

**Research on the joint innovation mode of school-enterprise cooperation and  
"online course" -- taking digital media application as an example**

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*Abstract: online course is with the network communication technology, the development of computer multimedia technology, digital technology and produce a new form of education, from "blackboard" to "multimedia courseware" to "as is" online courses, it is to build a lifelong system of knowledge economy era and a major means of learning society, sharing and openness, the individuality and autonomy, low cost and fairness. Online education has triggered a profound change from educational concept, content, method and method to educational mode and process.*

*Keywords: online course; Innovation; model.*

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## **1. THE BACKGROUND**

McLuhan said that the media is information, and the progress of media technology plays an important role in promoting social development. Therefore, the development of digital media will shift from communicator to audience, and digital media will become a multimedia information terminal integrating public communication, information, service, culture and entertainment, communication and interaction. With the rapid development of cloud computing and the Internet industry, a large number of "online" teaching models represented by MOOC and SPOC have begun to be favored by everyone. These online courses are not limited by time and space, and can be learned whenever and wherever there is a network, which brings great challenges to the traditional face-to-face classroom teaching model. Of course, the traditional classroom also has its irreplaceable advantages, such as face-to-face and instant communication, such emotional communication and communication, online courses do not have, through the implementation of online and offline teaching model.

Digital media industry has become a new driving force of China's economy and even the world economy. Driven by this industry, digital media majors in colleges and universities have developed rapidly in China in the past decade. In order to meet the requirements of The Times, many foreign universities have set up digital media majors. At present, the development of such majors in China is still unbalanced, especially in economically developed regions where industries and enterprises are larger and more numerous, and where digital technology is more advanced, so there is a great demand for such professionals. It is urgent for digital media majors in colleges and universities in China to find a feasible talent training mode. School-enterprise collaborative cooperation mode refers to the

way in which enterprises and schools, based on the willingness to cooperate, jointly formulate personnel training objectives and achieve such objectives. By taking advantage of relevant resources, the university and the enterprise cooperate to develop new products and raise the scientific and technological content of plateau products, improve students' scientific research and practical ability and the research and development level of the university and the enterprise, and promote the development and innovation of the university and the enterprise. To provide enterprises with the required talent model: enterprises through the investment of funds, equipment, network courseware and other commissioned schools to train specific professional talents, schools according to the needs of enterprise recruitment and teaching. This can not only reduce the cost of enterprises, access to professional talent reserve, but also enable the school to have more funds and practice base, improve the quality of students. School-enterprise joint construction mode: school-enterprise signs contracts on the basis of trust to establish deep cooperative relationship. It reflects the flexible development of school-enterprise cooperation under the market mechanism. Both the university and the enterprise shall perform their respective duties, build bases together, and conduct free exchange of funds and teachers to jointly cultivate high-level digital media talents. Online education has broken the traditional learning mode of students, and it is imperative to carry out online education by referring to the experience of online education in colleges and universities at home and abroad.

ONLINE TO OFFLINE, which originated in the United States, represents a new business operation model of ONLINE TO OFFLINE integration. It is not only a business operation mode, but also a way of thinking. The author tries to apply this way of thinking to the reform of teaching mode and proposes a mixed teaching mode. Through the joint development of enterprises and schools, enterprises can provide the required knowledge and schools can cultivate the required talents. The view of constructivism theory is that teaching can be completed not by one-way transmission of knowledge from teachers to students, but by means of meaning construction under certain circumstances. The essential idea of the mixed teaching mode is to take online teaching as the traction, put the internalization of knowledge into the classroom, lead and guide students to think and discuss actively, and stimulate students to carry out independent learning by means of competitions and rankings.

## **2. SIGNIFICANCE OF IMPLEMENTATION**

Under the background of online education, rich online resources can be provided for students. Through moocs and micro classes, the specific expansion of learning resources can be completed to ensure the value of online education. In higher vocational colleges, there are usually several main lecturers for a course, and teachers with different teaching styles provide auxiliary resources to ensure that students can maintain a high degree of coordination and interaction with higher vocational courses, so as to provide a new environment for curriculum reform. The emergence of online education has significant effects on higher vocational education and curriculum reform in China, and can construct a rich network resource for students to complete independent learning.

