#### The Strategies Research on Improving the Quality of Continuing Education in Universities in the Digital Age

Zhou Chao<sup>1,a</sup>, Dai Qunsen<sup>2,b</sup>, Wang Bingzhong<sup>3,c,\*</sup>

 <sup>1</sup>Faculty of Computer Science and Technology, Zhejiang University of Technology, Hangzhou, Zhejiang, China
<sup>2</sup>School of Teacher and Teaching Education, Shaoxing University, Shaoxing, Zhejiang, China
<sup>3</sup>College of Continuing Education, Zhejiang University of Technology, Hangzhou, Zhejiang, China
<sup>a</sup>chaozhou@zjut.edu.cn, <sup>b</sup>dqs0610@163.com, <sup>c</sup>wbz@zjut.edu.cn
\*Corresponding author

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*Abstract:* In order to serve the society, promote education equity and construct the learning society, the high-quality development of continuing education in universities is the key content. As the digitalization of education advances, continuing education in universities faces new opportunities. By researching the current development status of continuing education in universities and analyzing the application value of digital technology in this field, feasible paths for improving the quality of continuing education in universities are proposed, including updating educational philosophies, optimizing teaching resources, improving institutional mechanisms, and enhancing the construction of teaching staff. These efforts aim to provide references for the digital development and reform of continuing education in universities.

#### **1. Introduction**

The report of the 20th National Congress of the Communist Party of China emphasizes the coordinated innovation of vocational education, higher education, and continuing education, reflecting the significant layout of the Party Central Committee in perfecting the modern education system. The college continuing education focuses on the post-school education activities that all members of society after school education, with the dual attributes of continuing education and higher education, which has always been a key way to support adult learning and lifelong learning. However, due to factors such as scarce learning resources, single teaching methods, and insufficient learner motivation, the improvement of the college continuing education quality faces numerous challenges. In the stage of actively promoting the digital transformation of education, emerging technologies represented by metaverse, artificial intelligence, and deep learning provide more opportunities and challenges for the digital construction of the continuing education in universities.<sup>[1]</sup>

### **2.** The Value of Digital Construction for the Development of the Continuing Education in Universities

Under the strategic action plan for educational digitization, the "digitalization" is an inevitable trend in the current development of higher continuing education, and it is an important measure for the transformation and upgrading of the higher continuing education, and the resolution of the current issues of imbalanced and insufficient high-quality education. <sup>[2]</sup> Digital construction enables continuing education in universities to better adapt to the needs of social development, create more learning opportunities for learners, expand learning resources, provide different kinds of learning methods, and promote talent cultivation and social progress. Digital construction, especially in promoting equity in higher education continuing education, teaching innovation, talent cultivation, economic development, and social progress, has significant value and accelerates the development process of the entire continuing education system.

#### 2.1. Promoting Educational Equity: Overcoming Time, Space, and Economic Restrictions

Due to multiple restrictions such as time, space, and economics, traditional continuing education in universities has left many people unable to access high-quality learning opportunities. However, digital transformation brings new potential and impetus to support continuing education in universities. The establishment of digital learning platforms breaks the traditional constraints of time and space for learners, and the flexible and diverse learning methods provide more people with opportunities to receive higher education. Through digital learning platforms, whether in urban or rural areas, whether employed or not, people can access high-quality educational resources equivalent to traditional continuing education in universities. This widens the dissemination and sharing of learning opportunities in continuing education in universities, promotes the efficient utilization of educational resources, and enhances the fairness of education.

### **2.2. Promoting Teaching Innovation: Facilitating the Innovation and Development of Teaching Content and Methods**

Digital technology supports the innovation of teaching concepts, resource content, and process methods in continuing education in universities. Leveraging digital platforms, the college continuing education can break traditional constraints, and optimize the diversification of teaching content and the personalization of teaching processes. Teachers can utilize advanced technologies such as virtual laboratories and simulation exercises to make abstract knowledge more intuitive and perceptible, enhancing learners' understanding and application of skills. Education digitization enhances the interaction between teachers and students, enabling deep communication through methods such as online discussions and question-and-answer platforms, thereby deepening understanding and mastery of knowledge, and promoting collaborative learning, and mutual growth. Education digitization enables the personalization and diversification of the teaching process, allowing learners to choose learning paths that suit their own career growth needs and learning styles, thereby improving learning effectiveness and satisfaction. The continuing education in universities, supported by digital technology, can better cultivate learners' practical application abilities to meet the needs of career development, thereby achieving innovation transformation and high-quality development to a certain extent.

