

Online ISSN: 2981-8605

The Current Situation and Promotion Strategies of Digital Literacy of Foreign Language Teachers in Colleges and Universities in the Digital Intelligence Era

Zhonghao Zhuxi*, Yue Huang

Chengdu College of Arts and Sciences, Chengdu 610401, Sichuan, China

Copyright: © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: In the context of the digital intelligence era, teachers' digital literacy has gradually become a major factor in promoting innovation and educational reform in colleges and universities and optimizing talent cultivation. As direct contacts for students' all-around development, foreign language teachers in colleges and universities shoulder the important mission of cultivating talents with high-level foreign language skills, digital awareness, and internationalization. This makes the digital literacy of foreign language teachers a focus of attention in society, colleges, and universities. In this regard, foreign language teachers should constantly improve their own digital literacy to better carry out digital teaching activities and contribute to the comprehensive development of students.

Keywords: Professional development; Digital literacy; Colleges and universities; Foreign language education; Information technology

Online publication: April 28, 2025

1. Introduction

Against the background of the rapid development of the social economy, digital technology has profoundly influenced the pattern and competitive situation of the global economy. Promoting the digital transformation of higher education has become an inevitable choice. Moreover, college teachers are an important driving force for the modernization of higher education and a key force and participant in the digital transformation of education, undertaking the important responsibility of cultivating high-quality talents for society and industries. The digital literacy level of foreign language teachers in colleges and universities is closely related to the comprehensive ability of students. The mastery of digital knowledge and the application ability of technology play an important role in innovating teaching models and enriching teaching content. Therefore, how to improve the digital

^{*}Author to whom correspondence should be addressed.

literacy of college teachers in the digital intelligence era has become an important issue that needs to be urgently solved.

2. The value of improving the digital literacy of foreign language teachers in colleges and universities in the digital intelligence era

2.1. It is the fundamental guarantee for building a high-quality teaching team

The core of the high-quality development of higher education in colleges and universities is teachers. Facing the new challenges of higher education in the new era, strengthening the construction of the teaching team in colleges and universities and improving the overall quality and professional level of the teaching team is the key to achieving the digital transformation of education [1]. With the wide application of modern information technologies such as artificial intelligence, big data, and cloud computing in the field of education, the role of teachers is no longer merely a disseminator of knowledge, but also a guide in students' learning process, a cultivator of innovation ability, and a nurturer of information literacy. Teachers need to constantly improve their own information technology application ability and use digital tools to design personalized teaching plans to meet the individualized needs of students.

2.2. It is a key approach to promoting the digital transformation of colleges and universities

The "Digital Literacy of Teachers" issued by the Ministry of Education emphasizes the main framework for the improvement of educational digital literacy and particularly points out the significance of enhancing teachers' digital literacy in promoting the digital transformation of higher education institutions ^[2]. In the context of the new era, digital technologies have profoundly influenced the development trends of industries and education, innovating new forms and models of education. As the main implementers of education, teachers must possess a relatively high digital literacy to effectively utilize digital technologies for education and teaching, meet the individualized learning needs of students, and thereby further promote the digital transformation of colleges and universities. Meanwhile, the wide application of information technologies such as artificial intelligence and big data has led to changes in the industry's demand for foreign language talents. Only talents with innovative capabilities and digital skills can better adapt to the changes of the times, making the digital transformation of colleges and universities an urgent matter. On this basis, teachers should be aware of the importance of their own digital literacy for students' development. Therefore, the improvement of teachers' digital literacy has become a key approach to promoting the digital transformation of colleges and universities ^[3].

2.3. It is the inexhaustible driving force for the professional development of teachers

With the rapid development of society and the continuous update of science and technology, the emergence of a new generation of information technologies such as artificial intelligence, big data, and the Internet of Things has brought new reform opportunities to the field of education ^[4]. The wide application of information technology has effectively promoted the transformation of higher education to digital and intelligent education. It has created basic conditions for the improvement of digital literacy and professional development of college teachers. Digital and intelligent teaching methods are integrating into college curricula with an irresistible trend, bringing huge changes to the field of education. The organic integration of digital and intelligent technologies and education and teaching in higher education institutions has, to a certain extent, broken the traditional

teaching model. Diversified teaching methods and means are constantly emerging, and students' learning methods and learning environments are more inclined to be intelligent ^[5]. This requires teachers to transform their educational concepts and continuously improve their digital literacy, thereby expanding the depth and breadth of professional knowledge, improving the effect and quality of teaching, and further achieving high-quality development of professional ability, and enabling their professional ability to better serve the digital transformation of colleges and universities.

