# *Innovation Mode and Application Design of Mixed Teaching under the Background of " internet +"*

## *—Take the course of traditional Chinese medicine processing and storage as an example*

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***Abstract:*** The study is based on the Internet. With the need to transform the general undergraduate colleges into application, innovative teaching models and methods are necessary. In order to provide experience for the new hybrid teaching model, this paper explored the innovative model in the context of “Internet +” for the teaching of Chinese medicine processing courses in colleges and universities, and designed specific application programs in the professional courses of Chinese medicine related majors.

The State Council issued the "Guiding Opinions on Actively Advancing the "Internet +" Action" in July 2015[1].The effective integration of the Internet and education has become a new teaching model. It breaks through the time and space boundaries between teachers and students, and pays attention to the comprehensive quality training and individualized development of students.To provide experience for the new mode of mixed teaching, this paper aims at the teaching practice of Chinese medicine processing and storage course in colleges and universities, explores the innovative mode of mixed teaching in the context of “Internet +”, and designs specific application programs in the professional courses of Chinese medicine cultivation.

## 1. Characteristics of "Internet +" education

### 1.1 Knowledge sharing

The teaching of knowledge is no longer limited to face-to-face. "Internet +" breaks the monopoly of authority on knowledge. Everyone can learn knowledge, share knowledge, and create knowledge. Each knowledge point will find different understandings and explanations of different people. We can always Get help everywhere, participate in discussions, get guidance, gain knowledge and improve yourself in communication.

### 1.2 Platform openness

The construction of cloud platform and the improvement of cloud technology provide basic guarantee for “Internet+” education. Therefore, teaching activities are no longer limited to

classrooms. For example, we can establish a university education platform, and all teachers and students at all universities in the country can apply for study. The platform utilizes the resource sharing technology in the space to complete the teaching and learning activities of inter-school knowledge, enriching the teaching and learning activities of the school.

### 1.3 Diversification of carriers

Currently, Internet users are moving from the PC side to the mobile side. Modern teaching is made up of education and IT Internet, mobile terminals, MOOC, cloud computing, gamification, wearable devices, big data, smart technology, 3D printing technology and virtual assistants. With the integration of technology, the resources of the whole world can be fully displayed in a three-dimensional way to realize personalized service.

### 1.4 Teacher-student interaction

In this new mode of education, teachers and students are not just virtual collectives. The close connection between teachers and students is through language, communication, and guidance, breaking through time and space constraints. Teachers and students complete the learning content through teaching activities, and realize the mutual sharing of resources.

### 1.5 Formal diversity

The teaching method is no longer speaking and listening. Students complete the course through online video classrooms, photo animations, online questions, teacher-student exchanges, online tests, and more. Through various new forms of teaching, students become the real learning subject, and teachers only play the role of guidance and help.

## 2. Current status of colleges and universities

### 2.1 Adapt to the application of undergraduate school positioning

In the government work report, Premier Li Keqiang proposed to “guide the transformation of some local undergraduate colleges and universities to application” in 2015.The government work report clearly stated that “the promotion of qualified undergraduate colleges and universities to the application-oriented transformation on March 5, 2016,” [2]. Transformation is reform and innovation, and it is also a comprehensive innovation of China's higher education concepts, systems, teaching models and methods. We will cultivate application-oriented talents with "thick foundation, broad professionalism, strong ability, and high quality", and innovate teaching methods through teaching reform as the core. And highlight the goal of "can plan, operate, understand management, good marketing" .

### 2.2 Adapt to the requirements of intelligent campus

At present, mobile phones occupy an increasingly important position in people's daily lives. While smart phones bring convenience to students, they also seriously affect university classrooms. The “low-headed people” in the classroom can be seen everywhere. We should make full use of this resource to guide students to find relevant information through mobile phones, use online courses to learn, record micro-courses, and make small videos. Teachers must first learn to use the network to transmit information, publish resources, conduct online tests, and require students to use mobile phones to receive information, do exercises, and so on. Learning is more and more convenient

because of the access to the network and the increasing resources of learning resources. Network access makes learning more convenient and learning resources more and more abundant. "Internet + Education" further breaks the time and space restrictions, allowing students to receive information and read materials anytime and anywhere, inject fresh vitality into teaching, stimulate students' interest in learning, and improve learning. “Internet + Education” improves content design, teaching methods, and evaluation methods in teaching. Therefore, the reasonable and efficient use of mobile phones can achieve the role of teaching.

## 3. The optimization design of teaching reform in the curriculum

### 3.1 Update the teaching concept

Cultivate students' Internet thinking, adhere to the principle of educating people, using the Internet, mastering information technology and using mobile Internet to integrate educational and teaching resources. Teachers and students establish a learning community to jointly promote education, teaching, informationization, digitization and intelligence. Teachers use the Internet as a platform to promote the teaching resources, and students conduct online learning and broaden their horizons. Teachers can organize a wealth of teaching activities, pay attention to the personality development of students, and stimulate students' imagination and creativity. The teacher's own personality and personality, and deep contact with the students, will have a profound impact on the students. This is also the charm of the university class. In the course, the typical examples of the Internet are used to analyze and discuss practical problems, so that students can better understand theoretical knowledge, such as the basic theory of Chinese medicine processing, pharmaceutical principles and other professional strong theories.

