameful pedagogical environment supporting collaborative storytelling, reflective engagement, and culturally meaningful interaction.

Another important distinction in the literature concerns the concepts of playfulness and gamefulness. While playfulness generally foregrounds creativity, curiosity, improvisation, and exploration, gamefulness involves more structured experiences shaped by progression, goals, challenge, and achievement (Deterding et al., 2011). In language-learning contexts, effective gameful pedagogies often integrate both dimensions by combining creative communicative interaction with collaborative, goal-oriented learning activities.

Within ELT, gamified and gameful learning environments have been associated with increased learner motivation, reduced language anxiety, enhanced classroom participation, and improved communicative engagement (Zhang & Hasim, 2023). Such pedagogical approaches may additionally support learner autonomy, collaborative interaction, and active participation in digitally mediated learning environments. However, some scholars have criticised gamified language learning applications for relying excessively on repetitive drills, behaviourist reward structures, and competition-oriented systems while neglecting meaningful communication and sociocultural dimensions of language learning (Munday, 2015).

Recent systematic reviews further suggest that much of the existing literature on gamification in language learning remains heavily focused on learner outcomes and quantitative performance measures. At the same time, comparatively less attention has been devoted to reflective pedagogy, teacher experiences, and culturally meaningful interaction (Zhang & Hasim, 2023). Moreover, competition-oriented gamification systems may sometimes increase learner anxiety or disengagement, highlighting the importance of collaborative, interaction-centred, and culturally responsive pedagogical approaches. Consequently, recent scholarship increasingly advocates for gameful pedagogies that emphasise creativity, storytelling, collaboration, and authentic communicative engagement rather than purely reward-driven instructional systems.

Beyond early conceptualisations of gamification, subsequent scholarship has increasingly emphasised the importance of meaningful and learner-centred gameful experiences. Kapp (2012) argues that effective gamification should support engagement, problem-solving, and meaningful learning rather than relying exclusively on external rewards. Similarly, Nicholson (2015) introduced the concept of meaningful gamification, emphasising personal relevance, creativity, reflection, and social connection as essential components of sustainable learner engagement. Research has also demonstrated that gameful learning environments can positively influence motivation, participation, and learning outcomes when instructional activities are carefully aligned with pedagogical goals (Hamari et al., 2014). These perspectives reinforce the value of gameful pedagogies that prioritise meaningful interaction, creativity, and reflective participation within language learning contexts.

AI-Assisted Gameful Pedagogy in TEYL Contexts

The integration of AI technologies with gameful pedagogical approaches has recently attracted growing attention in language education research. AI-assisted gameful learning environments may provide opportunities for adaptive learning, personalised feedback, multimodal interaction, and interactive storytelling within digitally mediated classrooms. In TEYL contexts, such approaches may be particularly valuable due to young learners' developmental needs for play, imagination, creativity, collaboration, and experiential learning (Pinter, 2017).

Research in Teaching English to Young Learners (TEYL) has consistently highlighted the importance of storytelling, play, imagination, interaction, and meaningful communication in supporting children's language development (Cameron, 2001; Read, 2008; Nikolov, 2009; Pinter, 2017). Young learners benefit from learning environments that promote active participation, creativity, and experiential engagement, and that connect language learning to meaningful contexts and experiences.

These pedagogical principles closely align with gameful learning approaches that encourage exploration, collaboration, and learner-centred participation.

Storytelling occupies a particularly important place in TEYL pedagogy because it supports linguistic development, emotional engagement, cultural learning, and communicative competence (Cameron, 2001; Read, 2008). Recent developments in AI technologies have expanded opportunities for digital storytelling through multimodal content creation, visual narrative design, and interactive story generation. Consequently, AI-assisted gameful storytelling may provide innovative opportunities to integrate creativity, language learning, and cultural meaning-making within contemporary TEYL contexts.

AI-assisted gameful pedagogies may additionally facilitate more interactive and learner-centred educational experiences through dynamic content generation, adaptive scaffolding, and multimodal communication. Recent studies suggest that AI-assisted learning environments can support learner engagement, communicative participation, confidence, and reflective learning processes (Kohnke et al., 2023). At the same time, scholars emphasise that meaningful AI integration requires pedagogically informed implementation rather than mere technological adoption (Holmes et al., 2019). In this respect, the educational value of AI depends not solely on technological sophistication but on how teachers critically and contextually mediate AI-supported learning experiences.

Within TEYL settings, storytelling constitutes a particularly important pedagogical practice for supporting language development, imagination, emotional engagement, and cultural learning. Storytelling activities encourage young learners to actively participate in meaning-making while developing communicative and creative language skills. Accordingly, AI-assisted gameful storytelling environments may offer valuable opportunities to integrate digital creativity, collaborative interaction, and culturally responsive pedagogy into language teaching practices.

Despite the growing interest in AI-assisted language learning, existing studies have largely focused on technological affordances, learner motivation, vocabulary acquisition, or achievement-oriented outcomes. Comparatively limited attention has been devoted to pre-service teachers' experiences with AI-assisted gameful pedagogies, particularly within TEYL contexts. Furthermore, research examining how future English teachers negotiate cultural meanings, pedagogical beliefs, and emerging professional identities within AI-mediated gameful learning environments remains scarce.

Glocal Pedagogy and Cultural Meaning-Making in ELT

The global spread of English has intensified discussions regarding the relationship between global communicative practices and local cultural identities in language education. Glocal pedagogy emphasises the dynamic interaction between global English and local sociocultural realities, encouraging language learning practices that are context-sensitive, culturally responsive, and socially meaningful (Kumaravadivelu, 2006). Rather than conceptualising English as a culturally neutral or universally standardised system, glocal approaches recognise learners' local experiences, identities, and cultural narratives as integral components of language-learning processes.