3. The current situation of digital literacy of foreign language teachers in colleges and universities

3.1. Weak digital awareness

Against the background of the digital transformation of higher education, the improvement of digital literacy of foreign language teachers in colleges and universities has become the basis for teachers' professional development and the construction of high-quality teaching teams in colleges and universities ^[6]. However, from the current educational situation, some teachers, influenced by age, teaching habits, and traditional educational concepts, have only a superficial understanding of digital technology and lack a systematic understanding and in-depth knowledge of the digital transformation of foreign language education. Some teachers simply regard digital technology as computer technology, which limits their improvement of their own digital literacy to the improvement of the application ability of computer technology. In addition, in the actual teaching process, some teachers overly rely on their own teaching experience and a single teaching mode, lack recognition of digital teaching, think that digital technology is too complex and difficult to master, and even worry that digital technology will pose a threat to their career development. They have a low acceptance of digital skills and cannot effectively integrate digital technology into classroom teaching, making it difficult to meet the personalized and diversified learning needs of students ^[7].

3.2. Insufficient integration of digital resources

The ability to integrate digital resources is the basis for college foreign language teachers to innovate educational models and carry out diversified educational activities. Insufficient digital resource integration ability will have an impact on teachers' teaching effects and professional development. Firstly, some foreign language teachers have insufficient digital literacy and lack theoretical and practical knowledge of teaching resource integration, unable to effectively integrate and apply various teaching resources, resulting in waste and duplication of resources [8]. Secondly, some colleges and universities have not established high-quality teaching resource databases and resource sharing platforms, making educational resources relatively scattered. Teachers need to spend a lot of time and energy collecting and integrating resources, resulting in low efficiency and poor quality of educational resource integration, making it difficult to guarantee the quality of teaching.

3.3. Deficiency in application ability

Digital technology has great application value in the field of education and has become an important force promoting the digital transformation of higher education institutions. The improvement of teachers' digital application ability is related to the speed of educational innovation and intelligent development in colleges and universities. However, some foreign language teachers have relatively weak abilities in the application of digital technology. They merely use computers and multimedia equipment to conduct teaching, lacking the

ability to carry out teaching activities by comprehensively applying digital tools. They are unable to flexibly utilize digital technology to innovate educational and teaching models, nor can they conduct personalized teaching based on the characteristics and needs of students. At the same time, some foreign language teachers have relatively insufficient digital teaching experience and weak practical experience, making it difficult to deeply integrate digital technology into classroom teaching. Especially when facing new technologies and new equipment, due to the lack of sufficient training and support, teachers find it difficult to take the initiative to try new technologies and methods [9].

4. Strategies for improving the digital literacy of foreign language teachers in colleges and universities in the digital intelligence era

4.1. Transform educational concepts and enhance teachers' awareness of digital literacy

In the context of the new era, digital technology has been widely applied in all walks of life, especially in the field of education. Digital technology has become a key force promoting the innovation of education and teaching in colleges and universities [10]. Against this background, digital transformation has become an important carrier for foreign language teachers in colleges and universities to improve their digital literacy. In this regard, colleges and universities should focus on cultivating teachers' digital awareness and guide them to transform traditional educational concepts.

First of all, foreign language teachers should be aware of their responsibilities in promoting the digital transformation of colleges and universities, transforming from traditional knowledge imparters to learning guides and innovation promoters. When innovating teaching methods, they should actively accept and understand digital technologies and integrate them into classroom teaching to improve the quality and effectiveness of education. With the support of digital technologies, teachers can break the inherent model of traditional education and actively explore new teaching models in the digital environment, such as blended learning and flipped classrooms.

Secondly, teachers need to recognize the transformation brought about by digital technology in education and be aware of the importance of the digital transformation of foreign language education ^[11]. Specifically, due to the deep-rooted traditional educational concepts, teachers need to complete the transformation of educational concepts subjectively. This requires teachers to actively learn knowledge related to digital technology, understand the role and value of artificial intelligence, big data, and cloud computing in education, and proactively analyze teaching cases related to digital technology and integrate teaching resources, to strengthen their own digital awareness, improve the conversion rate of digital technology, and thereby further promote the digital transformation of foreign language education.

