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What Are Teachers for in the Age of AI? Professional Roles and Learning Among Chinese English Teachers

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Abstract: ***Artificial intelligence (AI) raises questions about what English teachers contribute and how they develop professionally. This qualitative study examines professional role perceptions and AI-related learning among 11 English teachers from 3 universities in southern mainland China. Drawing on interview accounts from a wider project, the article uses boundary crossing as a sensitizing perspective on teachers' encounters with unfamiliar professional demands. The findings identify four connected themes: reconsidering the teacher's role as a learning guide and emotional supporter; recognizing demands for critical judgment and continuous learning; developing interest through personally meaningful experimentation; and extending AI-related engagement into educational research while seeking better resource coordination. Individual accounts describe movement from initial resistance to further exploration, and three participants reported AI-related research projects. These forms of engagement represent different ways of developing professional practice, rather than a fixed sequence or hierarchy. The study connects AI use with teachers' interpretations of their work and their accounts of professional engagement. It suggests that professional development should combine opportunities for experimentation with critical evaluation, discussion of teacher roles, and institutional coordination of resources. Teachers' learning needs extend beyond familiarity with AI tools to the professional judgments and relationships through which those tools become meaningful in education.***

Keywords: Artificial intelligence, English teachers, Professional roles, Professional learning, Boundary crossing.

1. Introduction

Generative artificial intelligence (AI) offers English teachers resources for preparing materials, developing activities, and supporting students' language learning. Reviews have examined its educational applications and the practical questions accompanying classroom use (Law, 2024; Lo et al., 2024). These applications also raise professional questions. When students can obtain explanations, examples, and language assistance from AI, teachers have to consider how their expertise, guidance, and relationships with students contribute to learning. Understanding AI integration therefore involves examining how teachers interpret their work and engage with changing professional demands.

These questions are relevant to English teachers in China, who balance curricular requirements, students' language development, and the demands of classroom work. Studies of English teaching for non-English-major students illustrate these demands, including the need to respond to different language proficiency levels (Wen, 2014; Zhang & Zuo, 2019). AI can become a resource for this work, while also requiring teachers to learn unfamiliar tools and evaluate their educational value. The professional significance of AI use consequently extends to what teachers regard as worthwhile expertise and how they find opportunities to develop it.

Research on AI in language education includes pedagogical opportunities, ethical issues, and teacher education needs (Jiang, 2022; Omidvar & Meihami, 2025). Studies have also addressed teachers' emotions and identity reconstruction in AI-mediated language education (Ghiasvand & Seyri, 2025; Shen & Guo, 2024). These perspectives direct attention to teachers' experiences of change. The present study connects perceptions of professional roles with accounts of learning and engagement, asking how teachers explain the responsibilities associated with AI and what forms their professional exploration takes.

Boundary crossing provides a useful perspective on these questions. It focuses on the discontinuities encountered when people engage with different practices and the learning possibilities that arise as they establish connections between them (Akkerman & Bakker, 2011). For English teachers, familiar expectations about possessing and transmitting language knowledge meet demands to evaluate AI outputs, guide students' use, and maintain meaningful human interaction. Teachers' accounts of these encounters can reveal how professional learning becomes relevant to their everyday work.

This article examines the professional learning strand of a wider qualitative project involving 11 teachers at three Chinese universities. It addresses two questions: (1) How do English teachers using AI perceive their professional roles and competency requirements? (2) How do they describe their AI-related professional engagement and the conditions surrounding it? The focus is on teachers' interpretations and reported experiences, including experimentation and research participation.

2. Professional Learning and Boundary Crossing

Teachers' professional learning involves encounters with practices that challenge established understandings of their work. Boundary-crossing research has examined these encounters in out-of-field teaching, teacher education, and teaching–research relationships (Bao et al., 2024; Hobbs, 2013; Trent, 2013). The approach makes it possible to connect practical encounters with questions of professional positioning. In this study, it sensitizes the analysis to how teachers describe differences between familiar responsibilities and those associated with AI use.

Akkerman and Bakker (2011) identify four learning mechanisms associated with boundary crossing: identification, coordination, reflection, and transformation. Identification concerns making sense of differences between practices and their relationship; reflection involves considering perspectives on those practices. These concepts are relevant to teachers' discussions of the expertise and human contribution that remain important when AI becomes available. Transformation directs attention to the development of new activities and arrangements. The mechanisms serve here as conceptual resources for interpreting accounts of professional engagement, with particular attention to role perceptions and exploration.

