

Research on Digital Literacy Framework for Foreign Language Teachers

Lanjie Li^{*}, Ye Liang, Yin Wang

Xi'an Research Institute of Hi-Tech, Xi'an, China

* Corresponding Author Email: 410261452@qq.com

Abstract. The integration of digital technology resources into teaching has become an inevitable trend. Under the circumstances, it is increasingly important for foreign language teachers to develop digital literacy. This paper summarizes the connotations and dimensions of teacher digital literacy, then builds a framework of foreign language teacher digital literacy for pedagogical design. The paper aims to provide reference for the professional development of foreign language teachers by helping them better integrate digital technology resources.

Keywords: digital technology resources integration, teacher digital literacy, teacher professional development.

1. Introduction

Driven by modern technology, education is also undergoing a digital transformation, equipping learners with digital capabilities to better live, work, learn and thrive in an increasingly digitally mediated world [1]. Digitization of education is an important part of the strategy of building a digital China, and is of great significance for accelerating the construction of a high-quality education system and realizing the modernization of education [2].

Teachers are the key factor to promote the digitalization of education, because no more advanced digital equipment needs people to develop and utilize, no more optimized digital resources need people to construct and use, and no more new education and teaching mode needs people to explore and practice. Therefore, to ensure that teachers can make good use of digital technology resources to optimize the quality of classroom teaching, improve students' learning methods, and enhance the effectiveness of teaching and education has become an inevitable and important goal and task in the construction of high-quality teachers in the new era. Most foreign language teachers have a positive attitude towards the integration of digital technology resources in their teaching, but due to the lack of certain methodological guidance, they fail to give full play to the advantages of technology in teaching [3]. This paper first reviews the connotation and standards of teachers' digital literacy, and then builds a digital literacy framework for foreign language teachers, to provide references for foreign language teachers to integrate digital technology resources into their teaching activities.

2. Connotation and Dimensions of Teachers' Digital Literacy

At the end of the 20th century, digital technology developed rapidly and continuously, and the ability to solve problems and complete tasks with digital technology became the basic literacy requirement of citizens. In 1997, Gilster first proposed the concept of "Digital Literacy" and defined it as the key ability to understand and use complex information presented by computers [4]. Since then, the concept of digital literacy has gained widespread attention and spread in countries around the world. However, the term has not been unified in various academic literature, national policy documents and other materials, including names such as digital competence and digital capability. In this paper, the above concepts and terms are regarded as the scope of concern of this study, collectively referred to as digital literacy, refers to the teachers in the implementation of teaching and professional development process should have the awareness, knowledge and ability related to digital information resources. As for the specific connotation and standards of teachers' digital literacy, different countries have put forward a variety of views.

In 2013, the European Union proposed to all member States to develop a digital competency framework for citizens, recognizing digital competence as one of the eight key competencies for lifelong learning and broadly defining it as the confident, critical and creative use of ICTs to achieve goals related to work, employment, learning, leisure and participation in social activities. It relates to many 21st century skills that all citizens should possess to ensure their active participation in social and economic activities [1]. In 2016, Austria released the Digital Literacy Framework for Teachers, which consists of digital skills and information education, digital life, digital resource development, and digital teaching and learning [4]. In 2019, the UK released the Professional Framework for Digital Teaching, which covers teaching preparation, teaching methods, supporting learners to develop employment skills, subject teaching, assessment, accessibility and inclusion, self-development, etc. Is instrumental in identifying how the use of digital technologies can enhance Teaching and learning [5].

In November 2022, the Ministry of Education of China issued the standard "Digital Literacy for Teachers", which pointed out that the framework of teacher digital literacy includes five dimensions: digital awareness, digital technology knowledge and skills, digital application, digital social responsibility and professional development. Digital awareness refers to the active reflection of digital-related activities in teachers' minds, which mainly includes digital awareness, digital willingness and digital will. Digital technology knowledge and skills refer to the digital technology knowledge and skills that teachers should understand and master in daily education and teaching activities. Digital application refers to the ability of teachers to use digital technology resources to carry out education and teaching-related activities, including digital teaching design, digital teaching implementation, digital academic evaluation and digital collaborative education. Digital social responsibility refers to the responsibility in terms of moral cultivation and code of conduct in digital activities, including rule of law ethics and digital security. Professional development refers to the ability to use digital technology resources to promote the professional development of oneself and the community, including digital learning and research, digital teaching research and innovation.