Finally, college foreign language teachers should actively face the challenges brought by digital technology to education with an open mind and positive curiosity. They should actively participate in various trainings on foreign language education innovation and the improvement of the application ability of digital technology, understand the latest educational concepts and the most advanced digital technology, and learn to carry out teaching with the help of diverse digital platforms to enhance their digital awareness.

4.2. Establish an intelligent platform to promote mutual assistance and communication among teachers

Different universities can promote resource sharing and collaborative development by building intelligent

cooperation platforms ^[12]. In the context of the digital intelligence era, cooperation among universities plays an important supportive role in improving the digital literacy of foreign language teachers. First of all, on the intelligent platform, teachers from different universities can upload teaching resources, teaching experience, and some effective outcome cases to the platform for other teachers to download and use, to realize resource sharing and complementarity, and improve teaching quality. In this regard, the establishment of an open intelligent platform can integrate high-quality teaching resources from all parties, such as courseware, video tutorials, teaching cases, etc., continuously enrich teaching resources, and achieve joint construction and sharing.

Secondly, intelligent platforms should establish communication communities to encourage academic discussions, problem-solving, and experience sharing among teachers. In the communication communities, teachers can learn about the latest teaching trends, technological advancements, and industry developments, draw on the successful experiences of others, and stimulate new teaching inspirations and innovative ideas. At the same time, universities can set up resource modules, including resource sharing modules, cooperation modules, and scientific research modules. With the support of these modules, universities can guide teachers to manage teaching resources, conduct academic discussions, share cooperation projects, etc. Finally, universities can establish appropriate incentive mechanisms on the platform, such as point systems and medal systems, to encourage foreign language teachers from different institutions to actively upload resources, participate in discussions, and conduct cooperative research. The rewards can be used to exchange for teaching resources on the platform, participate in training opportunities, or obtain other forms of recognition.

Finally, on the intelligent platform, teachers can not only share their own achievements and experiences but also come into contact with different teaching methods and concepts, thereby stimulating new teaching inspirations and innovative ideas ^[13]. For example, teachers can carry out teaching activities better and enhance their digital literacy through the sharing of successful cases and experiences on the platform. In addition, teachers from different universities can jointly discuss the challenges faced in the digital transformation of higher foreign language education on the platform, such as technical difficulties and the shortage of teaching resources, and find solutions together to jointly promote the process of digital transformation and enhance digital literacy.

4.3. Strengthening the training of foreign language teachers and building a high-quality team

By providing all-around and multi-angle training, universities can help foreign language teachers understand the role and value of digital technology in teaching and improve their digital literacy ^[14]. To enhance the effectiveness of the training, universities need to build a teaching team with digital literacy. The teaching team not only needs to have rich teaching experience and rigorous professional ability, but also needs to master digital knowledge and the application ability of digital technology.

Interdisciplinary cooperation can promote the integration and blending of knowledge from different disciplines and stimulate the innovation of teaching methods. Colleges and universities need to organize foreign language teachers to participate in academic conferences, teaching salons and other activities, and exchange experiences with colleagues from different disciplines; encourage them to share successful cases of digital technology in teaching, discuss the potential and strategies of interdisciplinary teaching, prompt foreign language teachers to understand and master the cutting-edge technologies and teaching methods of other disciplines, such as information technology and psychology, and integrate these interdisciplinary knowledge

into foreign language teaching, innovate teaching methods and improve teaching effects.

To enhance the training effect of foreign language teachers, in addition to carrying out theoretical knowledge training, universities also need to focus on the cultivation of teachers' digital skills and practical abilities, and build an online training platform for digital literacy based on practice ^[15]. With its powerful functions, the online training platform can provide rich learning resources for digital literacy, including video tutorials, online courses, case studies, etc. All foreign language teachers can access the platform resources equally, without being limited by factors such as region and school type. At the same time, teacher training should focus on the application of digital technology in teaching practice for foreign language teachers, such as the use of online teaching platforms and the production of multimedia teaching resources. Universities can assess teachers' skills by carrying out teaching activities or simulating teaching scenarios and providing them with targeted suggestions to improve their digital technology application ability more comprehensively.