The relationship between teaching and research is also relevant. Research engagement has been examined in studies of English teachers in China (Borg & Liu, 2013). Bao et al. (2024) use boundary crossing to examine English teachers' engagement with teaching and research in professional doctoral programs in China. In the present setting, AI-related educational projects offer one possible connection between teachers' practical interests and formal inquiry. Other forms of engagement include learning to evaluate tools, trying unfamiliar activities, and reconsidering how teachers support students.

Hobbs (2013) draws attention to contextual factors, support mechanisms, and personal resources in boundary crossing. This perspective helps situate teachers' initiative within the conditions in which they work. An account of willingness to experiment can be considered alongside reported expectations, opportunities, and resource needs. The resulting framework treats professional learning as situated engagement: teachers interpret unfamiliar demands, explore responses, and describe the forms of support relevant to that work. It allows different forms of engagement to be examined without assuming that all teachers follow the same developmental route.

3. Method

The study draws on a wider qualitative interview project examining English teachers' encounters with AI-facilitated teaching. The project involved 11 teachers from three universities in southern mainland China. Universities A and B were regional public universities, and University C was a private institution. The participating teachers taught English to non-English-major undergraduate students. This article focuses on professional role perceptions and AI-related learning; a companion manuscript on classroom practices and assessment draws on the same participants, interviews, and artifact collection.

Participants, identified as T1–T11, were recruited purposively and voluntarily. The sampling sought variation in teaching experience and institutional affiliation, following a maximum-variation approach (Patton, 2014). Teaching experience ranged from 1 to 30 years. Their positions ranged from assistant lecturer to associate professor. Selection depended on their willingness to discuss their experiences of AI integration, regardless of their level of use. The sample provides accounts from teachers with different professional backgrounds within a shared area of university teaching.

Following research ethics approval, participants provided informed consent, and pseudonyms were used to protect confidentiality. Semi-structured interviews were conducted in Chinese over a period of one month, with initial individual interviews lasting 60–90 minutes. T1, T2, and T11 participated in second individual interviews lasting less than 60 minutes. T3, T4, T5, T6, T7, and T10 answered follow-up questions through text or voice messages on WeChat. T8 and T9 received no follow-up questions because the interviewer considered their initial accounts sufficient. Interviews were audio-recorded and transcribed verbatim.

The wider project also collected documents and artifacts, including lesson plans, AI-assisted activities, screenshots of AI interactions, students' AI-related submissions, and AI-generated digital personas. The present article focuses on teachers' accounts of these activities and their perceived implications for professional learning.

Analysis in the wider project combined deductive attention to boundary-crossing mechanisms with inductive attention to themes emerging from the material. Two researchers read the transcripts, identified episodes relevant to boundary crossing, and discussed coding and interpretation. Documents and artifacts were considered alongside interview accounts (Merriam & Tisdell, 2015). The present article develops the professional learning strand of that analysis, organizing the relevant material around role perceptions, competency demands, experimentation, and research engagement. The findings present participants' accounts and their interpretation within this focused strand.

4. Findings

Teachers' accounts connected AI use with questions about their contribution to education and the activities through which they explored unfamiliar demands. Four themes organize these accounts: reconsidering professional roles, recognizing competency and learning demands, developing engagement through experimentation, and extending professional interests into research while identifying resource needs.

4.1 Reconsidering the Teacher's Contribution

Teachers emphasized learning guidance and emotional support alongside knowledge instruction. T10 explained:

In the past, [English] teachers always felt there was no end to our knowledge instruction, as there were endless grammar rules and new words you need to explain…Now we learn to use AI tools to give them an effective guidance of language learning.

T10's account links AI availability with a reconsideration of the teacher's responsibility. Knowledge instruction remains part of the professional context, while guidance becomes a prominent contribution. The account presents learning to use AI as part of learning how to guide students. It thus connects a perceived role demand with teachers' own professional learning.

T9 emphasized the relational contribution of teachers in a learning environment containing more interaction with machines:

Another role I can think of is emotional supporter. I began to wonder, as machines are all around us and most of the time is spent on interacting with machines, what is the meaning of us teachers when facing students? We need to have more emotional exchanges and support them emotionally as teachers.

These comments point to a reconsideration of teachers' roles that emphasizes emotional communication and learning guidance. T9's question about the meaning of teachers' work connects AI use with the importance of human interaction. Together, the accounts show how participants articulated roles they considered meaningful in AI-facilitated education.

