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Research on Professional Development Pathways for Foreign Language Teachers in Private Universities in the Age of Artificial Intelligence

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Abstract

In the context of rapid advancements in artificial intelligence, foreign language teachers face new challenges and opportunities for professional development. This paper draws on theories of teacher professional development, the Technology Acceptance Model (TAM), Constructivist Learning Theory and Blended Learning to systematically explore pathways and strategies for the professional development of foreign language teachers in private universities in the era of artificial intelligence. The study suggests that foreign language teachers need to continuously enhance their digital literacy and information technology application skills throughout their careers, increase their acceptance of and proficiency in using artificial intelligence technology, and transform their teaching roles to actively explore AI-based teaching models. By constructing a professional competence framework, optimising top-level design, strengthening training mechanisms, and establishing a scientific evaluation and incentive system, it is possible to effectively promote the professional growth and teaching innovation of foreign language teachers.

Keywords

University foreign language teachers; Artificial intelligence; Professional development of foreign language teachers

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1. Introduction

With the rapid development of artificial intelligence technology, the education ecosystem is undergoing profound changes, and foreign language teaching is facing unprecedented opportunities and challenges. China places great emphasis on the deep integration of artificial intelligence and education. The Ministry of Education [1-5] has explicitly stated in a series of policy documents that teachers should actively adapt to technological changes, enhance their information technology application skills, intelligent literacy, and digital literacy, and strengthen their ability to interact and collaborate with machines. They should adopt a proactive attitude towards educational transformation to achieve continuous development of their professional capabilities.

Under this contemporary context, private

universities, as an integral part of China's higher education system, face significant challenges in the professional development of the foreign language faculty. This development not only impacts the quality of talent cultivation within institutions but also influences the optimisation and diversification of higher education structures. The integration of artificial intelligence (AI) into foreign language education has become increasingly prevalent, with applications spanning automated assessment systems, neural machine translation, intelligent tutoring platforms, and beyond. The introduction of these technologies has not only transformed the teaching environment but also posed new challenges to the traditional role and professional capabilities of teachers [6], necessitating a systematic restructuring of teachers' concepts, capabilities, and development pathways. Against this backdrop, an in-depth investigation into the professional competency development pathways for foreign language teachers in private universities during the AI era carries substantial theoretical significance, while also offering practical implications for advancing educational reform and improving instructional quality.

2. Literature Review

In the current era of artificial intelligence, the field of foreign language education is undergoing profound transformations and facing significant challenges. While scholars domestically and internationally have extensively explored the applications of artificial intelligence in education, systematic investigations into the professional development pathways for foreign language educators in private universities remain comparatively limited. Current research both domestically and internationally has primarily focused on the application of AI technology in language learning, teaching assessment, and personalised education, with limited in-depth exploration of how foreign language teachers at private universities can effectively address the challenges posed by artificial intelligence technology.

Internationally, in recent years, the impact of the AI era on higher education has gained significant attention from countries worldwide and scholars, with universities in various nations beginning to prioritise the influence of information technology and digital technology on higher education. Among these, Europe and the United States have addressed this issue earlier, with research primarily proposing new AI-based professional development models for foreign language teachers, including training objectives, curriculum design, and teaching methods. Kohnke et al. [7] explored higher education English teachers' attitudes toward generative AI tools, their willingness to use them, and the institutional support and professional development needed when using and learning these tools. They proposed 10 practical insights to cultivate language teachers' digital competencies, pedagogical knowledge, and positive attitudes toward AI integration, thereby enhancing students' learning experiences. Given the pedagogical and technical advantages of AI tools, Celik [8] proposed an updated teacher knowledge framework for ethically integrating AI tools, namely the Smart TPACK framework. Additionally, researchers have suggested designing AI-based educational software to enhance teachers' qualifications, establishing AI-based training pathways for all individuals working in the education sector, creating accurate databases across all education fields (including human resources), and developing educational training environments that facilitate the application of AI in teachers' professional development to enhance their professional capabilities.

