

Negotiating ESP teacher identity in the age of AI: a case study in China

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Abstract. With English for Specific Purposes (ESP) increasingly promoted in Chinese higher education and AI becoming more involved in teaching, this study examines an ESP teacher in a Chinese university to explore how such teachers negotiate their professional identity in an AI context. The research employed semi-structured interviews and thematic analysis. Findings indicate that the participant utilised AI to compensate for her limited linguistic knowledge in an interdisciplinary transformation, maintained the teacher's role in class, and continuously reconstructed her teacher identity. This study provides empirical evidence of how ESP teachers position themselves in an AI context. Nevertheless, future studies could overcome this study's limitations regarding its limited sample size by employing comparative research.

Keywords: ESP, teacher identity, AI

1. Introduction

As globalisation processes continue and higher education reforms in China advance, English for Specific Purposes (ESP) is becoming an increasingly important field in Chinese higher education. These reforms require ESP teachers to possess high levels of language teaching competence and subject knowledge to meet students' professional and academic development objectives.

Meanwhile, rapid technological developments, particularly the emergence of Artificial Intelligence (AI), have had a profound impact on education. Technology provides instructors with supplementary instructional resources, innovative pedagogies, and enhanced opportunities for student engagement. However, the introduction of AI poses a threat to the role of the teacher. Recent studies demonstrate that while instructors are willing to use AI, they often experience fear, doubt, and vulnerability regarding their professional identity when AI seems to either rival or disrupt human judgement.

Thus, the study proposes the following research questions:

- How do ESP teachers in Chinese universities negotiate their professional identity as teachers in the age of AI?
- How does a teacher's professional identity influence their teaching practices?

2. Literature review

2.1. Teacher identity

Teacher identity in the field of language education has been extensively theorised as a dynamic, relational, and socially constructed process that is continuously refined or transformed through ongoing interaction between institutional structures, sociocultural ideologies, and pedagogical contexts [1]. Post-structuralist perspectives emphasise that discourse, positioning, participation, and meaning-making constitute elements of negotiating and remaking identity rather than being psychological qualities [2]. The ways in which instructors exercise authority, perceive institutional normality, and respond to external circumstances within the education context due to the dynamic social-political environment define identity.

Recent research underscores the idea that teacher identity is not only shaped by social processes but also actively influences the professional practices, judgments, and resilience in the work of teachers [3]. Teacher identity is used to describe the creation of meaning, power negotiation, and the self-positioning of teachers in the context of the internationalisation and technological integration of higher education institutions, based on evolving institutional demand. Within this conceptual framework, ESP teachers negotiate new identities and value positions in AI-based learning spaces.

2.2. ESP teacher identity in Chinese higher education

With Chinese education policy increasingly emphasising the convergence of language and disciplinary education alongside professional skills and academic development, ESP has become a prominent field in Chinese universities. In this context, ESP teachers are expected to be both language specialists and subject experts, which creates complex identity pressures. ESP identity is influenced by pedagogical epistemology, disciplinary norms, procedures of institutional evaluation, and the hierarchies of university ecosystems. ESP teachers must balance the dual expectation of being subject experts and being English language teachers [4]. ESP teacher identity is developed by the teachers' professional experiences, institutional positioning, their participation in research, and their view of career opportunities.

At the same time, ESP teacher identity is shaped by symbolic capital, institutional identification, and discourse legitimacy, aligning with the identity investment perspective that treats identity as inseparable from capital, institutional identification, and social power [5, 6]. Moreover, identity negotiation is complicated by identity fragility, insecurity, and resource disequilibrium. The conceptual complexity of ESP teacher identity is central to understanding how Chinese ESP teachers reconstruct and negotiate identity in the AI era.

2.3. Teacher identity in AI contexts

The emergence of AI has introduced novel socio-technical circumstances, redefining the manner in which educators make, negotiate, and articulate their identities in higher educational contexts. AI-enhanced automated writing assessment, intelligent learning tools, multimodal corpus browsing, and predictive learning analytics enable students to autonomously engage with professional content and participate in global learning communities [7]. This changes the knowledge relations between teachers and students away from teacher-centred control towards distributed knowledge acquisition mediated by algorithms, data, and platforms. Identity reconstruction occurs as ESP teachers reevaluate their authority, professional legitimacy, and pedagogical value in AI-informed learning environments.

