

## **New Ideas on the Curriculum Construction in Universities Under the New Situation of "Internet +"**

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**Abstract:** Higher education has undergone major changes under the era of "Internet+", mainly express in the use of modern educational technology, reforming the teaching approach and teaching method of courses, and it puts great challenge on the curriculum construction of university. Open online course is the integration of Internet + education under the new situation, it has become the mainstream of curriculum construction in universities. Curriculum managers need to "advance with the times", apply user thinking to transform the traditional curriculum construction mode, keep pace with the times on the work ideas, work ideas. At the same time, we use open online course construction as the starting point, promote reforming of instructional model and evaluation methods on the blended learning or flipped classroom form four aspects as followed: platform construction, course resources production, changing of teaching design and philosophy, and teaching method reform. It formed closed-loop of curriculum construction and application, and enhanced the quality of curriculum construction.

### **1 Introduction**

With the development of new generation information technology which characterized by Internet and big data, higher education is also processing a digital revolution. The open online course is the product of the digital era. The blended learning or flipped classroom has become the development direction of current curriculum reform. Based on the background, the working direction, working mode, working idea of curriculum construction in universities have also changed.

### **2 The Connotation of "Internet + Higher Education" and the Curriculum Construction in Universities**

#### **2.1 The Concept of "Internet+"**

The concept of "Internet +" was proposed in the fifth session of the Mobile Internet Expo in November 2012. Analysis International Chairman and CEO Yu Yang proposed the concept of "Internet +" for the first time. In November 2014, Premier Li Keqiang attended the first World Internet Conference, pointing out that the Internet is a new tool for public entrepreneurship and innovation. Generally speaking, "Internet +" is the "Internet + all traditional industries", including industry, commerce, finance, education, etc. But it is more than a simple combination, it's the in-depth integration of the Internet and various traditional industries by the use of information technology and the Internet platform. It will create a new development trend.

#### **2.2 The Connotation of "Internet + Higher Education" and the Construction of Curriculum in Universities**

Internet + higher education is more than a simple combination of Internet and higher education, it's the in-depth integration of Internet and higher education by the information technology<sup>[1]</sup>. "Internet + education" makes the teaching content, method, mode and teaching management mechanism of higher education changing, mainly in the reform of teaching methods based on the traditional classroom teaching. Teachers carry out blended learning or flipped classroom with internet technology. It is an important direction of curriculum reform of higher education. Higher education

has entered the digital era, the way of knowledge acquisition has changed basely. The traditional classroom "teaching off a blackboard" mode has been unable to adapt to the modern educational environment, it can't satisfy the needs of personalized learning. The variety of high quality education resources get out of the ivory tower by the use of Internet + higher education ,so that different colors and different language learners from different parts of the world can share the same kind of education resources through the Internet platform.

April 2015, "Suggestions on strengthening the construction and application of open online courses in higher education universities by the Ministry of Education" (JIAOGAO [2015]3) (called document No. 3 for short) was issued, and it requires universities promoting construction and application of open online courses [2]. In order to achieve the national goals and tasks, the open online course constructions are in full swing. Thinking of "Internet +" era including user thinking, big data thinking, its core is the user thinking [3], that is user-centric, attention to the user's feelings. The goal of open online courses is the concrete embodiment of Internet thinking. Its basic characteristic is to keep the concepts of educational resources sharing, put traditional classroom teaching to "the Internet" through the information technology. But it's not simply recording course video and play on the internet, and it's an organized and designed teaching process, which is involved by the teaching teams. It makes the traditional teacher-centered and face-to-face teaching mode into the student-centered blending teaching mode [4]. Open online course is the product of "Internet +" era, and it is also the main development direction of universities.

### **3 The New Requirements of Curriculum Construction under the New Situation of "Internet +"Era**

With the development of information technology, which is characterized by the Internet and big data, it puts forward a new challenge on the curriculum construction of university. At the same time, direction of curriculum construction has also changed. Using the Internet thinking, it puts forward new requirements to the curriculum construction.

#### **3.1 Change the Work Concept**

The concept of open online course is based on behaviorism learning theory, Learners can study without restriction in the network [4], complete the whole study process through the interaction between learners, learners and teachers. The new curriculum teaching mode requires the managers to change the concept of curriculum construction, and gradually abandon the concept of top-quality courses selection as the main target. The spirit of document No. 3 as a guide to the managers, and steadily push forward the construction of curriculum under new situation. Managers analyze the quantitative indicators and evaluate the effect of new teaching mode by the information technology of big data, and adapt work concept to suit the "Internet +" new situation of curriculum digitization construction.