### **2.3.** Accelerating Talent Cultivation: Providing Personalized Educational Resources to Meet Diverse Learner Needs

As a populous country, China has diverse demands and requirements for higher continuing education among different groups, including diploma enhancement, professional skill strengthening, and comprehensive professional competence enhancement. Digital construction brings more teaching methods and resources for the continuing education, making learning more flexible and personalized. Learners can selectively improve their skills based on their career development needs. Educational institutions can provide more targeted course content and teaching resources by balancing factors such as different courses, learning abilities, conditions, and foundations, helping learners quickly acquire skills. Digital transformation enables the college continuing education to offer flexible learning or training programs according to the needs of different industries and fields, accelerating talent cultivation to meet the needs of social and economic development.

#### 2.4. Promoting Economic Development: Creating Growth Points for Continuing Education

The digital transformation of education not only creates economic growth points for college continuing education but also contributes to the career development of job seekers. Digital construction brings more learning opportunities and educational resources for continuing education in universities, enhancing learners' comprehensive qualities and key abilities. This not only improves the competitiveness of individual career development but also has a positive impact on the high-quality development of enterprises and the social economy. Learners can quickly acquire knowledge and skills directly applicable to their career development through digital platforms, thereby improving productivity and work quality. The college continuing education can provide online teaching, tutoring, and training services through digital platforms, opening up new sources of income for the college continuing education and improving its economic benefits. Additionally, the accelerated development of digital construction can stimulate positive competition in the education market, driving the continuous optimization and upgrading of the college continuing education, and promoting the healthy development of the entire continuing education industry.

#### 2.5. Promoting Social Progress: Facilitating Interaction, Sharing, and Development in Society

While promoting the transformation and upgrading of continuing education in universities, digital development has positively impacted the optimization and transformation of the entire society, driving social progress. Digital empowerment enables equal access to learning opportunities and resource sharing in continuing education in universities, creating conditions for enhancing learners' essential skills and key competencies. Learners' innovative thinking and practical abilities are systematically enhanced and strengthened, providing sustainable momentum for social progress and development. The digital transformation of the continuing education in universities also promotes communication and cooperation among different regions and groups, to facilitate collaborative discussions, problem-solving, and the formation of a favorable learning atmosphere and cooperative mechanisms. This fosters interaction, sharing, and development in society.<sup>[3]</sup>

### **3.** Strategies to Enhancing the Quality of Continuing Education in Universities in the Digital Era

Digital reform has provided new momentum for the high-quality development of continuing education in China's higher education, prompting a shift from the traditional "degree-oriented" model to a "competency-oriented" model. This transformation aims to provide learners with flexible, diverse,

and equitable high-quality education, enabling them to meet the needs of career development. <sup>[4]</sup> Empowering continuing education in universities with digital technologies is a systematic endeavor, requiring the creation of a digital learning environment through updates in educational concepts, optimization of teaching resources, improvement of mechanisms and systems, and enhancement of teacher training, thereby comprehensively enhancing the level of digitalization in continuing education.

# **3.1. Educational Concepts: Establishing New Ideas for the Digital Development of Continuing Education in Universities**

In the context of digital reform, continuing education in universities should be guided by new educational concepts and explore the various possibilities of applying new technologies in the field of continuing education. Based on the demands of talent career development under the background of digital transformation, emerging technologies such as metaverse, artificial intelligence, and deep learning should be utilized to explore new digital models for continuing education, thereby promoting the high-quality development of continuing education in universities. In the process of digital construction, it is essential to establish a mindset of big data, cultivate a sensitive awareness of data, fully understand the rich connotations of digital construction in continuing education in universities, and actively seek points of integration and key points where new technologies can organically merge with continuing education in universities. Under the guidance of digitalization in education, a systematic construction layout should be established based on relevant viewpoints such as structuralism, constructivism, and systems theory to create a digital ecosystem for learning, thus promoting the deep development of digitalization in continuing education in universities. <sup>[5]</sup>