AI is also changing identity on the ideological level because, as a type of technology, it is embedded in larger logics of efficiency, optimisation, productivity, accountability, and performance measurement in the governance of higher education [8]. AI serves as a tool and an ideological force which affects training, expertise, and professional competence. Teachers who are technically illiterate or express resistance risk marginalisation, while those who successfully incorporate AI may acquire legitimacy and symbolic capital. However, empirical research on integrating AI with identity in the Chinese ESP context remains limited. Most current studies emphasise AI's effectiveness in improving language learning outcomes rather than examining how teachers negotiate identity, interpret role positioning, and implement identity strategies when interacting with AI systems in real teaching practices [9]. Thus, teacher identity in the AI era warrants further research.

3. Methodology

3.1. Research design

This study adopts a qualitative exploratory research design. Subjective, professional, and identity positions, which are not measurable, can be examined using qualitative methods since identity is socially constructed, negotiated, and conditional [10]. The objective is to understand how ESP educators in higher education perceive themselves in an AI context. Semi-structured interviews are the main method of data collection that permit a free exploration of identity meanings, tensions, negotiations, and reflective assessments and ensure theoretical coherence with the research questions.

The participant, referred to as Zhang, is an ESP lecturer at a university in eastern China. Zhang is a 30-year-old female academic who studied abroad and has three years of experience teaching English as a second language. Her primary course is English for Design, which prepares students intellectually and linguistically to participate in international exchange programmes. Her international study experiences and multidisciplinary, practice-oriented ESP teaching have enhanced her awareness of identity issues and opportunities for using AI. The complexity of the phenomenon under investigation justified the use of purposive sampling.

3.2. Data collection and analysis

Two rounds of in-depth semi-structured interviews, each lasting 60 minutes, were conducted. The research questions shaped the interview outcomes by guiding the development of interview outlines, which covered the participant's transition into an ESP teacher, her use of AI technology in lesson planning and teaching, as well as strategies for negotiating teaching authority and role expectations in technology-assisted education.

The verbatim transcripts of all interview records were obtained to create textual information, which was analysed using the thematic analysis methodology suggested by Braun and Clarke [11]. Initial coding involved assigning first- and second-level codes to meaning units relevant to the topic studied. Data interpretation followed the principles of post-structuralist identity theory. The analysis identified basic themes with the help of code comparison, clustering, and refining.

The participant was fully informed about the study purpose, research procedures and data usage, and provided written informed consent signed prior to participation. Involvement was voluntary. All personally identifiable information was anonymised, and electronic data was encrypted and held in strict confidence for use only in this study.

4. Findings and analysis

4.1. The identity transformation from a design teacher to an ESP teacher

Zhang's journey to becoming an ESP teacher exemplifies some unique challenges faced by ESP teachers without an English-major background. Formerly a design instructor, her overseas study experiences and involvement in hosting international exchange students led her to become an ESP teacher. Zhang characterised her transition as "a huge leap," noting: "I didn't come from a professional English background" (Interview 1). Her primary challenge lay not in subject knowledge but in systemic linguistic knowledge. As she reflected, "My major is not English, so my linguistic knowledge is indeed weak... I think English majors have a much stronger understanding of the language" (Interview 2).

This lack of linguistic knowledge influenced her initial teaching practices and her psychological state. To address the challenges of teaching in English, she utilised a word-for-word script when preparing lessons. "I literally start with writing out every word. Teaching in English puts a lot of pressure on me" (Interview 2). This strategy functioned as a pedagogical technique for contending with identity anxiety and establishing her authority in the classroom.

Significantly, she conceptualised English as "a practical tool." She emphasised that "language is a tool that helps us communicate better" (Interview 2). Rather than treating English as a subject for deeper linguistic study, she positioned it as a means of facilitating her professional teaching and enabling interaction with international students.

4.2. AI as an assistant in teaching and learning

For Ms Zhang, AI enhances her lesson preparation and teaching efficiency. She elaborated on how AI is deeply embedded in her workflow: "First, I ask AI to gather information. Second, AI generates outlines... Finally, after completing the writing, AI helps with polishing" (Interview 2). She referred to AI as "a tool that helps me... it saves time and boosts productivity" (Interview 2). This demonstrates how she effectively integrates AI as a tool and subordinates it into her teaching framework and professional identity, thereby maintaining her professional autonomy and authority as a classroom leader.