Similarly, translingual perspectives challenge rigid boundaries between languages and conceptualise communication as fluid, negotiated, and socially situated across diverse linguistic and cultural contexts (Canagarajah, 2013). Within language classrooms, learners and teachers continuously negotiate meaning through interactions shaped by local identities, cultural experiences, and global communicative practices. Consequently, contemporary ELT pedagogies increasingly emphasise culturally responsive approaches that value learners' local voices, narratives, and lived experiences.

In digitally mediated educational environments, AI-assisted gameful pedagogies may create opportunities to integrate local cultural elements into English language learning. Through collaborative storytelling, multimodal interaction, and digital creativity, pre-service teachers may negotiate both local cultural meanings and global English teaching practices within AI-mediated pedagogical spaces. Such practices may contribute to more context-sensitive and culturally meaningful approaches to ELT while simultaneously fostering reflective pedagogical awareness among future teachers.

Teacher Identity and Reflective Professional Learning

Teacher identity has become a central concept in contemporary teacher education research. Rather than being understood as fixed or stable, teacher identity is increasingly conceptualised as dynamic, reflective, socially negotiated, and context-dependent (Beauchamp & Thomas, 2009). Teacher identity develops through experiences, emotions, pedagogical beliefs, professional interactions, and participation in educational communities. Accordingly, pre-service teacher education programs play an important role in supporting future teachers' reflective identity development and professional learning processes.

Reflection constitutes a particularly significant component of teacher identity formation. Reflective pedagogies encourage teachers to critically examine their beliefs, instructional practices, experiences, and professional roles within evolving educational contexts. Through reflective activities such as journals, collaborative discussions, and dialogic inquiry, pre-service teachers may develop greater awareness of their pedagogical values, instructional decision-making processes, and emerging professional identities (Beauchamp & Thomas, 2009).

From a sociocultural perspective, professional learning occurs through participation, interaction, mediation, and collaborative meaning-making processes (Vygotsky, 1978). Digital technologies and AI-mediated learning environments may therefore influence how pre-service teachers perceive themselves as future educators, negotiate pedagogical roles, and develop professional agency. AI-assisted gameful pedagogies may create spaces where future teachers experiment with instructional creativity, digital pedagogy, and culturally responsive teaching practices while simultaneously reflecting on their emerging professional identities.

Although previous research has examined gamification, AI integration, and digital pedagogy in language education, comparatively limited attention has been devoted to understanding how pre-service English teachers experience AI-assisted gameful pedagogies within TEYL contexts through reflective and glocal perspectives. Existing studies have frequently focused on technological effectiveness or learner outcomes, leaving teachers' lived experiences, cultural meaning-making processes, and identity development comparatively underexplored. Accordingly, the present study seeks to address this gap by examining how pre-service English teachers experience AI-assisted gameful pedagogy within a TEYL course and how these experiences shape their pedagogical engagement, reflective learning, cultural understandings, and emerging teacher identities.

Materials and Methods

Research Design

This study employed a qualitative interpretivist case study design to explore pre-service English teachers' experiences with AI-assisted gameful pedagogy implemented within a Teaching English to Young Learners (TEYL) course. Qualitative inquiry was considered appropriate because the study aimed to investigate participants' lived experiences, reflective interpretations, pedagogical perceptions, and emerging professional identities within a digitally mediated educational environment. Rather than

examining predetermined variables or causal relationships, interpretivist qualitative research seeks to understand how individuals construct meaning through social interaction, reflection, and contextualised experiences (Creswell & Poth, 2018).

The study was additionally informed by sociocultural perspectives on learning, which conceptualise learning as a socially mediated and context-dependent process shaped through interaction, collaboration, and participation in cultural practices (Vygotsky, 1978). Within this framework, AI-supported digital tools and gameful pedagogical activities were treated as mediational artefacts that influenced participants' pedagogical engagement, collaborative meaning-making, reflective inquiry, and professional learning processes.

Since the study focused on a bounded educational setting involving a specific TEYL course within a university-level teacher education program, a qualitative case study design was considered appropriate for generating an in-depth understanding of participants' experiences within their natural learning context (Merriam & Tisdell, 2016).

Research Context and Participants

The study was conducted in the ELT Department of a university in Türkiye during the 2025–2026 academic year. The research was situated within a Teaching English to Young Learners (TEYL) course focusing on contemporary approaches to language teaching, digital pedagogy, storytelling, and gameful instructional practices for young learners.

The participant group consisted of 56 pre-service English teachers enrolled in the TEYL course. Since the study aimed to examine the collective pedagogical experiences that emerged throughout the course's implementation, reflective journals and digital teaching artefacts were collected from all participants during the semester.

To obtain deeper qualitative insights into participants' experiences and interpretations, additional qualitative data were collected through semi-structured interviews and focus group discussions. A purposive sampling strategy was employed to identify participants capable of providing information-rich, reflective perspectives on AI-assisted gameful pedagogy (Patton, 2015). Diversity in classroom participation, technological familiarity, reflective engagement, and pedagogical perspectives was considered during the participant selection process.

Semi-structured interviews were conducted with 10 pre-service teachers, while 12 participants took part in two focus group discussions, each with 6 participants. The interview and focus group datasets were considered sufficient for achieving thematic saturation. At the same time, the reflective journals and digital teaching artefacts provided broader experiential and contextual depth across the participant cohort.

AI-Assisted Gameful TEYL Implementation

The pedagogical implementation was conducted over a 14-week semester within the TEYL course. Throughout the implementation process, participants engaged in AI-assisted gameful ELT activities designed to support collaborative learning, storytelling, creativity, reflective inquiry, and culturally responsive language teaching practices.

The instructional design integrated various AI-supported digital tools and gameful learning activities, including:

- AI-assisted storytelling tasks,

- collaborative lesson planning,
- digital material design,
- interactive quizzes,
- gameful classroom challenges,
- multimodal instructional activities,
- and reflective pedagogical discussions.

Participants used AI-supported tools such as ChatGPT and Canva AI while designing lesson plans, storytelling activities, classroom materials, and gameful instructional tasks for young learners. Additionally, digital platforms such as Quizizz were incorporated to support interactive and collaborative classroom engagement.

