# Research on Teaching Mode of Digital Transformation of Higher Vocational Education

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Abstract: Aiming at the trend of digital transformation of higher vocational education, this paper discusses the influence of digital transformation on teaching mode, and puts forward a new teaching mode. The research shows that digital transformation has brought more opportunities and challenges to higher vocational education, and the teaching mode needs to be transformed accordingly. The teaching mode proposed in this paper includes diversified teaching resources, personalized learning experience and interactive learning environment. These teaching modes can effectively improve students' learning effect and teachers' teaching quality, and provide new ideas and methods for the digital transformation of higher vocational education.

**Keywords:** Higher vocational education; Digital transformation; Model of instruction

#### 1. Introduction

Higher vocational education refers to the form of education with the main goal of cultivating applied and skilled talents at the level of higher education. With the continuous development and application of information technology, the digital transformation of higher vocational education has become a hot topic of concern in education and all walks of life. This section will introduce the current situation and trend of digital transformation of higher vocational education from the background and significance of digital transformation.

#### 1.1. Background of Digital Transformation of Higher Vocational Education

Digital transformation refers to the process of upgrading and transforming traditional industries and trades in an all-round way by using digital technology and information technology. Digital transformation has profoundly changed people's way of life and work, and also has a profound impact on the education industry.<sup>[1]</sup>

The background of digital transformation of higher vocational education mainly includes the following aspects: the rapid development of information technology and the continuous development and application of information technology provide technical support and infrastructure for digital transformation of higher vocational education. With the development of economy and society and the adjustment of industrial structure, the digital transformation of higher vocational education has become an inevitable choice to promote industrial transformation and upgrading. The deepening of educational reform also provides policy support and institutional guarantee for the digital transformation of higher vocational education.

# 1.2. The significance of digital transformation of higher vocational education

The significance of digital transformation of higher vocational education is mainly reflected in the following aspects: improving the quality of education and teaching. Digital transformation can provide richer and more diversified teaching resources and teaching means for higher vocational education, thus improving the quality of education and teaching. Promoting educational innovation and development, digital transformation can provide more flexible and diversified educational models and methods for higher vocational education, thus promoting educational innovation and development. Promoting industrial upgrading and talent training, digital transformation can provide higher vocational education with talent training modes and methods that are more in line with industrial needs, thus promoting industrial upgrading and talent training. Strengthening national competitiveness and digital

transformation can provide more advanced and efficient educational means and resources for higher vocational education, thus enhancing national competitiveness in the field of education.<sup>[2]</sup>

Digital transformation of higher vocational education has become an irreversible trend, which brings more opportunities and challenges to higher vocational education. Higher vocational education should actively adapt to the trend of digital transformation, strengthen the construction of digital education, improve the level of digital education, and make greater contributions to industrial upgrading and personnel training.

# 2. The influence of digital transformation on the teaching mode of higher vocational education

This section mainly discusses the influence of digital transformation on the teaching mode of higher vocational education. Digital transformation has brought more opportunities and challenges to higher vocational education, and the teaching mode needs to be transformed accordingly to meet the needs of the digital age. This section will discuss the influence of digital transformation on the teaching mode of higher vocational education, and provide the background and theoretical basis for the new teaching mode in the following chapters.

#### 2.1. Opportunities and challenges brought by digital transformation

Digital transformation is an important trend of higher vocational education at present, which brings many opportunities and challenges to education. This chapter will discuss the opportunities and challenges brought by digital transformation.

#### 2.1.1. Opportunities brought by digital transformation

Digital transformation provides more teaching resources for higher vocational education, including online courses, teaching videos and teaching software, which can help students better understand and master knowledge and improve teaching effect. At the same time, digital transformation also provides teachers with more teaching tools and technologies, making teaching more flexible and personalized and improving teaching quality. Digital transformation provides new ideas and methods for the teaching reform of higher vocational education. Through digital technology, we can realize the diversification and individualization of teaching content, make teaching closer to students' needs and interests, and promote teaching reform. Digital transformation has expanded more possibilities for the teaching boundary of higher vocational education. Through digital technology, online teaching, distance education and other teaching methods can be realized, providing students with more flexible and convenient learning methods, and at the same time expanding more teaching channels and markets for educational institutions.<sup>[3]</sup>

#### 2.1.2. Challenges brought by digital transformation

Digital transformation needs a lot of technical support, but the application and development of technology are uncertain, and there may be risks of technology update and replacement, which need to be followed up and updated constantly. Digital transformation requires teachers to have more teaching skills and abilities, and teachers to constantly improve their professional level and master digital teaching technology and teaching methods. Digital transformation may change students' learning habits and ways, which requires students to have more autonomous learning and information processing abilities, as well as more self-management and self-restraint abilities. In a word, digital transformation has brought opportunities and challenges to higher vocational education, which requires educational institutions and teachers to innovate and improve constantly to provide better educational services for students.