## **3.2. Educational Resources: Empowering Diversity in Continuing Education Courses through Digitalization**

In the digital era, higher continuing education can accelerate the organic integration of new technologies and continuing education, breaking the traditional classroom teaching system and constructing open and multifunctional online learning platforms. This approach aims to overcome difficulties in centralized face-to-face teaching and the high costs of developing diversified courses. By utilizing online education platforms, learners are freed from the constraints of time and space, providing them with the educational opportunities necessary for self-development. Moreover, by enhancing the multifunctional support of teaching media and utilizing multi-layered, diversified digital educational resources, personalized learning is supported. Attention is strengthened on vulnerable groups, providing them with special educational services and counseling measures to ensure that every learner's learning opportunities are safeguarded. It is particularly important to adapt strategies to meet local conditions, to offer vigorously developing online characteristic courses that meet local market demands. These courses should develop in a manner misaligned with regular higher education and higher vocational education, promoting the comprehensive and diversified development of continuing education. Additionally, digital platforms provide rich learning resources such as multimedia textbooks, online videos, and virtual laboratories, allowing learners to comprehensively understand and master knowledge and skills. Simultaneously, it facilitates interaction and communication among learners. Learners can engage in online discussions, collaborative projects, and share experiences, fostering their autonomous learning abilities, cooperative consciousness, and innovative thinking to meet the rapidly changing social demands.

### **3.3. Mechanism System: Enhancing the Digital Management System of Continuing Education in Universities**

An improved management system and clear management logic are prerequisites for enhancing the level of management in continuing education in universities. In the context of digital reform, the digital construction of continuing education in universities should strengthen the optimization of management systems and operating mechanisms, while actively exploring innovations in adult continuing education teaching models. Standardization, normalization, proceduralization, and timeliness are significant characteristics of digital construction in continuing education in universities. This necessitates that administrators complete each step of the work such as enrollment, class allocation, issuance of teaching tasks, scheduling, course selection, examination affairs, and recording of grades in a timely and orderly manner, with strict time limits, without delay. The formulation of strict and detailed work processes is essential to standardize teaching work and improve management levels. The digital management system of continuing education requires each role to fulfill its duties and strengthen teamwork to ensure the normal and orderly operation of the entire digitization process.

## **3.4. Team Building: Enhancing the Information Literacy of Faculty in Continuing Education in Universities**

The key to the digital construction of continuing education lies in the systematic development and training of talent, with a focus on improving the technical capabilities and key competencies of the faculty, and this is fundamental to ensuring the advancement of digital construction. The information literacy of the faculty is directly related to the quality level of continuing education in universities. Faculty members and administrators need to possess information technology skills that are suitable for their positions and strive to enhance their digital literacy in their work. An effective way to promote the implementation of digitalization in continuing education in universities is to conduct systematic and standardized training for the faculty. Encouraging teachers to actively participate in various aspects of digital construction helps comprehensively improve the digital literacy and skills of both teachers and students. Therefore, targeted and categorized training on digital technology should be provided to professional teachers and administrators in continuing education in universities to enhance their professional digital technology and proficiency. This will gradually adapt them to the new teaching model of "face-to-face teaching + online assisted learning" in adult higher education and gradually promote the application of new media such as TikTok, Feishu, and DingTalk in the teaching process.

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#### References

[1] Li L. The value and path of big data empowering higher continuing education[J]. Journal of Hebei University (Philosophy and Social Sciences Edition), 2022, 47(06): 110-116.

[2] Zhou Q. Analysis of the connotative development of higher continuing education empowered by digital technology: A case study of Shunde Vocational and Technical College [J]. Research on Continuing Education, 2023(05): 10-13.

[3] Zhou H, Chen R. The practical logic and innovative path of promoting common prosperity in higher continuing education[J]. Zhejiang Social Sciences, 2023(12): 151-155+161. DOI:10.14167/j.zjss.2023.12.015.

[4] Huang Y, Han Y, Chen E. Quality evaluation and improvement of continuing education in the new era: Value orientation, index system, and model construction[J]. China Electric Education, 2020(09): 96-104.

[5] Zhang Y. Research on the sustainable development of higher continuing education in China from an ecological perspective [M]. Wuhan University Press, 2021.