In the Chinese context, an increasing number of studies have focused on the professional development of university foreign language teachers in the AI-enhanced educational environment, with particular emphasis on conceptual frameworks, prevailing challenges, and developmental trends. Yao Lina [9] integrated the characteristics of artificial intelligence (AI) to examine its influence on foreign language teachers, and subsequently proposed a professional development framework for educators in the AI era from three key dimensions: the transformation of teacher roles, individual professional growth, and teacher training and development. Similarly, Lyu Jianxiu [10] contends that the advent of AI has introduced novel dimensions and challenges to the professional development of university foreign language teachers. The study advocates for the enhancement of teachers' professional competence through targeted training, school-based research initiatives, and reflective

teaching practices. In a related vein, Sun Qinmei [11] highlights the effectiveness of online collaborative learning communities in advancing teachers' professional cognition, broadening their knowledge base, refining pedagogical skills, and ultimately improving overall professional competence. Furthermore, Lin Xiaoling and her colleagues [12] emphasize that, within the framework of "AI + Education," the professional development of foreign language teachers should be guided by the principles of autonomy and sustainability. They propose that fostering intrinsic motivation and cultivating a supportive professional development environment are essential to advancing teacher growth in the AI era.

As can be seen, there is a relatively mature research system in the field of teacher professional development abroad, particularly in the cultivation of teachers' educational technology competencies. Despite growing interest, research that integrates artificial intelligence (AI) technologies with the cultivation of teachers' professional competencies remains in a nascent and exploratory stage. While domestic scholarship on the application of AI in education is gradually expanding, it has largely concentrated on basic education and online learning, with limited attention given to the professional competency development of foreign language teachers—particularly those employed in private universities. Overall, both domestic and international scholars have approached the cultivation of foreign language teachers' professional competencies in the AI era from diverse perspectives, offering valuable theoretical and practical insights for the present study. However, although some studies have examined the integration of AI into higher education, there is a notable lack of systematic and in-depth research specifically focused on the developmental pathways for enhancing the professional competencies of foreign language teachers in private higher education institutions. In particular, empirical studies supported by concrete case analyses and statistical data remain scarce.

3. Theoretical Foundations

This study primarily draws on teacher professional development theory and the Technology Acceptance Model (TAM), while also incorporating constructivist learning theory and blended learning theory, to explore pathways for cultivating the professional competencies of foreign language teachers at private universities in the era of artificial intelligence.

3.1. Teacher Professional Development Theory

Teacher professional development theory emphasises the continuous learning and growth process throughout a teacher's career, including improvements in knowledge, skills, attitudes, and values [13]. In the era of artificial intelligence, foreign language teachers need to continuously update their knowledge structures, enhance their information technology application capabilities, and develop their intelligent literacy to adapt to the demands of educational reform. This study will draw on teacher professional development theory to construct a professional competence framework for foreign language teachers in private universities and explore effective cultivation pathways to promote teacher professional development.

3.2. Technology Acceptance Model (TAM)

Used to explain the degree to which users accept information technology, it posits that perceived usefulness and perceived ease of use are key factors influencing users' acceptance of new technology [14]. In the era of artificial intelligence, the degree to which foreign language teachers accept artificial intelligence technology directly impacts its application effectiveness. This study will employ the Technology Acceptance Model to analyse the factors influencing the acceptance and application of artificial intelligence technology by foreign language teachers at private universities, and explore strategies to enhance teachers' technology acceptance.

3.3. Constructivist Learning Theory

This theory emphasises the active process of knowledge construction by learners, positing that learning is a process where learners actively construct new knowledge based on their prior experiences through interaction with the environment [15]. In the era of artificial intelligence, foreign language teachers need to transition from knowledge transmitters to learning facilitators, leveraging artificial intelligence technology to create authentic learning environments and guide students in actively constructing knowledge. This study will draw

on constructivist learning theory to explore foreign language teaching models and methods based on artificial intelligence technology, thereby promoting students' deep learning.

4. Professional development pathways for foreign language teachers

In the context of artificial intelligence (AI) profoundly reshaping the educational landscape, the professional development of foreign language teachers in private universities is confronted with both emerging opportunities and complex challenges. To align with the evolving trends of educational informatization and intelligent transformation, teachers must not only continuously enhance their disciplinary knowledge and pedagogical competencies but also acquire and effectively integrate AI-related technologies into their teaching practices. This integration is essential for facilitating role transformation and fostering pedagogical innovation. Drawing upon teacher professional development theory, the Technology Acceptance Model (TAM), constructivist learning theory, and blended learning theory, the present study proposes a set of professional development pathways tailored to the needs of foreign language teachers in the AI era.