#### 2.2. Teaching mode needs to be transformed accordingly

With the continuous development and popularization of information technology, the digital transformation of higher vocational education has become an irreversible trend, and the application of digital technology has profoundly affected the education and teaching mode. Digital transformation has brought more opportunities and challenges to higher vocational education, and also put forward higher requirements for teaching mode. [4]

Digital transformation makes the acquisition of teaching resources easier and more convenient. Teachers and students can obtain a variety of teaching resources through the Internet, such as online courses, e-books, online teaching videos and so on. The enrichment of these resources provides more teaching means and tools for higher vocational education, and also provides more possibilities for the

transformation of teaching mode. Digital transformation enables students to study remotely through the Internet, regardless of time and place, and at the same time, they can choose their own courses of interest. This flexible learning method can better meet the individual needs of students and improve the learning effect. Digital transformation has also brought more personalized learning experience to higher vocational education. Students can choose and explore independently according to their own learning interests and abilities, and teachers can also conduct more refined and personalized teaching according to students' learning situation. Digital transformation provides a more interactive learning environment for higher vocational education. Students can learn through online communication and interaction, and at the same time, they can share knowledge and learn cooperatively through social networks and online education platforms. This interactive learning environment can better promote students' learning and growth.

#### 3. Propose a new teaching model

In this section, the article puts forward a new teaching mode to adapt to the trend of digital transformation of higher vocational education. This new teaching mode includes diversified teaching resources, personalized learning experience and interactive learning environment. These teaching modes can effectively improve students' learning effect and teachers' teaching quality, and provide new ideas and methods for the digital transformation of higher vocational education.

#### 3.1. Diversified teaching resources

Diversified teaching resources are an important content in the digital transformation of higher vocational education, which includes the application and development of various digital teaching resources. In the traditional teaching mode, teachers can usually only use limited teaching resources such as paper textbooks, courseware and blackboards for teaching. After the digital transformation, teachers can use all kinds of digital teaching resources to enrich the teaching content and improve the teaching effect.

Diversified teaching resources can include open education resources, multimedia teaching resources, interactive teaching resources, autonomous teaching resources and so on. Open educational resources refer to digital teaching resources that can be obtained and used for free, such as Mooc courses, digital libraries, open courses, etc. These resources can provide students with wider and deeper learning content and learning opportunities, and also provide teachers with more choices of teaching resources. Multimedia teaching resources refer to those teaching resources that contain a variety of media elements, such as video, audio, pictures, animation and so on. These resources can provide students with a more vivid and intuitive learning experience, and at the same time, they can also provide teachers with more teaching methods. Interactive teaching resources refer to those that can interact with students, such as online tests, teaching games and virtual experiments. These resources can provide students with a more participatory and interesting learning experience, and at the same time provide teachers with more teaching evaluation methods. Autonomous teaching resources refer to those that can learn independently, such as online courses and autonomous learning platforms. These resources can provide students with more independent and flexible learning methods, and at the same time, they can also provide teachers with more learning tracking and evaluation means.<sup>[5]</sup>

By using diversified teaching resources, teachers can better meet students' learning needs and improve students' learning interest and learning effect. At the same time, teachers can give full play to their teaching ability and creativity, and improve teaching quality and efficiency.

### 3.2. Personalized learning experience

Under the background of digital transformation, students' learning needs and hobbies are becoming more and more diversified. Therefore, personalized learning experience has become an indispensable part of the new teaching model.

According to different students' learning needs and hobbies, teachers should formulate personalized learning goals according to the actual situation of students, so that students can participate in learning more actively. Digital transformation provides more learning resources for students. Teachers can choose suitable learning content according to students' learning needs and hobbies, so that students can choose learning content more independently. Different students have different learning styles. Teachers should design personalized learning styles according to students' learning characteristics and needs, so that

students can master knowledge more effectively. Personalized learning experience also needs to include personalized learning evaluation and feedback mechanism, so that students can better understand their learning situation and adjust their learning strategies in time. Through the implementation of personalized learning experience, students can participate in learning more actively, improve their learning enthusiasm and initiative, and thus better achieve teaching objectives.