A major component of the implementation involved collaborative storytelling practices that integrated local cultural themes and narratives into ELT activities. Participants were encouraged to create culturally meaningful gameful tasks that incorporate local stories, traditions, characters, and contextual experiences while engaging with global English-language teaching practices.

Throughout the semester, reflective discussions were additionally conducted regarding:

- pedagogical affordances of AI,
- ethical concerns related to AI integration,
- challenges of digital pedagogy,
- culturally responsive teaching practices,
- and future classroom applications of AI-assisted ELT.

Data Collection Tools and Procedures

To ensure methodological triangulation and to obtain a comprehensive understanding of participants' experiences, multiple qualitative data-collection tools were employed, including reflective journals, digital teaching artefacts, semi-structured interviews, and focus group discussions (Lincoln & Guba, 1985).

Reflective Journals

Reflective journals were among the primary qualitative data sources in the study. Reflective writing is widely used in teacher education research because it enables participants to critically examine their pedagogical beliefs, emotional responses, classroom experiences, and professional learning processes (Farrell, 2015).

Reflective journals were collected from all 56 pre-service teachers throughout the semester. Participants were asked to maintain weekly reflections documenting their experiences with AI-assisted gameful pedagogy implemented during the TEYL course.

The journals encouraged participants to reflect on:

- their experiences with AI-supported teaching tools,
- perceptions of gameful pedagogical activities,
- collaborative storytelling experiences,
- emotional responses to digital pedagogy,
- challenges and affordances of AI integration,
- culturally responsive teaching practices,
- and evolving perceptions of themselves as future English teachers.

The reflective journals provided rich narrative data regarding participants' pedagogical reflections, identity negotiations, and professional learning trajectories within AI-assisted gameful learning environments.

Digital Teaching Artefacts

Digital teaching artefacts constituted another major qualitative data source in the study. Artefact analysis is frequently used in qualitative educational research to examine participants' pedagogical thinking, instructional creativity, and meaning-making processes through the educational materials they produce (Merriam & Tisdell, 2016).

Digital teaching artefacts were collected from all participants during the implementation process. The artefacts included:

- AI-assisted lesson plans,
- digital storytelling activities,
- gameful classroom tasks,
- interactive quizzes,
- multimodal teaching materials,
- AI-generated worksheets,
- visual classroom resources,
- and culturally responsive instructional materials developed for young learners.

The artefact analysis particularly contributed to understanding how participants integrated local cultural elements and global English teaching practices into AI-assisted pedagogical activities. The artefacts additionally provided insight into participants' pedagogical creativity, gameful instructional strategies, and digital literacy practices.

Semi-Structured Interviews

Semi-structured interviews were conducted with 10 purposively selected participants to obtain deeper insights into their experiences, perceptions, reflective interpretations, and professional learning processes regarding AI-assisted gameful pedagogy. Semi-structured interviewing is particularly suitable for qualitative interpretive inquiry because it enables researchers to explore participants' experiences in depth while maintaining flexibility to probe emerging themes and emerging ideas (Kvale & Brinkmann, 2009).

The interviews focused on:

- participants' experiences with AI-assisted gameful pedagogy,
- perceptions regarding the pedagogical value of AI integration,
- experiences with collaborative storytelling practices,
- challenges encountered during implementation,
- emotional and reflective responses to digital pedagogy,
- and the influence of these experiences on professional learning and emerging teacher identities.

Each interview lasted approximately 35–50 minutes and was conducted in a quiet setting within the university environment. All interviews were audio-recorded with participants' consent and later transcribed verbatim for analysis.

Focus Group Discussions

Focus group discussions constituted another important qualitative data source in the study. Focus groups are particularly valuable in qualitative educational research because they allow participants to collaboratively negotiate meanings, share experiences, and build upon one another's reflections through social interaction (Morgan, 1997).

A total of 12 participants took part in focus group discussions organized into two groups consisting of six participants each. The focus group participants were purposively selected to ensure diversity in pedagogical perspectives, technological engagement, and classroom participation experiences.

The discussions explored:

- collaborative experiences with AI-assisted activities,
- perceptions of gameful pedagogy in TEYL contexts,
- culturally responsive storytelling practices,
- pedagogical challenges,
- ethical concerns regarding AI integration,
- and perceptions regarding future teaching practices.

The focus groups additionally enabled the researchers to observe how participants collectively discussed and negotiated ideas related to digital pedagogy, AI-assisted ELT, cultural representation, and professional identity development.

Data Analysis

The collected qualitative data were analysed through thematic analysis following Braun and Clarke's (2006) six-phase analytical framework. Thematic analysis is widely employed in qualitative educational research because it enables researchers to systematically identify, analyse, and interpret recurring patterns of meaning across qualitative datasets.

The analysis process involved six stages:

1. familiarisation with the data through repeated reading of journals, interview transcripts, focus group discussions, and artefacts;
2. initial coding involving the identification of meaningful units, reflective statements, pedagogical interpretations, emotional expressions, and culturally relevant patterns;
3. searching for themes by organising related codes into broader conceptual categories;
4. reviewing themes to ensure coherence, consistency, and meaningful representation across datasets;
5. defining and naming themes through interpretive refinement and conceptual clarification;
6. and producing the report by integrating thematic findings with relevant theoretical literature and research questions.

The analysis incorporated both inductive and deductive approaches. While many themes emerged directly from participants' reflections and experiences, the broader interpretation of findings was informed by sociocultural theory, glocal pedagogy, gamefulness, and teacher identity perspectives.

Trustworthiness and Ethical Considerations

To enhance trustworthiness, methodological triangulation was employed using reflective journals, digital teaching artefacts, semi-structured interviews, and focus group discussions (Lincoln & Guba, 1985). Member checking was conducted with selected participants to verify the accuracy of thematic interpretations, while peer debriefing was used to review coding decisions and theme development. An audit trail documenting analytical decisions was maintained throughout the study. Thick description and researcher reflexivity further supported the credibility and transferability of the findings.