The advantage of flexible online education is that it is not confined to the classroom environment of higher vocational colleges and avoids the boring and boring traditional teaching methods. Students can obtain the key resources they need through mobile devices. The learning place is not limited, can make full use of scattered and fragmented time, to ensure the flexibility of the learning process. In

terms of learning time, students should fully respect their subjective will and choose their own time to study. Students have more freedom in their right of control and can feel their intrinsic value in a good environment.

Through the study of online courses, the discussion sections in class and online will change from the original "watching" mode to "directly participating in the discussion" mode, so as to improve the participation of students and seize the learning degree of "phubbing" students.

The higher vocational education mainly focuses on the cultivation of technical talents, which is conducive to the cultivation of lifelong learning habits in the process of specific classroom teaching practice. It is the basic standard that this kind of teaching mode ADAPTS to the higher vocational teaching reform and can form a benign learning habit from a new Angle. Such as making full use of fragmented and fragmented time, students have a high degree of autonomy and feel the convenience provided by online education. After mastering the classroom time, practice after class to consolidate knowledge and lay a solid foundation for the real realization of "online and offline integration" teaching method.

Precise and personalized learning. Data collection and analysis are carried out with the help of big data. Precise analysis is made on students' online learning clicks, homework, classroom tests and exams, so as to accurately track students' learning trends and timely feedback the teaching effects to students and teachers. In this way, personalized teaching and training can be made for each student, personalized learning content recommendation, recommendation of teachers suitable for students, suitable for students' own learning methods and partners, suitable for their own learning time. The characteristics of learners are described from different data dimensions, and students are classified. The problems of each student, the comparison between the past and the present of students and the comparison between students are discovered through big data. Teachers can master the learning situation of students in an all-round way, predict students' scores, optimize the course arrangement and so on.

Optimization of educational services through intelligent assessment technology, analysis of learners' self-learning ability, urge learners to improve their enthusiasm. Design scholarship incentives to motivate teachers and learners. The evaluation system is the main means to reflect the learning effect and check the quality. The establishment of a complete learner-centered evaluation system can effectively help online education enterprises to timely follow up the relevant services of learners. Develop user learning assessment system to understand the daily learning situation of learners. After completing each unit, comprehensively evaluate the user's knowledge acquisition. Feedback the evaluation results in time, analyze the wrong questions, give precise guidance to the weak knowledge points, and push the learning content and test questions to strengthen the knowledge points. Guarantee the completion rate of courses and cultivate long-term learning habits.

### **3. CURRENT RESEARCH**

As a new way of learning, online education has brought about a profound change in educational concepts, methods and contents, as well as educational means, modes and processes. The focus of online education is interaction, the core is education, based on its own characteristics and advantages, online education has been more and more widely used.

Since 2012, massive open online courses (moocs), commonly known as moocs, have sprung up all over the world. Online education has become another hot topic in the field of higher education. At the same time, many advanced network information technologies (such as: Social networks, cloud computing, artificial intelligence, the emergence of large data, etc.) also provides a solid platform for the development of online education and a more broad space for development, through the way of online learning, different learners from different places all over the world to be able to sit at the computer through the Internet, share the excellent education resources around the world, making the behavior to accept education gradually break geographical factors such as space, time limit, also makes the mass learning and individualized learning is no longer a vision. Therefore, traditional higher education has suffered great impact and faced more challenges.

Xiao gang et al. studied the concept and connotation of online education and proposed the definition of "e-learning" as the activity of organically combining information technology with the Internet and spreading new knowledge and methods. The E in e-learning stands for e-learning, exploratory, experiential, extensibility, convenience, expansion and enhancement. Online education includes development of online course resources, acquisition and application of course resources, service for learners, assessment and certification of learners' knowledge and skills, quality control and guarantee, etc. Online education is not simply explained as the network of traditional education, it is a complete system, not just a means of education and learning. Yang yan et al. conducted basic research on the development and design of online courses. Xie youru et al. studied the classification of online course development and design. Luo qiuli and yu shengquan et al. studied the development and design of online courses from the perspective of learners. Piskurich, a foreign scholar, explained online learning in 2003 and 2004 respectively. He believed that online learning is a learning method that USES computer network as a medium and USES network transmission, interaction or guidance. Ally believes that online learning means that the learning subject obtains the learning materials through the network and interacts with teachers and students. In this way, the learning subject can get the services and acquire the required knowledge and finally promote the growth of their own ability. According to Davidson-Shivers, online learning is a process of distance learning carried out by teachers and students under the platform of Internet.