Guided by teacher professional development theory, this study proposes the establishment of a competency-oriented growth framework for foreign language educators. Teacher professional development theory underscores the significance of lifelong learning, reflective practice, and continuous professional enhancement throughout a teacher's career [14]. In the context of rapid advancements in artificial intelligence (AI), foreign language teachers are required to continuously update their pedagogical beliefs and strengthen their competencies in information literacy, the application of intelligent tools, and interdisciplinary integration. Accordingly, this study advocates for the construction of a foreign language teacher competency framework centered on three core dimensions: technology integration capabilities, smart teaching competencies, and data literacy skills. This framework aims to support teachers in transitioning from traditional instructional models to AI-enhanced smart teaching practices. Furthermore, by formulating staged developmental goals and implementing systematic training programs, professional development initiatives, and collaborative learning communities, a supportive environment conducive to sustained professional growth can be cultivated.

The Technology Acceptance Model (TAM), proposed by Davis [14], posits that users' acceptance of new technologies is primarily influenced by their perceived usefulness and perceived ease of use. Applying this theoretical framework, the present study emphasizes the importance of enhancing foreign language teachers' understanding and acceptance of artificial intelligence (AI) technologies. At present, a number of educators in private universities exhibit hesitation or resistance toward the adoption of AI tools in educational settings, which poses a barrier to the deeper integration of educational technologies into pedagogical practice. To address this challenge, it is essential to employ targeted strategies—such as the dissemination of exemplary case studies, the implementation of scenario-based simulation teaching, and the provision of experiential training—to improve teachers' awareness of the pedagogical value of AI. Concurrently, efforts should be made to simplify the operational interfaces of teaching platforms and AI tools, enhance their usability, and reduce technical barriers. These measures aim to progressively strengthen teachers' willingness to adopt AI technologies and improve their operational competence, thereby facilitating the effective integration of AI into foreign language teaching.

Grounded in constructivist learning theory, the transformation of teachers' instructional roles is imperative in AI-enhanced educational contexts. Constructivism, as articulated by Piaget [15], posits that learners actively construct knowledge through engagement in authentic, real-life contexts. In the era of intelligent education, teachers are no longer viewed merely as transmitters of information but are redefined as organizers of learning, curators of educational resources, and facilitators of student-centered learning processes. Within this framework, foreign language teachers are encouraged to leverage AI technologies—such as intelligent speech recognition, automated writing evaluation, and virtual dialogue systems—to create immersive and interactive language learning environments. These tools can effectively stimulate students' intrinsic motivation, foster

deeper engagement, and support meaningful knowledge construction. This study advocates for the integration of constructivist principles into teacher training systems to enable educators to master the design of intelligent learning tasks, reform instructional content and assessment practices, and ultimately improve students' comprehensive language competencies[16].

In parallel, the integration of blended learning theory serves as a catalyst for diversifying teachers' professional learning modalities. Blended learning emphasizes the multidimensional fusion of online and offline, synchronous and asynchronous, as well as individualized and collaborative learning approaches. In designing professional development pathways for foreign language teachers, it is essential to promote the strategic integration of diverse learning resources, including online platforms, AI-driven teaching assistants, and face-to-face training. For instance, establishing an "AI + Foreign Language Teaching" online micro-course platform can offer teachers flexible, personalized learning resources accessible at any time. Furthermore, initiatives such as problem-based collaborative learning via online communities or participation in "Teacher Growth Check-in Plans" can facilitate peer interaction and knowledge exchange. These efforts should be complemented by offline activities—including classroom observations, teaching competitions, and pedagogical workshops—to ensure the holistic integration of theory and practice, and to foster sustainable professional growth among foreign language educators[17].

In summary, the professional development of foreign language teachers in private universities in the era of artificial intelligence should be supported by theoretical guidance, based on technology acceptance, centred on a shift in teaching philosophy, and guided by innovative learning models. This should form the basis for constructing a multi-dimensional, phased, and integrated development system to achieve the comprehensive transformation and sustainable development of foreign language teachers.

5. Conclusion

In the context of the rapid development of artificial intelligence, the professional development of foreign language teachers in private universities is confronted with both emerging opportunities and complex challenges. To align with the evolving trends of educational informatization and intelligent transformation, teachers must not only continuously enhance their disciplinary knowledge and pedagogical competencies but also acquire and effectively integrate AI-related technologies into their teaching practices. This integration is essential for facilitating role transformation and fostering pedagogical innovation. Drawing upon teacher professional development theory, the Technology Acceptance Model (TAM), and constructivist learning theory, the present study proposes a set of professional development pathways tailored to the needs of foreign language teachers in the AI era.