Participation was voluntary, and informed consent was obtained from all participants prior to data collection. Participants were informed of their right to withdraw at any time, and pseudonyms were used to ensure confidentiality and anonymity.

The study was initially presented at the *International Multidisciplinary Conference on Innovation, Technology and Sustainability 2026* before being expanded into a full journal manuscript. As the research was conducted as part of routine educational activities in a university-level Teaching English to Young Learners (TEYL) course and involved non-invasive educational data collection, formal institutional ethics committee approval was not required under the applicable institutional procedures at the time of data collection. Nevertheless, the study adhered to widely accepted ethical principles for educational research, including informed consent, voluntary participation, confidentiality, anonymity, and responsible data management (American Psychological Association, 2017; British Educational Research Association, 2024).

Results

The thematic analysis of reflective journals, digital teaching artefacts, semi-structured interviews, and focus group discussions revealed four major themes related to pre-service English teachers' experiences with AI-assisted gameful pedagogy in the TEYL course. All quotations presented in this section are reproduced verbatim from participants' reflective journals, interview transcripts, and focus group discussions. Minor grammatical corrections were made only where necessary to improve readability while preserving participants' intended meanings.

The findings indicated that participants generally experienced AI-assisted gameful learning environments as interactive, reflective, culturally meaningful, and professionally transformative pedagogical spaces. However, the data also revealed variations in participants' experiences and perceptions. While many participants emphasised the pedagogical benefits of AI-assisted gameful learning, others expressed reservations regarding technological dependence, cultural appropriateness, ethical considerations, and future classroom implementation. These contrasting perspectives contributed to a more nuanced understanding of AI-assisted gameful pedagogy within TEYL contexts.

The themes were closely aligned with the research questions and reflected participants' pedagogical engagement, perceptions of AI-supported learning, glocal meaning-making processes, and emerging teacher identities.

The four major themes identified through the analysis were:

1. Experiencing AI-Assisted Gameful Pedagogy as Interactive and Collaborative Learning
2. Pedagogical Affordances and Critical Challenges of AI-Assisted Gameful Learning
3. Negotiating Local Culture and Global English Through AI-Assisted Storytelling
4. Emerging Teacher Identities and Reflective Professional Learning

Experiencing AI-Assisted Gameful Pedagogy as Interactive and Collaborative Learning

Addressing the first research question concerning how pre-service English teachers experienced AI-assisted gameful pedagogy in a TEYL course, the findings revealed that participants perceived the learning environment as highly interactive, collaborative, creative, and participatory. Reflective journals and focus group discussions indicated that AI-supported storytelling activities, collaborative tasks, and multimodal instructional practices encouraged active experimentation and reflective engagement throughout the semester.

Many participants explained that AI-supported tools reduced hesitation regarding lesson planning and material design by facilitating idea generation and instructional creativity. Rather than perceiving AI merely as a technological tool, participants frequently described it as a pedagogical resource supporting imaginative thinking and collaborative exploration.

One participant stated:

"The AI tools helped us think more creatively because we could quickly generate ideas and then adapt them for children. Instead of feeling stressed about preparing activities, we focused more on making learning meaningful and enjoyable." (Interview Participant 4)

Participants additionally emphasized that gameful activities increased emotional engagement and classroom participation. Reflective journals frequently described feelings of curiosity, enjoyment, motivation, and active involvement during collaborative storytelling and gameful lesson design activities.

Another participant reflected:

"The course felt much more interactive than other methodology courses because we learned through collaboration, storytelling, and creative activities rather than only listening to lectures." (Reflective Journal Participant 17)

Collaborative learning emerged as another important aspect of participants' experiences. Group-based storytelling tasks and digital material design activities appeared to foster peer interaction, collective creativity, and collaborative problem-solving. Focus group discussions further suggested that collaborative gameful activities reduced anxiety regarding technology use and encouraged participants to experiment with innovative pedagogical ideas together.

Digital teaching artefacts additionally reflected participants' active engagement with multimodal and gameful instructional design practices. Many artefacts incorporated interactive storytelling, character-based narratives, collaborative classroom missions, visual learning materials, and culturally contextualised learning activities designed specifically for young learners.

Although most participants described AI-assisted gameful pedagogy as engaging and collaborative, not all experiences were uniformly positive. Some participants reported initial difficulties adapting to unfamiliar digital tools and occasionally felt overwhelmed by the variety of AI applications introduced during the course.

One participant reflected:

"At the beginning, I felt a bit lost because there were many different tools and I did not know which one would be useful for my lesson. Sometimes I spent more time learning the technology than thinking about the activity itself." (Reflective Journal Participant 41)

Similarly, another participant explained:

"I liked the creative ideas that AI provided, but sometimes I found it difficult to decide which suggestions were really suitable for young learners. It was not always easy to connect the technology with my teaching goals." (Focus Group Participant 11)

These contrasting perspectives suggest that the effectiveness of AI-assisted gameful pedagogy may depend partly on participants' prior technological experience and confidence.

Collectively, the findings suggested that AI-assisted gameful pedagogy fostered active participation, collaborative engagement, creativity, and reflective experimentation within the TEYL course. Although participants varied in their levels of technological confidence and prior experience, most viewed the learning environment as supportive of pedagogical exploration, collaborative meaning-making, and innovative approaches to language teaching.

Pedagogical Affordances and Critical Challenges of AI-Assisted Gameful Learning

Regarding the second research question exploring participants' perceptions of the pedagogical value of AI-assisted gameful learning for teaching English to young learners, the findings showed that participants generally viewed AI-supported pedagogies as valuable for enhancing creativity, learner engagement, instructional flexibility, and multimodal learning. At the same time, participants also expressed critical concerns regarding ethical issues, overreliance on technology, and the pedagogical appropriateness of AI-generated content.