#### 3.3. Interactive learning environment

Interactive learning environment is an important part of the new teaching model. By using advanced technology and tools, it provides students with a learning environment with strong interaction and convenient information sharing and transmission. Through in-depth research and practice of interactive learning environment, students' learning effect and teachers' teaching quality can be effectively improved, and more comprehensive and effective support can be provided for the digital transformation of higher vocational education.

# 4. The countermeasures and suggestions for further digital teaching mode in higher vocational colleges

Continue to improve the implementation system of digital teaching. Higher vocational schools should further improve their ideological understanding, strengthen organizational management, and truly put the construction of digital teaching on the important agenda. The professional management organization and management system of digital construction have been formed, and the important work of digital teaching in schools has been led, organized and managed as a whole, which has promoted the scientific progress of relevant work. The top-level design has been further improved. According to the specific situation of higher vocational schools, the long-term planning of digital teaching work, sound and perfect management system and supporting measures have been put forward. Through various ways and means, funds have been raised, technical support has been strengthened, effective integration of existing systems in the school and rational design of new systems have been strengthened, and repetitive construction projects have been resolutely put an end to.<sup>[6]</sup>

Continue to explore the digital education and teaching mode. First, we should further innovate the teaching methods of modern information technology courses. We should not only pay attention to the educational ability of the content of modern information education courses, but also strengthen the training of learners' awareness and ability to understand and deal with problems in knowledge with modern information methods as tools. The second is to further innovate the learner-centered classroom teaching system, take modern information methods as tools, and strengthen the research and application of classroom teaching processes and teaching resources, so as to promote the transition of classroom education from traditional teaching methods to educational methods in which learners actively identify, study and deal with knowledge problems. The third is to create a way of exploratory teaching in the network era, so that students can determine the teaching content of special research through the guidance of teachers, according to their actual ability and inquiry consciousness, freely collect and exchange all kinds of relevant information, and carry out corresponding research tasks by computer operation.

Further do a good job in the key links of digital teaching. First, we should do a good job in preparing for the digitalization of teaching. Teachers make use of the school network and the campus network for collective and cooperative teaching preparation. By scientifically and reasonably planning the teaching content of the course, reasonably determining the teaching division of teachers, and rationally using information technology, teachers are separately organized to prepare lessons, cooperate with each other and share data, which ensures the quality of teachers' teaching activities. Second, it is necessary to comprehensively use modern means of educational informatization, and improve the actual effect of the classroom more effectively through rich and diverse teaching contents and forms such as demonstration, materials and expansion. Third, it is necessary to build a platform for curriculum system, a platform for teachers' teaching management and a platform for students' basic learning materials, so as to further promote the smooth and orderly implementation of digital teaching.

Gradually improve the construction of digital education teachers. Strengthen the attraction of talent training in higher vocational colleges, actively attract compound talents who not only understand the teaching principles of professional courses, but also skillfully use digital teaching methods, and further improve and optimize the teaching staff. Strengthen the optimization and improvement of the overall quality of teachers, increase the training and education of teachers' operating methods, professional skills and design innovation ability in basic technology, and further enhance the educational literacy of

comprehensive digitalization of talent teams in higher vocational colleges. To sum up, higher vocational education is the main component of higher education in China, and it is of great significance and imperative for teachers in higher vocational schools to innovate the most effective methods of digital teaching, which will improve the educational level and teaching quality of higher vocational schools and promote the reform and development of higher vocational education in China. Therefore, we should attach great importance to and strengthen the research and construction of digital teaching mode in higher vocational schools, and constantly sum up experience.

#### 5. Conclusion and prospect

The new teaching mode proposed in this paper can effectively improve the teaching effect and quality of higher vocational education, and provide new ideas and methods for digital transformation. In the future, we should further explore the application and optimization of new teaching mode to promote the digital transformation of higher vocational education. The new teaching mode proposed in this paper provides new ideas and methods for the digital transformation of higher vocational education, but there are still some limitations that need further research and exploration.

The future development direction and research lies in the development and integration of teaching resources. Better integration and utilization of various teaching resources can improve the teaching effect and students' learning experience, and develop and utilize new teaching resources, such as virtual laboratory and online simulation. Give full play to the role of digital technology in learning and improve students' interest and initiative in learning. Develop innovative learning methods, such as game-based learning and social learning. Using digital technology to realize personalized learning and meet students' different learning needs and interests. Teachers should be guided to adapt to the needs of digital transformation, improve teachers' digital teaching ability and level, and change from traditional knowledge imparting to students' learning guidance and assistance. In a word, the digital transformation of higher vocational education is a long-term process, which needs constant exploration and innovation. Future research should focus on how to make better use of digital technology to improve the quality and effect of education and teaching.

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