#### **4. SCHOOL-ENTERPRISE COOPERATION AND DEVELOPMENT OF DIGITAL MEDIA MAJOR**

School-enterprise cooperation in the development of online courses refers to the way in which enterprises and schools, based on the willingness to cooperate, jointly develop personnel training objectives and achieve such objectives. In developed countries, school-enterprise cooperation and talent training to promote economic development complement each other, which has always been concerned. Digital media enterprise is equipped with advanced technology, fully functional online education resources to make equipment, set up the advertising company, multimedia classroom training, simulation conference center, the engineer, the practical audio-visual feedback hall, etc., there are a variety of intelligent training facilities, including computers, animation teaching facilities, computer engraving, etc., the technical requirements of online learning has been basically satisfied.

School-enterprise cooperation in developing digital media online education can play a complementary role.

### 5. CONSTRUCT THE TRAINING MECHANISM OF APPLICATION-ORIENTED UNIVERSITY-ENTERPRISE COLLABORATIVE INNOVATION TALENTS

In terms of actions, resources and performance of school-enterprise collaborative innovation, the fire department and enterprises must communicate with each other, and reach consensus on cooperation between some levels to achieve the purpose of sharing resources and information. At the same time, it is necessary to make the actions of both sides synchronized and coordinated in an optimal way, so as to maximize the effectiveness and build a bridge of trust, equality and mutual benefit for the cooperation between both sides. In the process of collaborative innovation, colleges and universities are responsible for exporting talents and science and technology, and enterprises are responsible for providing experience, technology and hardware equipment, which are unified and combined to achieve the goal of cultivating innovative talents for the society. The cooperation mode is shown in figure 1.

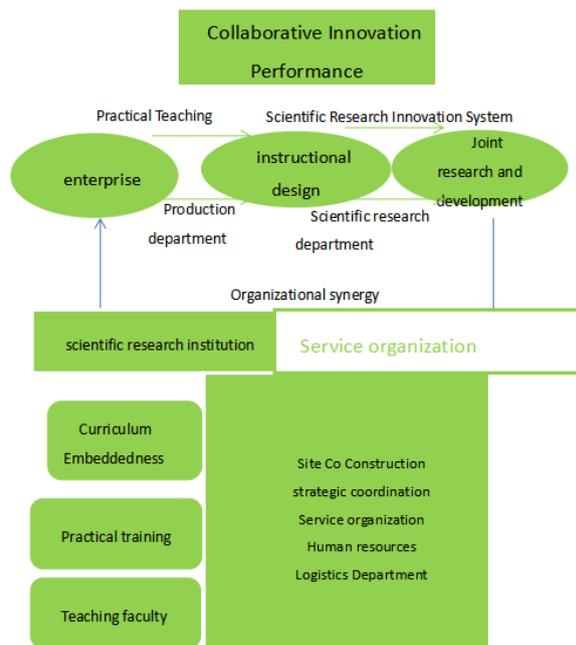


Figure 1 school-enterprise collaborative innovation effect diagram

### 6. CONCLUSION

The value chain promotes the integration of resources. In many developed countries, collaborative innovation is led by universities. For media companies, the main purpose is to make money. But for colleges and universities, innovation is the concept and social responsibility is the guide. The university creates the social value, the enterprise USES this kind of value in the commercial activity, and transforms into the economic benefit and the social benefit. As an excellent platform, colleges and universities can promote the transformation of talent cultivation and innovative achievements, strengthen the sense of cooperation between the two sides and improve the commercialization ability to a greater extent. Enterprises provide platforms and practical opportunities for talent cultivation and

training in colleges and universities, and enhance the power of digital media talent cultivation. Colleges and universities make use of their own scientific and technological advantages to carry out scientific and technological innovation. At the same time, it also takes the market demand as the guide. Talents in colleges and universities should give full play to their talents in innovation and develop products with more scientific and technological content, which will help digital media enterprises to improve their competitiveness in the market competition and occupy an advantageous position. Enterprises and universities use their respective advantages to make collaborative innovation and integrate various resources, so as to promote the development of enterprises and the training of digital media talents.

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