Participants consistently emphasised that AI-assisted pedagogies supported instructional creativity, learner engagement, material design, and pedagogical flexibility. Many explained that AI-supported tools simplified lesson preparation by generating stories, classroom activities, visual materials, and interactive prompts that could later be adapted according to young learners' needs and classroom contexts.

One participant explained:

"AI tools provided many creative ideas very quickly. We could adapt stories, visuals, and games depending on the level and interests of children, which made lesson preparation easier and more flexible." (Interview Participant 7)

Participants additionally associated gameful learning environments with increased learner motivation and communicative participation. Reflective journals frequently suggested that storytelling, collaborative challenges, and interactive classroom tasks created emotionally engaging learning experiences for young learners.

Another participant noted:

"Children can learn English more naturally through stories, games, and interaction rather than memorization. Gamified activities make participation more enjoyable and less stressful." (Reflective Journal Participant 31)

At the same time, participants demonstrated a critical and reflective stance toward AI integration. One recurring concern involved excessive dependence on AI-generated content. Several participants worried that uncritical reliance on AI tools might reduce teacher creativity, pedagogical reflection, and instructional originality.

One participant reflected:

"AI can be very useful, but teachers should not depend on it completely because some activities may not always be suitable for children or educationally meaningful." (Interview Participant 2)

Participants additionally discussed concerns related to cultural appropriateness, ethical AI use, content accuracy, and technological limitations. Focus group discussions revealed that participants believed teachers should critically evaluate AI-generated materials before integrating them into classroom practices.

One focus group participant explained:

"AI should support teachers rather than replace them. Teachers still need to evaluate whether the materials are appropriate, culturally sensitive, and useful for learners." (Focus Group Participant 5)

Despite generally positive perceptions of the pedagogical value of AI-assisted gameful learning, several participants remained cautious about an excessive reliance on AI-generated content.

One participant reflected:

"Sometimes the activities looked interesting at first, but when I checked them carefully, I realized that some parts were not suitable for young learners. I think teachers still need to adapt and improve what AI creates." (Reflective Journal Participant 45)

Similarly, another participant explained:

"AI gave me many ideas, but I did not want to use everything directly. If we depend too much on AI, we may stop thinking creatively as teachers and just accept whatever the tool suggests." (Interview Participant 10)

A focus group participant also highlighted concerns regarding contextual appropriateness:

"Some materials were useful, but others did not really match our classroom context. We needed to change examples, language level, and sometimes even the whole activity." (Focus Group Participant 7)

These findings indicate that participants viewed AI not as a replacement for teachers but as a pedagogical resource requiring critical evaluation, adaptation, and contextual mediation.

Taken together, the findings indicated that participants viewed AI-assisted gameful pedagogy not as an autonomous instructional system but as a pedagogical support mechanism that required active teacher involvement. Participants emphasised that the educational value of AI depended largely on teachers' ability to critically evaluate, adapt, and contextualise AI-generated content in ways that were pedagogically meaningful, culturally appropriate, and responsive to learners' needs.

Negotiating Local Culture and Global English Through AI-Assisted Storytelling

Addressing the third research question, examining how pre-service teachers negotiated local cultural elements and global English teaching practices through AI-assisted gameful activities, the findings revealed that participants actively integrated culturally meaningful themes, local narratives, and familiar contextual experiences into English language teaching activities designed for young learners. AI-assisted storytelling activities appeared to serve as culturally responsive pedagogical spaces in which participants negotiated relationships between local identities and global English-language practices.

Many participants emphasised that integrating local cultural elements into English teaching made instructional activities more meaningful, relatable, and emotionally engaging. Rather than presenting English solely as a culturally distant language, participants attempted to connect language learning with learners' familiar cultural experiences and local narratives.

One participant stated:

"Using local stories made English activities more meaningful because children could relate to characters, situations, and traditions that already existed in their own lives." (Interview Participant 9)

Digital teaching artefacts revealed extensive use of local folktales, culturally familiar characters, traditional symbols, regional celebrations, family-oriented narratives, and culturally contextualized storytelling activities. Participants frequently adapted these local narratives into interactive English learning tasks supported by AI-generated visuals, stories, and classroom materials.

Reflective journals further demonstrated that participants viewed English not as a culturally detached subject but as a communicative medium through which local meanings and identities could be expressed.

One participant wrote:

"This course helped me realize that English teaching does not need to ignore local culture. We can use English to tell our own stories and represent our own cultural experiences." (Reflective Journal Participant 22)

At the same time, participants critically reflected on the cultural limitations of AI-generated content. Several participants observed that AI-supported tools occasionally produced overly Westernised or culturally inappropriate materials that did not align with local classroom realities. Consequently, many participants modified AI-generated outputs by incorporating local characters, cultural references, and contextually appropriate narratives.

One participant explained:

"Some AI-generated stories reflected foreign cultural assumptions that would not fully fit our classroom context, so we adapted them using local characters and culturally familiar situations." (Focus Group Participant 8)

Not all participants found the integration of local cultural elements into English language teaching equally straightforward. Some reported difficulties in balancing local cultural content with language-learning objectives and in ensuring that storytelling activities remained pedagogically focused.

One participant reflected:

"Sometimes I became so focused on making the story culturally meaningful that I worried whether enough attention was being given to the language objectives. Finding a balance between culture and language was not always easy." (Reflective Journal Participant 37)

Similarly, another participant explained:

"Using local stories was motivating for children, but adapting them into English activities took more time than I expected. It was sometimes difficult to keep both the cultural message and the language focus equally strong." (Interview Participant 6)

A focus group participant also noted:

"Some AI-generated ideas were creative, but they did not always fit our local context. We often needed to change characters, settings, or examples to make the activities feel more relevant for our learners." (Focus Group Participant 11)

These contrasting perspectives suggest that culturally responsive AI-assisted storytelling requires careful pedagogical planning and contextual adaptation rather than the simple inclusion of local cultural references. The findings, therefore, highlight the complexity of implementing glocal pedagogies within digitally mediated language learning environments.