Disclosure statement

The author declares no conflict of interest.

References

[1] Ministry of Education. 2019. Opinions of the Ministry of Education on the Implementation of the National Primary and Secondary School Teachers' Information Technology Application Capacity Improvement Project 2.0. [2024-06-22]. http://www.moe.gov.cn/srcsite/A10/s7034/201904/t20190402_376493.html

[2] Ministry of Education. 2021. Notice of the Ministry of Education on the Implementation of the Second Batch of Pilot Projects for the Artificial Intelligence-Assisted Teacher Workforce Development Initiative. [2024-06-22].http://www.moe.gov.cn/srcsite/A10/s7034/202109/t20210915_563278.html

[3] Ministry of Education. 2022a. Notice from the Ministry of Education on the Release of the Industry Standard for Teacher

Digital Literacy. [2024-06-22]. http://www.moe.gov.cn/srcsite/A16/s3342/202302/t20230214_1044634.html

[4] Ministry of Education. 2022b. Artificial Intelligence Promoting Educational Transformation and Innovation. [2024-06-22]. http://www.moe.gov.cn/jyb_xwfb/s5148/202212/t20221222_1035689.html

[5] Ministry of Education. 2024a. Digital Literacy and Skills Are the Foundation of a Teacher's Professional Identity — Observations from the Parallel Conference on Enhancing Teachers' Digital Literacy and Competence. [2024-06-22]. http://www.moe.gov.cn/jyb_xwfb/xw_zt/moe_357/2024/2024_zt02/pxhy/pxhy_jssy/pxhy_jssy_mtbd/202401/t20240131_1113510.html.

[6] Xu Y & Gu Y, 2025, Foreign Language Teaching and the Professional Development of Foreign Language Teachers in the AI Era: Challenges, Identity Crisis, and Solutions. Contemporary Foreign Language Studies (01), 60-72.

[7] Kohnke L., Moorhouse B L., & Zou D, 2023, Exploring generative artificial intelligence preparedness among university language instructors: A case study. Computers and Education: Artificial Intelligence, 5, 100156.

[8] Celik I, 2023, Towards Intelligent-TPACK: An empirical study on teachers' professional knowledge to ethically integrate artificial intelligence (AI)-based tools into education. Computers in human behavior, 138, 107468.

[9] Yao L, 2020, 'Exploring the Role Positioning and Professional Development Pathways of Foreign Language Teachers in the "AI+Education" Era'//Innovative Research on Foreign Language Education and Translation Development (Volume 9). Zhejiang Yuexiu University of Foreign Languages;, 2020:4. DOI: 10.26914/c.cnkihy.2020.003605.

[10] Lyu J, 2021, Professional Development of University Foreign Language Teachers in the Context of Artificial Intelligence: Connotation, Challenges, and Development Pathways. Campus English, (03): 72-73.

[11] Sun Q, 2021, A Study on the Influencing Factors of Online Learning Communities on the Professional Development of University Foreign Language Teachers. Foreign Language World, (04): 71-79.

[12] Lin X, Chen Z, Wu X, et al, 2023, Research on the Professional Development of Foreign Language Teachers in the Context of 'AI+Education'. Journal of Hubei Adult Education College, 29(04): 29-34. DOI: 10.16019/j.cnki.cn42-1578/g4.2023.04.007.

[13] Guskey T. R, 2000, Evaluating professional development (Vol. 1). Corwin press.

[14] Davis F. D, 1989, Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS quarterly, 319-340.

[15] Piaget J, 2013, Principles of Genetic Epistemology: Selected Works vol 7. Routledge.

[16] Chiu T. K. F., Xia Q., Zhou X., Chai C. S., & Cheng M, 2023, Systematic Literature Review on Opportunities, Challenges, and Future Research Recommendations of Artificial Intelligence in Education. Computers and Education: Artificial Intelligence, 4, Article 100118.

[17] Jiang R, 2022, How does artificial intelligence empower EFL teaching and learning nowadays? A review on artificial intelligence in the EFL context. Frontiers in Psychology, 13, 1049401.