4.2 Recognizing New Competency and Learning Demands

Teachers also identified extra skills needed in AI-facilitated teaching. T3 articulated this shift in the requirements:

In traditional teaching, we first needed to accumulate our knowledge reserves. To provide students a drop of water, you first need to have a bucket of water, right? But now I think the biggest demand is that teachers must improve their critical ability in thinking and distinguishing, and the ability to collaborate with AI.

The knowledge-reserve metaphor describes an established understanding of expertise. T3's subsequent emphasis on critical thinking, discrimination, and collaboration identifies additional requirements for working with AI. These requirements concern how teachers evaluate and use assistance, connecting technical engagement with professional judgment.

T2 described continuous learning as a demand associated with students' expectations: "The requirements for teachers have become higher because teachers need to continuously learn and understand AI tools. If you cannot keep up with the students' pace, they may think the teacher is incompetent."

Teachers' recognition of competency requirements was accompanied by external expectations. T2 described policy pressure: "You have to follow national policy (to use AI), because that has become an important performance evaluation item for teachers."

T11 expressed a broader sense that teachers had to respond to AI's social presence: "This (using AI) is not something we can avoid, as the whole society just uses it. We must admit the issue."

These accounts show how participants interpreted the expectations surrounding AI use. Students, perceived policy requirements, and wider social developments supplied reasons to engage. Such expectations made learning professionally salient, while T3's emphasis on critical judgment specified the kind of expertise that engagement could require.

4.3 Developing Engagement Through Experimentation

Teachers' accounts included changes in their willingness to explore AI. T7 described an attitude shift from initial resistance to recognizing its practical value: "at the first beginning, I was quite resistant…but later I found it really saves me a lot of time."

T7's account makes time saving personally meaningful. It explains a change in attitude through an experienced benefit, providing one example of how initial reluctance could give way to further engagement. The account connects professional learning with a problem that matters in teachers' work: how to manage the demands placed on their time.

T3 described an innovative application and an unexpectedly positive response: "I asked students to play the role of Socrates in class and to engage with AI. Students' responses were much more enthusiastic than I thought."

T3 also described extending text-based interactions to visual representations. She asked students to interact with Doubao to generate visual outputs. The reported enthusiasm belongs to T3's interpretation of the activity and helps explain why the experience encouraged further exploration.

T7 took this exploration into a teaching competition by creating an AI-generated digital human: "When preparing a teaching competition, we made an AI digital human. Students were quite surprised when they first saw the digital human…their response was very positive."

These examples show participants exploring AI through activities connected to their professional interests. T3's account centers on trying an interaction and interpreting students' responses; T7's examples connect practical benefit with a competition-related activity. They illustrate forms of engagement through which teachers found reasons to continue exploring AI.

4.4 Connecting Professional Exploration With Research and Resources

AI-related professional engagement extended beyond individual classroom practice into formal academic projects. T11 began this research trajectory in 2023 and reported a successful Ministry of Education project application:

When I was applying for the Ministry of Education Project in 2023, I applied for research on AI-assisted writing. Since I started working on the topic of AI relatively early, the project application went successfully, which also strengthened my confidence in conducting research in this area.

Other participants also described connecting their teaching experiences with formal academic projects. T4 reported a college-level research grant focusing on an AI-enhanced drama course in 2023, followed by a university-level project in 2024 examining AI's role in empowering English literature courses. T5 developed pedagogical approaches that incorporated critical evaluation of AI-generated content and reported a provincial-level educational reform project. These

reports identify AI-related research and reform as another form of professional engagement. T11 explicitly linked the successful application with greater confidence in continuing research.

The accounts also contain a request for better coordination of resources. T11 stated: "Now the school level isn't doing very well as they do not integrate resources and put them into a coordinated platform for teachers to utilize."

T11's reported research participation coexisted with a perceived gap in institutional resource integration. This combination connects individual engagement with the arrangements available to support teachers' work. It identifies a specific support need: organizing resources so that teachers can access and use them more readily. Research projects, experimentation, and requests for coordinated resources together show different aspects of participants' professional engagement with AI.

5. Discussion

The findings connect AI use with how teachers interpret professional responsibility and seek opportunities to learn. Role guidance and emotional support, critical judgment, practical experimentation, and research participation form the main elements of this connection. They offer a situated account of professional engagement among English teachers working with AI.