However, Zhang observed that students relied on AI translation tools to process professional instructions. "When students receive instructions in English, they use AI to translate it directly" (Interview 1). She noted the unintended consequences of such convenience: "It does increase student laziness because it's too convenient" (Interview 1). When asked whether AI improves students' English level, she responded, "No... English proficiency remained at a moderate level" (Interview 2). Here, "English proficiency" seems to refer to traditional, quantifiable language abilities measured by standardised tests such as CET-4/6 or IELTS.

Nevertheless, Zhang emphasised that her course objective is "to create a professional English environment for students, enabling them to adapt to exchange programs" (Interview 1). What students gain is adaptability and confidence in using English in authentic contexts rather than the accumulation of linguistic knowledge.

4.3. Emotions and confidence contributing to teacher identity

Apart from her teaching experience, Zhang's interviews revealed rich emotional and self-evaluation reflections. Her growing confidence is closely tied to her teaching practice and AI utilisation. She described her transition from initial nervousness to her current state of comfort: "At the beginning, I felt nervous... but now... I feel more confident" (Interview 2). This confidence stems from accumulated teaching experience and the effective support of AI tools. She believed that AI-assisted lesson preparation has made her "more confident" in tackling teaching challenges. This technological empowerment indirectly reinforces her professional confidence.

Zhang also articulated her belief that a "teacher is a guide for students" (Interview 1). She recounted a case in which she helped a graduate improve their language skills and encouraged them to pursue further education abroad. That student eventually became a college teacher. Reflecting on this, Zhang stated: "Throughout this process, I felt a sense of accomplishment... which further solidified my conviction that teachers truly serve as guides" (Interview 1). This experience deepened her understanding of her profession and enhanced her sense of efficacy, thereby reinforcing her teacher identity.

5. Discussion

This paper examined an ESP teacher in a Chinese university and explored how she negotiates her professional identity in the context of AI integration into teaching.

To begin with, many ESP teachers typically face the challenge of possessing strong language proficiency but limited subject knowledge. They often need to develop disciplinary knowledge alongside curriculum design and delivery skills [12]. The case presented in this study demonstrates the opposite profile: the teacher transitioned from a subject-expert to an ESP teacher, possessing disciplinary knowledge but lacking confidence in her linguistic competence. This perspective complements the existing understanding of ESP teachers' backgrounds and highlights the need for linguistic support for those teachers.

Secondly, the teacher in this study did not oppose using AI but constructed her professional identity by positioning AI as a supportive tool. This aligns with the view that AI should be regarded as a facilitator of lesson preparation and classroom enrichment rather than as a substitute for teachers [13]. Zhang employed AI to collect resources and refine English writing scripts, thereby compensating for weaknesses in her language knowledge. At the same time, she established clear boundaries, framing AI as an assistant rather than a partner in teaching. This demonstrates how teachers maintain control of their classroom and direct students to the learning goals when AI is involved.

Finally, emotions were found to significantly impact teacher identity. Yu and Yu highlight how teachers in the AI era are prone to anxiety or worry with respect to diminished value in their profession [14]. The teacher in this study questioned her originality in conducting research when using AI, yet in the classroom she consistently emphasised the irreplaceable role of teachers in the development of the students. Overall, she regarded AI as a tool to develop her confidence and to support classroom management. This cyclical navigation between anxiety and self-affirmation enabled her to reconstruct her teacher identity amidst rapid technological advancement.

6. Conclusion

This research presented the case of an ESP instructor without an English-major background, providing an account of her processes of negotiating teacher identity through role transformation, AI use, and emotions in an AI context. An important contribution of this study is its extension of existing literature, which has largely focused on English-major ESP teachers. It demonstrates how ESP teachers with strong subject knowledge but limited language proficiency can utilise AI to overcome language weaknesses and conduct a more guiding role in teaching practice.

Nevertheless, this study has limitations. It was confined to a single institution with a small sample size. Future research could provide longitudinal studies across institutions with a larger sample size to further enhance understanding of teacher identity negotiation in an AI context.

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