Taken together, the findings suggested that AI-assisted storytelling activities created culturally responsive pedagogical spaces in which participants actively negotiated relationships between local cultural meanings and global English language practices. While participants generally valued this integration, the process also required critical reflection, contextual adaptation, and careful balancing of cultural and linguistic learning objectives.

Emerging Teacher Identities and Reflective Professional Learning

In response to the fourth research question investigating how participants' experiences influenced their professional learning and emerging teacher identities, the findings demonstrated that participants gradually began to reimagine themselves as future English teachers capable of integrating creativity, digital pedagogy, cultural responsiveness, and reflective teaching into their future classrooms. Reflective journals, interviews, and focus group discussions suggested that participants developed greater pedagogical confidence, reflective awareness, and professional agency throughout the implementation process.

Many participants initially described feelings of uncertainty and anxiety regarding AI-supported teaching practices. However, these concerns gradually shifted toward greater pedagogical confidence, experimentation, and reflective awareness throughout the semester.

One participant reflected:

"At first, I was nervous about using AI tools in teaching because I thought technology would make teaching complicated. However, during the course, I realised that technology can actually support creativity and meaningful learning if teachers use it carefully." (Reflective Journal Participant 11)

Reflection emerged as a central component of participants' professional learning processes. Through journals, collaborative discussions, and storytelling activities, participants critically examined their assumptions regarding technology, pedagogy, creativity, and classroom interaction. Several participants also explained that the course transformed their understanding of language teaching by encouraging more learner-centred, interactive, and culturally responsive pedagogical approaches.

One participant stated:

"This course changed how I think about teaching English to children. I started to see teaching not only as language instruction but also as creativity, interaction, and cultural communication." (Interview Participant 6)

Focus group discussions further demonstrated that participants increasingly perceived themselves as facilitators of learning rather than traditional transmitters of knowledge. Participants frequently associated effective teaching with creativity, flexibility, collaboration, cultural sensitivity, and reflective digital pedagogy.

Participants also emphasised the importance of maintaining ethical awareness when integrating AI into educational practices. Many described future teachers as needing to balance technological innovation with pedagogical responsibility and human-centred teaching practices.

Although most participants described AI-assisted gameful pedagogy as engaging and collaborative, not all experiences were uniformly positive. Some participants reported initial difficulties adapting to unfamiliar digital tools and occasionally felt overwhelmed by the variety of AI applications introduced during the course.

One participant reflected:

"At the beginning, I spent too much time trying to understand how the tools worked. Sometimes I focused more on using the technology than on planning the lesson itself. After some practice, it became easier, but the first weeks were challenging." (Reflective Journal Participant 41)

Similarly, another participant noted:

"There were so many AI tools that I sometimes felt confused about which one to use. Instead of helping me immediately, the technology occasionally made lesson preparation more complicated." (Focus Group Participant 11)

These contrasting perspectives suggest that the effectiveness of AI-assisted gameful pedagogy may depend partly on participants' prior technological experience and confidence.

Overall, the findings suggested that AI-assisted gameful pedagogies contributed not only to participants' technological and instructional learning but also to their reflective professional development and emerging teacher identities within digitally mediated TEYL contexts. While participants differed in their levels of confidence and readiness to implement AI-assisted practices, the course experience generally encouraged greater pedagogical awareness, critical reflection, and engagement with innovative and culturally responsive approaches to language teaching.

Discussion

This study explored pre-service English teachers' experiences with AI-assisted gameful pedagogy in a Teaching English to Young Learners (TEYL) course through a glocal pedagogical perspective. Rather than examining AI solely as a technological innovation, the study sought to understand how pre-service teachers interpreted, adapted, and pedagogically mediated AI-supported learning experiences. The findings suggest that AI-assisted gameful pedagogy may function as a reflective, culturally responsive, and socially mediated learning environment that supports not only technological engagement but also pedagogical reasoning, professional learning, and identity development. The discussion interprets these findings in relation to the four research questions and relevant theoretical perspectives.

Experiencing AI-Assisted Gameful Pedagogy as Interactive and Reflective Learning

The findings suggest that the significance of AI-assisted gameful pedagogy extends beyond increasing engagement or participation in classroom activities. Rather than functioning solely as a motivational tool, AI-assisted gameful learning appeared to create opportunities for pedagogical exploration, collaborative meaning-making, and reflective inquiry among pre-service teachers. This finding is particularly important within teacher education because professional learning involves not only acquiring instructional knowledge but also developing the capacity to critically examine, adapt, and refine pedagogical practices.

Consistent with previous studies highlighting the potential of gameful pedagogies to enhance engagement, participation, and motivation in language learning environments (Deterding et al., 2011; Zhang & Hasim, 2023), participants described the learning environment as interactive, collaborative, and creativity-oriented. However, the present study extends this literature by suggesting that gameful pedagogies may also support reflective engagement among pre-service teachers. Through storytelling, multimodal design, and collaborative experimentation, participants were encouraged to explore alternative instructional possibilities, evaluate pedagogical decisions, and reflect on how learning experiences could be adapted for young learners.

From a sociocultural perspective, these findings can be interpreted through Vygotsky's (1978) concept of mediated learning. AI-supported digital tools functioned not merely as technological resources but as mediational artefacts that shaped participants' interactions, reflections, and pedagogical decision-making processes. Learning emerged through participants' active engagement with peers, instructional tasks, and technological tools rather than through technology alone. This finding reinforces the view that the educational value of AI depends largely on how it is integrated into collaborative and socially mediated learning environments.

Another important contribution of the study concerns its conceptualisation of AI-assisted pedagogy as a gameful pedagogical environment rather than a conventional gamified instructional system. Participants rarely emphasised competition, rewards, or performance-oriented mechanisms. Instead, they highlighted creativity, storytelling, imagination, collaboration, and meaningful interaction as central features of their learning experiences. This finding supports scholarship that argues that meaningful gamification should move beyond behaviourist reward structures to foster agency, participation, creativity, and learner ownership (Deterding et al., 2011).

