Research on the Path of Improving Digital Literacy of Teachers in Vocational Colleges

Yu Zhang

Department of electrical and Electronic Engineering, Wenzhou Polytechnic, Wenzhou, 325035, China

Abstract: Digital Literacy of Teachers is an important condition to realize the high-quality development of vocational education, and also the key to improve the quality of talent training, which determines the professional qualification and core competitiveness of students in the future digital workplace. Higher vocational colleges should build a big data platform, a collaborative governance system and sustainable development ecology, and help improve Digital Literacy of Teachers.

Keywords: Higher vocational colleges, Digital literacy, Path.

1. Introduction

In recent years, China's national digital literacy has been increasingly valued. The outline of the 14th Five-Year Plan proposes to strengthen digital skills education and training for the whole people, and popularize and improve citizens' digital literacy. At the 34th group study session of the Political Bureau of the CPC Central Committee, Xi stressed that the digital economy is related to the overall development of the country, and the digital literacy and skills of the whole society should be improved to consolidate the social foundation for the development of China's digital economy. Digital literacy is an important foundation for developing the digital economy. Digital technology talents who both understand the industry and have digital literacy have become the core driving force of the comprehensive transformation of China's economy to digital. Therefore, improving Digital Literacy of Teachers is not only the objective demand of the development of digital society, but also the internal requirement of the digitalization of education.

2. An Overview of the Digital Literacy of Teachers

The European Union released the Digital Education 2021-2027 Action Plan (2021-2027) at the end of September 2020. The report focuses on the use of digital technology to teach and learn in digital education and the development of learners' digital capabilities, and identifies two strategic priorities to be promoted at the EU level: "promoting the development of a high-performance digital education ecosystem" and "improving digital skills and capabilities for digital transformation". Cultivating professionals with advanced digital skills is important to maintain national competitiveness and support the digital transformation of society.

Nine departments about the Ministry of Education about the vocational education quality culture optimal action plan (2020-2023) " clearly, the implementation of vocational education informational 2.0 construction action to vigorously enhance the level of vocational education informational construction, promote information technology and vocational education teaching, improve teachers' information literacy and ability, including teachers digital literacy is the important condition and key to improve the quality of talent training. In February 2023, the Ministry of Education officially released the teachers digital literacy industry standards, has been clear about the core connotation of Digital Literacy of Teachers and index framework, for education management department, schools and education institutions in the development of teachers digital literacy provides guidance, also for the construction of teachers digital literacy training resources, provides the basis for monitoring and evaluation.

Digital Literacy of Teachers is the consciousness, ability and responsibility of teachers to acquire, process, use, manage and evaluate digital information and resources, discover, analyze and solve education and teaching problems, optimize, innovate and change educational and teaching activities; their digital literacy is a comprehensive scientific skill and cultural literacy embodied by teachers in the digital age, which includes three dimensions: basic digital ability, digital learning ability and digital teaching ability. Basic digital ability mainly includes digital ethics, digital thinking, digital skills and digital security; digital learning ability includes research awareness and innovation ability, problem awareness and critical thinking, technical support of collaborative learning and self-learning ability. Digital teaching ability refers to teachers' deep application of digital technology, innovation of teaching mode, improvement of teaching management mode, promotion of scientific research level, and promotion of their own professional development, such as deep learning, precision teaching and online teaching.

3. Current Status of Digital Literacy of Higher Vocational Teachers

At present, higher vocational teachers of digital literacy is a necessary literacy of professional development, the use of digital technology in teaching is less, ability is weak, to learn and explore the digital technology is not active, not strong, only used in classroom management or organization communication, in how to more effective use of digital teaching tools, combining digital technology and teaching strategies and methods, lack of more experiments and reflection, collaboration to explore and share the subjective desire of communication. The development of digital technology needs to further improve the digital literacy of higher vocational teachers, which is mainly manifested in the
following aspects.

(1) The diversity of digitalization needs to improve the digital literacy of educators

The popularization of digitalization has brought about changes to individual interpersonal communication, work and life, knowledge construction, information acquisition and other aspects. It can be said that the diversity of digitalization has changed people's way of behavior and thinking. As a higher vocational teacher, he should not only carry out ideological and political education to students with his rich professional knowledge background, guide students to establish correct ideas, but also do a good guide for students with his own ability and accomplishment, and organize and carry out student work. The arrival of the digital society has put forward higher requirements for teachers, who need to have more digital literacy, be better at using digital carriers to carry out ideological and political education, and have the internal unity of professionalism and comprehensiveness.

(2) The sharing of digitalization needs to pay attention to the independent learning of learners

Digitization increases our life paths and shares knowledge and information. As a university teacher, we should clearly realize the sharing of digitalization, and have the skills of information resource management, such as the search, classification, storage and extraction of network resources, and establish favorites, multi-window browsing and resource download for network resources. It can use digital technology effectively according to the different stages and environment of the learning process, so as to achieve the purpose of guiding students to learn independent learning, and help students to gradually realize independent learning.