### 3.2 Form a teaching team

"Internet + education" is not a teaching task that one can complete. It requires overall design and regulation. The keynote speakers, assistants, photographers, post-production staff, artists, IT experts and other talents are carefully prepared and carefully designed. Therefore, schools should introduce incentives for teaching reform, support the formation and development of teachers' interdisciplinary teams, actively develop team building of courses, build an incentive mechanism that encourages all teachers to participate, and promote the specialized division of labor and integrated management through the construction of curriculum platforms. For example, traditional Chinese medicine processing and storage through recording related videos including cutting, frying, simmering, etc. Through post-production, the course makes the visual and auditory artistic. While completing the professional operation of the standard, it also makes students feel that learning is a pleasure when they receive professional knowledge.

### 3.3Innovative teaching mode

In the current Internet age, access to various professional knowledge is very extensive.The study of college students should be a higher level of innovation and creativity. The design of activities should be multi-disciplinary and selective. Only such activities can better adapt to individual differences among learners and cultivate students' ability to think, analyze and solve problems independently.

The new teaching model divides teaching activities into three parts: pre-course, in-class and after-school. Before the class, the teacher conducts a trait analysis on the students, and according to the set learning objectives, the task list is designed in a targeted manner. Teachers provide self-study

micro-courses, select excellent MOOCs, select rich media resources, and prepare pre-test questions to provide students with learning resources. Students can express their opinions on the pre-study materials shared by the teachers. The teacher's improved teaching design plan is based on the students' opinions and online communication, test results, etc. for comprehensive analysis.

In the process of teaching in class, students are the dominant players, and teachers play the role of guides and facilitators. The teacher summarizes and analyzes the problems of pre-class feedback. In the classroom, the teacher and the students discussed, and finally concluded the summary of the completion of each group of tasks. Teachers do not focus on lectures in the classroom, the focus is on solving doubts, teachers and students exchange learning. The groups ask each other and learn from each other. The communication between the teachers and the students is further deepened, which is very conducive to cultivating students' innovative thinking and promoting students' mastery of the entire knowledge system.

After class, the teacher sends targeted review test resources to the first student's class and class, through the online learning platform. The teacher evaluates the mastery of each knowledge based on the time the student completes the answer and the correct rate of answer. This kind of learning of knowledge points through the network platform can efficiently and quickly reflect the learning situation of students. The teacher can communicate with the students in time to correct the mistakes in the students' learning, and the students will summarize and reflect.

For example, in the processing of traditional Chinese medicine, the video of wine cellar, vinegar, salt, ginger, candied fruit and oil scorpion is introduced before the class. The teacher uploads the task list. According to the task list, the students use the data query to master the processing methods and cannons of typical Chinese medicine rhubarb, Yanhusuo, Eucommia, Magnolia, Astragalus, Licorice, Sanqi, etc., and investigate whether the relatives and friends have taken it? Whether you are taking raw products or processed products, you can go to the pharmacy to check which preparations contain these Chinese medicines. What is the main treatment range? What is the main role after processing? What happened to the composition after processing? Teachers encourage students to develop new processing methods and processing techniques based on the principle of concocting. Teachers and students collaborate on discussions. The teacher tests the students after class and masters the students' learning.

### 3.4 Diversification of evaluation methods

That is to say, the evaluation subject is diverse, the evaluation method is diversified, and the evaluation content is diverse. It is a diversified incentive and guiding function that gives full play to the evaluation method [3].The evaluation subject is composed of self-evaluation in the group, teacher evaluation, and mutual evaluation of each group. The evaluation method adopts two methods: achievement result and quality evaluation. For example, the results of the processing and storage of traditional Chinese medicines are mainly evaluated through the collection of records, the content design, the small test, the production level of the courseware, the quality of the processed products, the specifications of the processing, the operation and the test results. The quality evaluation mainly includes students' inquiries before class, communication and coordination skills within the group, and independent learning ability. It is the enthusiasm for the students in the class, the ability to express words, the interest in learning, the ability to explore, problem analysis, and ability to solve. Teachers develop evaluation norms. First, students conduct group evaluations, and then each group conducts mutual evaluation. Finally, teachers conduct comprehensive evaluation.

Under the background of "Internet +" education, the hybrid teaching mode can solve some problems existing between the current mobile phone popularization and college classrooms. Students make full use of smart phones to extend the classroom to extracurricular activities,

increase interaction and communication between teachers and students, and promote students' knowledge internalization and ability improvement. This is to some extent to turn the disadvantages into profit, to achieve the purpose of improving college students' learning and learning satisfaction.

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