Taken together, the findings suggest that AI-assisted gameful pedagogy may be particularly valuable in teacher education contexts because it creates reflective and collaborative spaces where future teachers can experiment with pedagogical ideas, negotiate instructional meanings, and develop greater awareness of how technology can support meaningful language learning experiences.

Pedagogical Affordances and Critical Challenges of AI-Assisted Gameful Learning

The findings suggest that participants perceived AI-assisted gameful pedagogy not simply as a technological innovation but as a pedagogical resource capable of expanding instructional possibilities within TEYL contexts. The perceived value of AI was closely associated with its ability to support idea generation, storytelling, multimodal material design, and flexible lesson planning. Rather than replacing existing pedagogical practices, AI appeared to serve as a catalyst, encouraging participants to explore alternative instructional approaches and develop more creative learning experiences for young learners.

This interpretation aligns with previous research highlighting the potential of AI-supported pedagogies to facilitate creativity, personalisation, adaptive learning, and interactive participation within language education (Holmes et al., 2019; Kohnke et al., 2023). The findings also reinforce the importance of storytelling and multimodal learning in TEYL by demonstrating how AI tools can support the creation of engaging and developmentally appropriate language learning experiences (Pinter, 2017). Importantly, participants did not value AI solely for its technological capabilities; rather, they appreciated its potential to enrich pedagogical design and enhance learner engagement.

At the same time, the findings reveal a notable tension between technological opportunity and pedagogical responsibility. Although participants generally recognised the benefits of AI-assisted gameful learning, they also expressed concerns about overreliance on AI-generated content, ethical

considerations, cultural appropriateness, and the potential reduction in teacher creativity. These concerns suggest that participants approached AI integration critically rather than uncritically accepting technological solutions. This observation supports recent scholarship emphasising the need for reflective and ethically informed approaches to AI integration in teacher education (Ayanwale et al., 2024).

A particularly significant finding concerns participants' emphasis on teacher mediation and contextual adaptation. Consistent with Holmes et al. (2019), participants viewed AI as a pedagogical support mechanism rather than an autonomous instructional system. Educational decision-making was understood as a complex process requiring professional judgment, contextual awareness, and sensitivity to learners' needs. Consequently, participants frequently described adapting, modifying, and critically evaluating AI-generated materials rather than implementing them directly in classroom activities.

This finding is especially important because it highlights the continuing centrality of teacher agency in AI-enhanced educational environments. Participants did not position AI as an unquestionable authority but as a flexible pedagogical resource whose value depended on teachers' ability to evaluate, adapt, and contextualise its outputs. Meaningful AI integration, therefore, appeared to depend not only on technological competence but also on pedagogical expertise, ethical awareness, and reflective decision-making.

The findings should also be considered alongside research questioning whether gameful approaches consistently lead to sustained learning outcomes beyond initial engagement and novelty effects (Munday, 2015). From this perspective, the educational value of AI-assisted gameful pedagogy may depend less on the presence of AI or gameful elements themselves and more on how teachers purposefully integrate these tools into meaningful learning experiences. This interpretation further reinforces the argument that pedagogical design and teacher mediation remain central to effective AI-supported language education.

Negotiating Local Culture and Global English Through AI-Assisted Storytelling

The findings suggest that AI-assisted storytelling can serve as a pedagogical bridge between local cultural identities and global English language practices. Rather than treating English as a culturally neutral system to be transmitted to learners, participants appeared to conceptualise language learning as a process closely connected to learners' sociocultural experiences and cultural identities. This perspective is particularly important in contemporary ELT contexts, where increasing attention is being given to culturally responsive and context-sensitive approaches to language teaching.

The findings strongly resonate with glocal pedagogical perspectives, emphasising the need to connect global communicative practices with local sociocultural realities (Kumaravadivelu, 2006). However, the present study suggests that AI-assisted storytelling may provide a practical mechanism for enacting such connections in teacher education. Participants' efforts to incorporate local stories, cultural themes, and familiar experiences into English language teaching activities indicate that they viewed culture not as supplementary content but as an integral component of meaningful language learning. In this respect, glocal pedagogy appears to involve an active process of pedagogical decision-making through which teachers negotiate the relationship between local relevance and global communication.

The findings also support translingual perspectives that conceptualise language, identity, and culture as fluid and dynamically negotiated within multilingual contexts (Canagarajah, 2013). Participants frequently positioned English as a communicative resource through which local meanings

and cultural experiences could be expressed rather than as a culturally detached academic subject. Consequently, AI-assisted storytelling functioned not only as a language-learning activity but also as a space for cultural representation, identity construction, and contextual meaning-making.

A particularly noteworthy finding concerns participants' critical engagement with the cultural limitations of AI-generated content. Their tendency to question culturally inappropriate outputs and adapt AI-generated materials to local contexts demonstrates that meaningful AI integration requires active cultural mediation. Rather than accepting AI-generated content uncritically, participants assumed the role of pedagogical and cultural mediators who evaluated, modified, and contextualised digital resources to meet learners' needs and sociocultural realities. This finding reinforces the argument that the educational value of AI depends largely on teachers' interpretive and pedagogical decisions rather than on the technology itself.

Taken together, the findings indicate that AI-assisted storytelling may support more humanistic, culturally responsive, and contextually meaningful approaches to ELT. The study, therefore, contributes to ongoing discussions on how AI-enhanced pedagogies can be integrated into language teacher education in ways that preserve local cultural identities while preparing learners to participate in global communicative contexts.