5.1 Role Reconsideration as a Focus of Professional Learning

Teachers' role perceptions bring the human contribution to AI-supported education into view. T10's emphasis on guidance and T9's emphasis on emotional exchange identify professional responsibilities that participants regarded as meaningful when AI could supply language assistance. These accounts connect with research on language teacher identity reconstruction in relation to AI (Ghiasvand & Seyri, 2025). Their contribution here lies in specifying the roles teachers articulated and connecting those roles with their accounts of learning.

Through a boundary-crossing perspective, these comments can be understood as efforts to identify relationships between familiar professional expectations and emerging practices (Akkerman & Bakker, 2011). Teachers make sense of their contribution by considering how knowledge instruction, learning guidance, and emotional support relate. Role reconsideration therefore gives professional development a substantive focus: what teachers need to understand and do in order to support students meaningfully when AI is part of the learning environment.

T3's account adds critical judgment and collaboration to this focus, while T2 highlights continuous learning and professional credibility. Taken together, these perceptions suggest that development opportunities should connect tool use with discussion of professional decisions. Working through examples of AI outputs, considering how to guide students, and discussing the relational responsibilities of teaching would address the competency concerns expressed in these accounts. Such opportunities would also provide a setting in which teachers can articulate the reasons for their choices.

5.2 Personally Meaningful Encounters and Professional Engagement

The accounts illustrate how externally perceived expectations and personally meaningful experiences can coexist. T2 described policy and performance expectations; T11 described a broad social expectation to respond. T7 recalled a practical benefit that changed her response to AI, while T3 described an unexpectedly positive classroom encounter. These examples connect professional engagement with the value teachers themselves found in particular experiences.

Boundary-crossing research attends to the learning possibilities created by encounters with unfamiliar practices (Hobbs, 2013; Trent, 2013). In this study, the relevant encounters included finding an activity useful, recognizing an additional competency requirement, and exploring a new professional opportunity. Their value for learning depended on the meanings participants gave them. T7's account of time saving, for example, explains why AI became worth exploring in relation to work demands.

The findings support creating opportunities for manageable experimentation and discussion of the experience. Teachers could try activities relevant to their own work, examine what happened, and compare the value and difficulties they encountered. Students' reactions can become one source for that reflection, alongside teachers' judgments about educational purposes and the work involved. This approach connects professional learning with teachers' existing responsibilities and the specific questions that motivate their engagement.

5.3 Research Participation and Institutional Coordination

The projects described by T4, T5, and T11 show how AI-related interests can connect with educational research and reform. This connection is relevant to work on English teachers' research engagement in China and teaching–research boundary crossing (Bao et al., 2024; Borg & Liu, 2013). T11's account is particularly informative because it connects a successful project application with greater confidence in further research. Formal projects thus represent one reported form of engagement with AI-related research.

Professional learning in these accounts also includes the role reflections of T9 and T10, the competency judgments of T3, and T7's willingness to explore practical possibilities. Recognizing this range helps institutions support teachers whose interests and responsibilities take different forms. Opportunities to discuss professional roles, examine teaching experiences, or develop educational research can each be relevant to the learning concerns identified here.

T11's concern about resource integration gives this support an organizational dimension. Hobbs (2013) highlights the relevance of context, support, and personal resources to boundary crossing. The present account shows an engaged teacher asking for a coordinated platform alongside pursuing

research. Institutions can respond to this kind of need by making resources easier to locate and by creating opportunities for teachers to exchange experiences. Professional initiative can then connect with arrangements that support the practical work of learning.

6. Conclusion and Limitations

This study examined professional role perceptions and AI-related learning among 11 Chinese English teachers. Participants articulated responsibilities involving learning guidance, emotional support, critical judgment, and continuous learning. Individual accounts described practical encounters that encouraged further exploration, while three teachers reported educational research or reform projects. A perceived need for better institutional resource coordination accompanied these forms of engagement. Boundary crossing helped connect the unfamiliar demands associated with AI with teachers' efforts to understand and develop their professional work.

The study draws on a small, purposively recruited sample in one area of higher education. The findings concern participants' accounts collected within a 1-month interview period, including retrospective descriptions of earlier activities. They provide evidence of perceived roles and reported engagement; sustained changes in professional identity and student learning outcomes require other forms of evidence. Future longitudinal research could follow how teachers' role perceptions relate to their practice over time and examine the support arrangements they use. For professional development, the present findings point to connecting practical exploration with critical judgment, discussion of teacher roles, and coordinated access to resources.

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