The current framework of teacher digital literacy has different definitions, starting points and specific connotations for teachers' digital literacy, but most of them believe that teachers' digital literacy mainly includes four aspects: (1) Basic digital literacy, the ability to operate, use and develop digital tools and resources, and translate relevant policies and expectations into subject teaching; (2) The teaching literacy of integrating digital technology resources, the ability to use digital technology and digital resources to help students obtain effective learning experience; (3) Professional development literacy, the ability to use digital technology resources to improve teachers' own professional literacy; (4) Social moral literacy, the ability to assume civic responsibility in the digital society and cultivate responsible citizens in the digital society [6]. The above frameworks of teachers' digital literacy include multiple levels and different dimensions of teachers' digital literacy, but they all target at the whole group of teachers and fail to fully consider the differences in teaching of different disciplines. This paper will combine the factors that need to be considered when integrating digital technology resources into foreign language teaching, and build a digital literacy framework that foreign language teachers should possess.

3. Digital Literacy Framework for Foreign Language Teachers

Based on the four aspects of teachers' digital literacy and the characteristics of integrating digital technology resources into foreign language teaching, the digital literacy framework for foreign language teachers is composed of digital awareness literacy, digital technology literacy and digital resource literacy.

3.1. Digital Awareness Literacy

Digital awareness refers to the subjective initiative of foreign language teachers to use digital technology resources and the sense of social responsibility to cultivate students' digital literacy, that

is, teachers' own professional development ability and students' social responsibility as digital citizens. The professional development of foreign language teachers includes the independent use of technology to improve professional competence, as well as the independent learning to improve the ability to integrate and utilize digital technology resources. The former uses digital technology resources to improve professional quality, while the latter focuses on improving the ability to integrate digital technology resources to design and implement teaching activities. Whether foreign language teachers in the new era have the ability to effectively use digital technology resources to improve their professional competence has become an important part of teachers' digital literacy, which includes actively searching for online resources according to personal development needs, hosting or participating in online workshops, and various informal learning methods. Common methods include reading social media public accounts, self-practice and reflection, communicating with students, joining the teacher development community to participate in cooperation, and carrying out teaching and research activities. Social responsibility moral literacy refers to the provision of appropriate support for improving students' digital literacy as citizens of digital society when foreign language teachers design and implement teaching activities, which mainly includes regulating students' online behavior, supporting students' open attitude of respecting different opinions in online communities, cultivating students' ability to choose appropriate language styles, and providing students with opportunities to contribute online resources.

3.2. Digital Technology Literacy

Digital technology literacy refers to the ability to apply and transform digital technology resources, that is, the ability of teachers to operate and use digital technology resources and the ability to reasonably position technology and their roles in foreign language teaching. In foreign language teaching, the ability to apply digital technology resources not only refers to the ability to operate tools and resources, but also includes the ability to understand and use functions closely related to language learning. In foreign language teaching activities, digital technology resources can play a role in improving the classroom teaching effect and supporting independent learning after class. Technology can play the role of "tutor" or "coach", providing students with learning materials, adaptive learning support and feedback, realizing flipped teaching, supporting students' independent learning after class, promoting the redefinition of teachers' role in foreign language learning, and maximizing the advantages of technology and teachers in students' learning [7]. When transforming digital technology resources in teaching activities, foreign language teachers should reasonably locate the advantages that technology can bring into play according to the teaching objects, teaching objectives and teaching environment, to enhance the understanding of students' role in extracurricular independent learning and maximize the respective advantages of technology and teachers. For example, for students with low language level or lack of self-confidence, teachers' role positioning should focus on demonstrating the use of technology resources in class and improving students' ability to use real language materials independently; For students with higher language level, teacher role positioning should focus on encouragement and resource recommendation [8].