(3) The wisdom of digitalization needs to highlight the innovation ability of educators

The development of digital, digital literacy connotation evolution, human digital survival will generation than generation, as a teacher, need to have the basic ability to cope with complex network environment and literacy, broaden the original indoctrination and preaching education method, into innovative and dynamic, with more distinct education method, with the help of digital technology, allow students to better receive university education.

4. Improvement Path of Digital Literacy of Higher Vocational Teachers

(1) Build a digital platform of higher vocational colleges and form a "large database"

Data is an important factor of production and a core driving force in the construction process of a modern education system. Build a professional digital service platform, speed up the coordination of data resources, and form a "large database" of the university. Make full use of the digital professional ability of the platform, reduce the threshold of digital application, strengthen the smooth data interconnection, and help higher vocational colleges to integrate into the development tide of digital economy with the help of the service platform. Gather, govern and analyze all kinds of data resources, promote the flow of data between teachers and students, and drive service innovation, education innovation and management innovation. Introduce big data, cloud computing, Internet of Things, 5G, artificial intelligence and other digital technologies to fully gather the information and data of all aspects of the school, enrich the data space, and provide services for the efficient development of student work.

(2) Strengthen the intelligent management of education and teaching work, and form a collaborative governance system

Based on the masses of teachers and students service needs and get feeling, satisfaction, development on the basis of digital technology and digital resources of new management tools, with digital means to promote school management comprehensive, systematic, heavy plastic change, for example, to build seamless, dynamic collaborative management mechanism and student work platform, is committed to the teaching, canteen, apartment, medical, property, security, such as mutual series, enhance the digital management level of college teachers.

(3) To improve the digital ability of university teachers and form a comprehensive development trend

The policy and resource input for improving the cultivation of teachers' digital literacy can greatly promote the process of Digital Literacy of Teachers training and provide a guarantee for the improvement of teachers' digital skills.

First of all, strengthen the overall management of IOT sensing equipment, strengthen network security and operation and maintenance guarantee, and provide efficient, convenient, safe, stable and on-demand infrastructure resources for all kinds of digital applications. Optimize the school-based online learning platform, and effectively support online and offline mixed teaching, online learning, online examination, online teaching and research, online quality evaluation and other teaching activities. Promote school teaching resources unified planning, unified deployment, the construction of mechanism and platform, realize resources convenient search, service on-demand push effective application, relying on the opportunity of vocational education innovation highland, build vocational education characteristic teaching resource center, radiation education backward areas, build vocational colleges digital social service system, power "precision FuZhi".

Secondly, teachers' digital education and digital skills training should be strengthened to optimize the ability structure. Conduct relevant technical teaching in classroom, focusing on improving the theoretical system of teachers' skills and the means needed for work; organize teachers to actively participate in highly targeted and special training organized by professional training institutions, including vocational training, party school training, etc.; encourage teachers to participate in academic training to improve academic level, consolidate the foundation of knowledge and ability; organize various teacher forums, skills competitions and campus activities to improve digital capability.

Third, to adapt to the new requirements "Internet + vocational education", promote modern information technology and education teaching depth fusion, improve the quality of classroom teaching, promote remote collaboration, real-time interaction, flipped classroom, mobile learning information teaching mode: for example, to promote "information technology + teaching", improve the mechanism of teaching ability game, build intelligent learning space.

(4) Improve the behavior supervision of digital literacy, and form a sustainable development ecology

Schools should improve the behavior supervision of digital literacy, place the ability to develop courses and learning resources based on digital technology in the core position of teacher professional education, and form a teacher professional education system committed to promoting
students' independent learning and personalized learning. And focus on how to promote students' independent learning, realize the effective integration of technology and learning and teaching, for teachers to master the digital technology that will be widely used in school and social learning environment. In addition, teachers' professional organization or government must act, develop and future learning, teaching, education change of the new teacher professional standards, indicate the direction of teachers' professional development, make teachers have comprehensive response, depth in the future learning, teaching and education change comprehensive quality and ability, make teachers become the future teacher education idea, model change creator, leader and priority demonstrator, thus, form ecological sustainable development.

Teachers 'digital literacy is an important condition for the development of vocational education quality, and improve the quality of talent training and the key, to comprehensively promote the healthy development of Digital Literacy of Teachers, higher vocational colleges should build big data platform, strengthen the wisdom of education teaching management, improve the behavior of digital literacy supervision, ecological collaborative management system and sustainable development, effectively improve Digital Literacy of Teachers and skills.

Acknowledgment

[Fund Project]: 2022 Philosophy and Social Science Planning project of Wenzhou "Research on Digital Transformation of Small and Medium-sized Enterprises in Wenzhou under the Background of" Common Prosperity 

"(22WSK157); Key project of Party Building and Students 'Ideological and Political Education of Wenzhou Polytechnic in 2022" Research on Digital Literacy of Teachers under the Guidance of Party Building " (WZYDS202203)

References