#### **3.2 Updated the Work Ideas**

The spoon-like video resource playback is easy to make learners feel tired under the traditional network course learning process, knowledge fragmentation is the challenges for human learning under the Internet era [5]. Different from the traditional curriculum construction methods, the focus of open online course is teaching design and construction of curriculum resources. The goal of open online course is to build MOOC (massive open online course),the requirements are higher than open online courses. And a good course resource requires strong financial and technical support. Columbia University's research report showed that the cost of each MOOC was between \$ 39,000 and \$ 325,300, among them, labor costs were between \$ 29,000 and \$ 244,000 [6]. Cui Can analyzed the MOOC survey data of college curriculum construction in mainland China in 2014, it showed that funding for each course is basically between 5-20 million [7]. Therefore, managers need to redesign work ideas from the construction requirements and content of open online course.

### **3.3 Improve the Work Technology**

The construction and use of open online course need to be achieved through educational techniques, including the development of blended learning or flipped classroom. In addition, the construction of open online course depends on the course platform for sharing. For now, the core of MOOC is the platform<sup>[8]</sup>. Management need to know the advantages of the platform, and the use of curriculum resources in the curriculum platform. They require improving the technology and mastering the technology of data analysis to control the quality of curriculum construction in real-time.

## **4 The New Ideas of Curriculum Construction under the New Situation of "Internet +"Era**

Under the new situation of the Internet, the construction of open online course in universities has become the main direction of curriculum construction. Universities have formulated policies to promote the construction of the curriculum, including the academic departments, personnel departments, etc. The curriculum platform construction is the foundation, curriculum resources construction is the core, and teaching use is the purpose. According to the new requirements, management combines with the practice of curriculum construction in university, puts forward new ideas of curriculum construction.

### **4.1 Transformation of Teaching Concepts and Objectives**

In the era of digital education, new teaching modes have emerged. On the one hand, it is based on the teaching mode of open online course, such as MOOC and SPOC (Small Private Online Course). Through network data analysis by the modern educational technology realize the prediction of learners' behavior and personalized learning. On the other hand, through online and offline interactive discussion to realize the integration of educational technology and teaching concepts. Universities organize the teacher workshops, online course lectures and other teaching training activities, not only invite teachers to sharing experience of curriculum construction, but also organize the platform technical training for teachers, including video production, network operation. Management can also explain the policies and funding support to teachers, and provide a full range of support services<sup>[9]</sup>. Through the establishment of new teaching objectives and teaching design to realize the transformation of teaching concepts and teaching objectives.

### **4.2 Various Forms of Curriculum Resources Construction**

The course resources are derived from the production of curriculum video. In view of the requirements of physical、intellectual and financial necessary, management should take account of the funds for the construction, including the pre - course funding and the update funding. From the development process of open online courses in China, the universities are equipped with excellent courses at all levels, and each course has relied on a website. These courses have a certain basis, and can be as the starting points for the construction of open online courses. At the same time, universities can make use of school network teaching platform to carry out curriculum construction. First teachers upload curriculum resources to the school network platform conduct trial run for the students. Management invites school experts, students to evaluate the construction and effect of courses. According to the problems raised by the experts and the standards of national open online course, teachers perfect the curriculum resources and meet the technical requirements of MOOC.

### **4.3 Carry out Blending Learning Reform by the Technology**

Zhang Rui compared the blending learning class with the traditional teaching class of four tests results, and found that the scores of blending learning class are increased<sup>[10]</sup>. Through interview teachers, and combine with the practical experience, the reform of blending learning mode such as flipped classroom is helpful to improve the classroom enthusiasm and the test scores<sup>[11]</sup>. For the effect of personnel training, the blending learning focuses on cultivating students 'practical ability in extracurricular activities, the teaching effect is embodied in the students' innovation and creativity; For the teaching methods, the blending learning emphasizes the interaction between teachers and

students, teaching effect is embodied in the interpersonal ability of students; For the teaching quality, blending learning is the requirement of adapting information teaching, which is beneficial to expand learners 'thinking ability and improve practical exploration ability<sup>[12]</sup>. According to the standards of MOOC construction, it needs a long time to build curriculum resources. Universities can set up SPOC courses in school platform firstly. SPOC mode is more suitable for blending learning and it can take online interaction. Management can encourage teachers to carry out blending learning from all kinds of funding, such as education and curriculum reform<sup>[13]</sup>.

## 5 Conclusion

"Internet +" has brought opportunities and challenges to the University, through the internet thinking to transform the teaching concept and promote education reform<sup>[14]</sup>. The open online course construction is an opportunity to take advantage of the existing excellent curriculum resources. Management explores courses of higher click rate in school platform and encourages teachers setting up SPOC curriculum reform. Management speeds up the pace of open online course construction, and steadily promotes curriculum construction work under the new situation in university. At the same time, curriculum reform is to promote talent cultivation mode reform and improve the quality of talent cultivation.

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