5. Conclusion

To sum up, in the context of the digital intelligence era, the improvement of digital literacy of foreign language teachers in colleges and universities not only helps to enhance the teaching quality but also can effectively promote the digital transformation of colleges and universities. In this regard, colleges and universities can guide teachers to deeply understand the importance of digital technology for innovative education by enhancing teachers' digital awareness, establishing intelligent platforms, strengthening the training of foreign language teachers, and creating a digital environment, and prompt them to deeply integrate digital technology with teaching, to better cultivate high-quality foreign language talents for the society.

Funding

This article is the research outcome of the project "The Current Situation and Promotion Paths of Digital Literacy of Foreign Language Teachers in Private Colleges and Universities under the Background of Education Digitalization" of Sichuan Education Information Technology Research Project in 2024 (Project Number: kt2024092776f1057)

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Zeng YY, 2025, Multi-dimensional Approaches to Improving the Literary Literacy of Foreign Language Teachers from the Perspective of Foreign Language Education. Frontiers in Foreign Language Education Research, 8(1): 70–79.
- [2] Wang W, Lu T, 2025, Research on Digital Literacy of College Foreign Language Teachers and Its Enhancement Paths under the Background of Digital Transformation in Education. Journal of Ludong University (Philosophy and Social Sciences Edition), 42(1): 62–67.
- [3] Yuan Y, 2025, Discussion on Digital Literacy of College Foreign Language Teachers under the Background of

- New-quality Productivity. Heilongjiang Education (Higher Education Research and Evaluation), 2025(1): 15-19.
- [4] Bian JS, Jiang Q, Huang Z, et al., 2024, Research on Digital Literacy of Pre-service Foreign Language Teachers in China to Adapt to Digital Teaching. Foreign Language Research, 2024(6): 61–71.
- [5] Zhao LZ, 2024, Enhancement of Digital Literacy of College Foreign Language Teachers and Digital-intelligent Foreign Language Teaching Practice. Journal of Changchun Institute of Technology (Social Science Edition), 25(2): 99–104.
- [6] Jiang X, Pan MW, 2024, Professional Development of College Foreign Language Teachers in China in the New Era: Current Situation and Countermeasures. Journal of Beijing International Studies University, 46(5): 102–114.
- [7] Xiao YH, Zou YM, Feng WQ, et al., 2024, Research on Evaluation Analysis and Enhancement Paths of Digital Literacy Capacity of College Foreign Language Teachers. Modern Educational Technology, 34(10): 83–91.
- [8] Liu XM, 2024, Theoretical Discussion and Enhancement Strategies of Digital Literacy of College Foreign Language Teachers. Education Observation, 13(28): 25–28.
- [9] Shi WZ, Liang J, 2024, Strategies for Improving Digital Literacy of Foreign Language Teachers in Higher Vocational Colleges under the Background of the "Three Education" Reform. Education Information Forum, 2024(9): 27–29.
- [10] Chen Q, 2024, Research and Practice on the Training Model of Digital Literacy for Foreign Language Teachers in Colleges and Universities under the Background of "Internet +". Science, Education and Culture Collection, 2024(10): 23–27.
- [11] Liu J, Li JP, Wang XL, 2023, Research on Digital Literacy of Foreign Language Teachers in Colleges and Universities Based on Online Teaching. Journal of Jining University, 44(6): 81–87 + 95.
- [12] Han YN, 2023, Research on Strategies for Improving Digital Literacy of Foreign Language Teachers in Colleges and Universities Enabled by Information Technology. Journal of Jilin Radio and TV University, 2023(6): 55–57.
- [13] Liu P, 2023, Challenges and Promotion Paths of Digital Literacy of Foreign Language Teachers in Private Colleges and Universities in the Digital Age. Modern English, 2023(22): 30–34.
- [14] Hu JH, Zhang TF, 2023, Research on the Beliefs and Practices of Digital Literacy of Foreign Language Teachers in Chinese Colleges and Universities. Foreign Languages and Their Teaching, 2023(5): 73–85 + 147.
- [15] Wu J, 2023, Research on the Promotion Path of Ideological and Political Literacy of Foreign Language Teachers in Colleges and Universities in the Digital Context. Teachers, 2023(27): 87–89.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.