Emerging Teacher Identities and Reflective Professional Learning

The findings suggest that AI-assisted gameful pedagogy may influence teacher development not only by introducing new technological tools but also by reshaping pre-service teachers' understanding of their future professional roles. Rather than viewing themselves solely as users of educational technologies, participants increasingly positioned themselves as reflective pedagogical decision-makers responsible for adapting, evaluating, and contextualising digital resources within meaningful learning environments. This shift is particularly significant because it highlights the role of AI-enhanced learning experiences in supporting professional identity formation rather than merely acquiring technological skills.

These findings are consistent with contemporary perspectives that conceptualise teacher identity as dynamic, socially negotiated, and continuously reconstructed through experience and interaction (Beauchamp & Thomas, 2009). Participants' reflections suggest that engagement with AI-assisted gameful pedagogy encouraged them to reconsider what it means to be an English language teacher in increasingly digital and technologically mediated educational contexts. Their developing understandings of teaching extended beyond content delivery to include creativity, cultural responsiveness, ethical awareness, and pedagogical adaptability.

A particularly important aspect of this process was the role of reflection. Through reflective journals, collaborative discussions, and storytelling activities, participants critically examined their assumptions about technology, language teaching, creativity, and classroom interaction. In this respect, reflection functioned not merely as a supplementary activity but as a mechanism through which professional learning and identity development were negotiated. This finding supports previous research emphasising reflective practice as a central component of teacher development and professional learning (Farrell, 2015).

The findings further suggest that AI-assisted gameful pedagogies may strengthen teacher agency by creating opportunities for experimentation, adaptation, and pedagogical decision-making. Rather than accepting AI-generated outputs uncritically, participants frequently evaluated, modified, and redesigned digital materials according to learners' needs and sociocultural contexts. This tendency indicates that participants increasingly understood teaching as an active process of pedagogical

mediation rather than the implementation of predetermined technological solutions. Consequently, teacher agency emerged as a central element of responsible AI integration.

From a sociocultural perspective, these developments can be interpreted as identity construction through participation in collaborative, socially mediated learning practices (Vygotsky, 1978). Collaborative storytelling activities, peer interaction, and reflective dialogue provided opportunities for participants to negotiate both pedagogical meanings and professional self-understandings. Identity development, therefore, appeared to emerge through interaction, reflection, and participation rather than through the acquisition of technological knowledge alone.

Importantly, the findings also suggest that developing confidence in AI integration is an ongoing process rather than a completed outcome. While many participants reported increased pedagogical confidence and digital awareness, some continued to express uncertainty regarding future classroom implementation. This observation highlights the need for sustained opportunities for guided practice, reflection, and experimentation within teacher education programs if future teachers are to develop the confidence and competence required for meaningful AI integration.

Taken together, the findings indicate that AI-assisted gameful pedagogies may contribute to teacher education by supporting not only digital pedagogical competence but also reflective professional learning, teacher agency, and emerging professional identities. The study therefore contributes to the growing literature on AI-enhanced teacher education by demonstrating that the educational significance of AI lies not merely in technological innovation but in its potential to support reflective, culturally responsive, and pedagogically informed teacher development.

Limitations and Future Research

Several limitations should be considered when interpreting the findings of the present study. First, the study was conducted within a single TEYL course at one university in Türkiye, involving a relatively homogeneous cohort of pre-service English teachers. Consequently, the findings should not be generalised to all teacher education contexts. Instead, they should be understood as contextually situated insights into participants' experiences with AI-assisted gameful pedagogy.

Second, the study relied exclusively on qualitative data collected from reflective journals, digital teaching artefacts, interviews, and focus group discussions. While these data sources provided rich and in-depth accounts of participants' experiences, future studies could employ mixed-methods or longitudinal designs to examine how AI-assisted gameful pedagogies influence teacher development over extended periods and across diverse educational settings.

Third, the findings emerged within a specific sociocultural and institutional context in Türkiye. Participants' perceptions of AI, digital pedagogy, cultural representation, and English language teaching may have been shaped by local educational traditions, technological resources, and teacher education practices. Therefore, the transferability of the findings to other cultural or institutional contexts should be considered with caution.

The study also contributes to ongoing debates regarding gameful pedagogy. Although participants generally perceived AI-assisted gameful learning positively, previous research has highlighted potential limitations of gamified approaches, including superficial engagement, novelty effects, and an overemphasis on motivational features at the expense of deeper learning processes (Munday, 2015). Future research should therefore investigate not only the benefits but also the potential tensions and unintended consequences of AI-assisted gameful pedagogies across different learner populations and educational contexts.

Future studies may additionally explore how AI-assisted gameful pedagogies influence classroom implementation during teaching practicum experiences, in-service teacher development, and young learners' language outcomes. Comparative cross-cultural studies could further examine how local educational contexts shape the integration of AI, storytelling, and glocal pedagogical practices in language teacher education.

Conclusion

The present study explored pre-service English teachers' experiences with AI-assisted gameful pedagogy in a Teaching English to Young Learners (TEYL) course through a glocal pedagogical perspective. The findings demonstrated that AI-assisted gameful learning environments functioned as interactive, reflective, culturally meaningful, and professionally transformative pedagogical spaces. Participants perceived AI-assisted pedagogies as valuable for supporting creativity, learner engagement, instructional flexibility, and multimodal learning, while simultaneously recognising the importance of critical evaluation, ethical awareness, and teacher mediation.

The findings further revealed that AI-assisted storytelling facilitated the integration of local cultural narratives with global English-language practices, contributing to culturally responsive and contextually meaningful language-learning experiences. In addition, participants reported increased pedagogical confidence, reflective awareness, and emerging teacher identities characterised by creativity, cultural responsiveness, and digital pedagogical competence.

Taken together, the findings suggest that meaningful AI integration in language teacher education requires more than technological proficiency alone. Effective implementation depends on reflective pedagogy, teacher agency, contextual sensitivity, and culturally informed instructional decision-making. The study, therefore, contributes to the growing literature on AI-enhanced ELT by highlighting the potential of AI-assisted gameful pedagogies to support human-centred, reflective, and culturally responsive approaches to future English language teacher education.

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Conflict of Interest

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