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# Research on the Reform of Orthopedic Clinical Teaching under the Situation of Internet+

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**Abstract:** In the process of the development of the times, the reform of the medical profession has become more in-depth and thorough, in which more challenges and problems have been encountered, and the requirements of the students trained by the medical school are growing along with it. Under the situation of Internet +, the traditional teaching mode has been substantially revolutionized and upgraded, which has produced higher quality requirements for professional teachers. This paper explores the reform path of orthopedic clinical teaching under the situation of Internet+.

**Keywords:** Internet +; Orthopedic teaching; Clinical teaching

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## Introduction

Orthopedic medical students to master orthopedic diagnosis and treatment of related diseases have a certain degree of difficulty, which requires professional teachers to invest more energy in which to carry out deeper exploration, this paper reflects on the reform of orthopedic clinical teaching under the situation of Internet +.

## 1. Orthopedic clinical teaching methods in the situation of Internet + situation

### 1.1 Microteaching

Microteaching mode is aimed at the traditional teaching mode of innovation and upgrading, the arrival of the micro-age of teaching puts forward new requirements, the need for teaching staff to take the initiative to make up for the problems that exist in the traditional clinical teaching, this microteaching form of teaching saves the time of teaching, clear teaching focus, and has become an important teaching tool, and the final effect is also immediate, by the teachers and students of the pursuit of. Microcourse teaching significantly improves the participation rate of students, the relevant aspects of the research shows that through the microcourse platform teaching mode applied to orthopaedic clinical teaching, found that many of the quantitative indicators are more obvious, especially to promote the growth of the students' practical ability, the students for the microcourse course of the importance of the higher degree of memory is also more likely to focus on the process of explaining the knowledge of microcourses, the student's thinking has been tempered, mind More active, for the formation of students' clinical diagnosis and treatment thinking is of great significance.

### 1.2 Catechism teaching

Catechism is a kind of large-scale network open course with sharing, using the Internet platform to provide all students with common learning, the cost of catechism teaching form is relatively low, and has the characteristics of interactive learning. Under the background of catechism teaching, teachers pay more attention to the connotation of the course, and it is more convenient for the connection and transmission of high-quality resources, and it is not restricted by the region to obtain the sharing of resources, so the students will be more democratic in learning. Relevant reports show that the opening of catechism courses in orthopedic clinical teaching provides us with broader and more convenient medical learning resources, but at the same time, it also has certain limitations, for example, there is no way to provide students with hands-on opportunities, as well as the supervision and evaluation of the students is relatively weak, and the way of assessment needs to be optimized. At the same time, it is difficult to have a cheerful classroom atmosphere under the teaching environment of catechism, and the problems generated temporarily in teaching and the wonderful moments in the classroom will not appear.

## 2. The reform of orthopedic clinical teaching in the situation of Internet + situation

### 2.1 Computer technology for orthopedic clinical teaching reform

The development of computer technology is one of the greatest inventions of the 21st century, and it is also the main trend and symbol

of educational reform in recent years. The application of computer technology reflects the education of the times, showing a higher teaching efficiency, especially the combination of computer three-dimensional animation technology and modern imaging, which can help medical workers to make a more correct and accurate diagnosis of the patient's condition, and can also be used in the late stage of the judgment of the injury and healing treatment. At present, the commonly used computer diagnostic techniques in orthopedics include X-ray and CT, etc. The main purpose of carrying out orthopedic clinical teaching is to help and lead students to learn to judge and diagnose various types of orthopedic diseases, and the teacher's task is to make use of modern technical means and equipment to make in-depth elaboration and analysis of the patient's condition, and at the same time, guide the students to obtain the key information content from these imaging data. The teacher's task is to use modern technology and equipment to explain and analyze the patient's condition in depth, and to guide the student to obtain key information from the images, so that he or she can understand the pathogenesis of different diseases and formulate effective treatment plans. Disease occurrence and development is a dynamic process of change, in different environments, its content has a different form of imaging performance, so for the same disease, may be due to the patient's different environments and present different images, for the image to do an objective analysis and processing can help staff diagnose the cause of the patient's disease, but also in the process of the image observation to find some unfavorable factors It can also help staff to diagnose the cause of the patient's disease and detect some unfavorable factors in the process of observing the image to prevent it and realize the ultimate treatment purpose. As the disease will develop and change, the judgment of the same image requires a comprehensive review and summary of the results of the previous stage, but also need to predict the subsequent development of the disease, this skill suggests that the students should learn to look forward and backward in the process of treatment, have a sense of the big picture, and consider the issue in a comprehensive manner, but at the same time there is also a problem, that is, in the different diseases although there are differences in the individual patient, the environment is different, and the cause of the disease is also different. The problem is that, although there are differences in the individual patient, the environment is different, and the etiology of the disease is inconsistent, the final imaging manifestations are similar. In this regard, it is necessary for teachers to combine diversified information to guide students and give them specific methods for mastering and recognizing images. The use of computer technology to assist in the development of teaching tools enriches the form of teaching and provides more effective teaching products, including text, audio, video, etc., all of which can be used in the teaching work to facilitate teaching.

## **2.2 Internet+ for Orthopedic Clinical Teaching Reform**

Intelligent devices have become an important tool and equipment in the current era. Intelligent devices are usually lightweight and convenient, affecting all aspects of people's lives, and providing a communication tool and a platform for people to explore the world. Nowadays, its functions are constantly enriched and increased, and the quality learning resources contained therein are also becoming more and more abundant, people can use only the device to obtain key learning resources, so its advantages should be fully utilized, so as to provide convenient conditions for the development of teaching and learning. There is a new teaching method is the Internet + lecture mode, it is a kind of Internet as the basis of the teaching method, in the near future will become a powerful tool in the teaching work and auxiliary teaching means. Internet + teaching mode is based on the theme of the course combined with PBL teaching method, before the class arranged for students to complete the pre-study according to the theme content, while in the course of the teacher's mastery of clinical cases and the progress of the discipline is introduced, after the course to allow students to explore the case of the treatment of the case of the effective program, this Internet + teaching mode is based on the premise of the theoretical teaching with the method of experimental teaching, to solve the traditional problem of theory and practice in the teaching work. This Internet + teaching mode is based on the premise of theoretical teaching, with the laboratory teaching method, which solves the traditional problem of the separation of theory and practice, provides students with the soil and opportunity to practice, and allows students to learn more in the process of learning, and also builds a high degree of enthusiasm and self-confidence in learning. Internet + teaching mode is very effective in solving the teaching limitations of the past teaching work can only be limited to the textbook teaching limitations, cultivate students' innovative thinking, students need to solve the difficult problems through their own brain research, after the end of the course, students and teachers can use the Internet + system of intelligent devices to interact and communicate, summarize and reflect on the teachers, they can use this to determine the students in the classroom For teachers, they can use this to determine what knowledge students have mastered in the classroom, what knowledge is still a problem, and then can also do the corresponding check and fill in the gaps, students can also understand the problem more deeply, can put forward some of their own doubts to the teacher, for the subsequent reform of teaching to lay a solid foundation for the development of the teaching and learning to achieve the goal of teaching and learning to grow together.

## **3. Conclusion**

The reform of orthopedic clinical teaching under the situation of Internet + needs to realize the flexible and full application of computer

technology and Internet + to promote the change of the traditional teaching mode and improve the efficiency of teaching. But even so cannot completely abandon the traditional teaching mode, especially in the traditional teaching mode of intuitive and vivid language and sincere and deep emotional communication between people, only the combination of traditional teaching and advanced computer technology, each with their own strengths, in order to achieve more effective and critical orthopedic clinical teaching goals.

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