3.3. Digital Resource Literacy

Digital resource literacy refers to teachers' teaching literacy in integrating digital technology resources. The multiple roles of digital technology resources in foreign language teaching inspire teachers to think about how to integrate digital technology resources into teaching activities from multiple angles. Technology tools can be used in the classroom to enhance students' classroom learning experience. Teachers can use technology resources and tools in the classroom to enrich the classroom learning experience. Technology functions can be simulated to enrich teaching activities. Teachers can simulate the advantages and functions of technology in the design of teaching activities. Take the design of gamified teaching activities as an example, teachers do not need to use a specific game, but integrate gamified elements into the teaching activities, use the story-telling mode of simulation games to run through the knowledge points and learning tasks in the course teaching, give

learners the opportunity to choose and try and make mistakes, design hierarchical challenge tasks and incremental reward mechanism, and encourage cooperation and competition. It can be incorporated into digital corpus to enrich learning materials. Teachers collect and integrate multi-modal or paper language materials to provide real learning materials in various contexts for teaching activities. Students can be encouraged to use technology to expand connections in and out of class. Teachers encourage students to independently use technology resources outside of class, and design teaching activities to link with learning in and out of class, provide opportunities for students to share extracurricular learning resources and experiences, encourage students to collect and choose extracurricular language materials, and class activities revolve around the corpus provided by students.

4. Summary

Integrating digital technology into teaching is the general trend of education and teaching development. The literacy framework for foreign language teachers to integrate digital technology resources in their teaching aims to provide a reference direction for teachers to improve their digital literacy, to cope with and promote the new development process of foreign language teaching. To give full play to the function of digital technology resources in language teaching, teachers need to use technology-enabled teaching activities flexibly. According to the basic characteristics of foreign language teaching, this paper mainly discusses the connotation and standards of digital literacy and the framework of digital literacy for foreign language teachers, and provides practical reference directions for foreign language teachers to integrate digital technology resources in their teaching activities. When designing teaching activities, teachers can choose a variety of digital technology resource integration modes according to the teaching objectives; When implementing teaching activities, teachers can integrate digital technology resources into teaching activities in several ways to ensure the teaching effect.

References

- [1] European Commission. The Digital Education Action Plan (2021-2027) [EB/OL] [2023-09-30]. https://ec.europa.eu/education/education-in-the-eu/digital-education-action-plan_en.
- [2] Ren Youqun. Editor's note. Audio-visual Education Research, 2023 (8): 108.
- [3] Taghizadeh M & Hasani Yourdshahi Z. Integrating technology into young learners' classes: Language teachers' perceptions [J]. Computer Assisted Language Learning, 2020, 33 (8): 982 - 1006.
- [4] Wu Ji, GUI Xujun, Zhou Chi, Chen Min. Digital Literacy of teachers: Connotation, Standards and Evaluation [J]. Research on Audio-Visual Education, 2023 (8): 108 - 114.
- [5] Education and Teaching Foundation (ETF). Digital teaching professional framework [EB/OL]. (2019-01-30) [2023-09-30]. <https://www.et-foundation.co.uk/wp-content/uploads/2018/11/181101-RGB-Spreads-ETF-Digital-Teaching-Professional-Framewor k-Short.pdf>.
- [6] Yu Yang, He Mingxia. [J]. The connotation elements of college teachers' Information Literacy in the new information technology environment and its improvement path. Information Science, 2021 (12): 32 - 38.
- [7] Huang X, Zou D, Cheng G, Chen X & Xie H. Trends, research issues and applications of artificial intelligence in language education [J]. Educational Technology & Society, 2023 (1): 112 - 131.
- [8] Lai Chun, Lv Boning, Gong Yang. [8] A framework for teachers' Digital Literacy in Foreign Language Teaching activity design. Foreign Language Circle, 2023 (3): 31 - 38.