Research and Practice of Online and Offline Mixed Classroom Teaching of Pathology Based on Computer Technology

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Abstract. We can see that the teaching method of pathology in the old times was very single. According to the students' reaction, the traditional teaching method and its effect are very poor. To some extent, it may limit students' initiative thinking and creative thinking. This is a very unfavorable way to cultivate innovative talents. In order to meet the needs of Pathology Teaching in today's society, people invented a mixed classroom teaching mode of online teaching and offline teaching [1]. Online teaching and offline teaching mode is a new teaching method that connects offline general teaching with Internet platform. With the support of computer technology, many medical schools have begun to implement the mixed teaching mode of pathology teaching. According to statistics, this teaching process can promote the learning of pathology.

Keywords: Computer Technology, Pathology, Mixed Teaching

1. Introduction

According to the relevant theories of medicine, we can understand that the relationship between pathology and clinical medicine is very close. As a basic medical discipline, it is also a bridge between basic medicine and clinical medicine. It is very important in the teaching of medical courses. As a basic subject, the content of pathology is very complicated. For many medical students, its learning task is very heavy. At present, the traditional teaching method of pathology has been unable to meet the learning needs of contemporary medical students [2].

On this basis, people invented online pathology teaching platform. After that, people gradually found that the efficiency of online pathology learning is very high. However, online teaching is still a double-edged sword. Although it can provide students with high learning efficiency, it can not be used as a real teacher. In the traditional classroom, teachers can take care of students to complete relevant studies. However, online learning platform lacks this point. In order to better solve this problem, based on the support of computer technology, people have developed a mixed teaching mode of pathology online teaching and offline teaching. It has been proved that this model can effectively promote the deep learning of pathology for medical students.

2. The present situation and main defects of Pathology Teaching
Through the narration of medical students, we can understand that pathology is a basic medical subject. It covers a lot of medical fields. These areas include western medicine, traditional Chinese medicine, integrated Chinese and Western medicine and other specialties. However, the present situation of pathology teaching is obviously not very good.

2.1. The present situation of Pathology Teaching
We can know that there are many medical colleges and universities. Each medical school has its own unique specialty and strong specialty. Therefore, the teaching level of pathology teachers in different schools varies greatly. There is no doubt that this is an obvious problem. The academic level of students trained by different teachers’ courses is also quite different. Moreover, due to the limitation of traditional teaching mode, it is difficult for many students to broaden their horizons and patterns in learning. This is a terrible thing.

2.2. The main defects in the teaching of Pathology
Medical specialty should combine theory with practice as the main teaching method. This is the only standard for a medical student to learn professional knowledge well. However, in the current teaching of Pathology, teachers pay more attention to the assessment of students’ theory and ignore the development of students’ practice[3]. Moreover, according to the feedback of students from different medical colleges, it is difficult for them to concentrate in the study of professional courses, and even many students will be very disgusted with the pathology class. This is an important defect in Teachers’ classroom teaching (see Figure 1).

Figure 1. The research stage of Pathology

3. Advantages and disadvantages of online teaching of Pathology
The emergence of online pathology teaching platform has subverted people's views on traditional medical education. Before that, people thought that only the traditional classroom could help students learn professional knowledge. Generally speaking, the emergence of online platform under computer technology is successful. On the other hand, it's not perfect.

3.1. Advantages of online teaching of Pathology
Online teaching can present the curriculum resources of excellent pathology teachers to students through multimedia. No need to listen to the class in the actual classroom, students can also listen to each teacher's online courses through the computer network platform. For some studious students, this is a very favorable learning platform. It can greatly improve students’ interest in learning and help them expand their innovative thinking. If students don’t understand the content of the course in a certain period of time, online resources can provide the form of repeated watching to help students repeat learning. Repeated learning can help students to remember all kinds of knowledge.
3.2. Disadvantages of online teaching of Pathology

According to the above description, we can know that intelligent computer network system can provide a lot of learning resources. However, it is not a perfect instructor. It can only have a lot of resources, but not the pioneering thinking and active brain activity of human beings. In the old classroom teaching, teachers can supervise students' daily learning. They can supervise students to complete their various studies. This is a very good learning mode for the students with weak self-control. However, the shortcomings of online teaching of pathology are obvious. (see Table 1)

| Option                              | Satisfaction |
|-------------------------------------|--------------|
| Resources of online teaching        | 85%          |
| Supervision rate of online teaching | 25%          |
| Resources for offline Teaching      | 30%          |
| Supervision rate of offline Teaching| 90%          |
| Blended teaching                    | 80%          |
| Online teaching only                | 45%          |
| Only use offline Teaching           | 40%          |

Table 1. Investigation on online and offline teaching mode of pathology based on computer technology

4. Advantages and disadvantages of the old teaching mode of Pathology

The old teaching mode is a good teaching mode for many students' parents. Many parents think that the old classroom teaching can help them to supervise their students' daily learning. Indeed, the classroom teaching of pathology can provide students with more knowledge. However, it is also a sharp double-edged sword[4].

4.1. Advantages of the old teaching mode of Pathology

As we all know, the teacher's role is not only as a knowledge infusion machine. In the traditional classroom teaching of Pathology, teachers can not only teach students a variety of knowledge, they can also help students solve various problems. These problems include life problems, psychological problems and comprehensive problems. In addition, the exchange of learning experience and emotion between students and teachers is also an important help for students' future growth. The transmission of pathology teacher's experience can help medical students to understand medical knowledge more deeply. The effect of this training mode can not be achieved by online teaching.

4.2. Shortcomings of the old teaching mode of Pathology

The traditional teaching mode has become a mature teaching idea. It can not make great teaching reform through the efforts of the outside world. Many teachers and many students have been used to the traditional teaching methods of pathology. Familiar things can make people more numb and boring. Many students don't like the rigid way of learning in the classroom. Therefore, many students can not concentrate on listening to the teacher's knowledge. Moreover, many teachers with low academic level have many problems in classroom teaching. In general, many teachers are just numb to copy the content of the courseware. This is not conducive to students' learning of pathology.

5. Research and practice of online and offline mixed classroom teaching of pathology based on computer technology

According to the comprehensive description above, we can understand the advantages and disadvantages of online and offline teaching of pathology. After people understand these contents, people combine the online teaching mode and offline teaching mode of pathology and apply it in the daily teaching of pathology[5]. This new teaching mode is called mixed classroom teaching mode by educators. At present, many schools have applied this teaching technology to practical work.

Theoretically speaking, many teaching resources of online teaching provide students with a platform for autonomous learning of pathology content. This way of learning is very conducive to
students who love learning. On the other hand, in the old off-line teaching mode, teachers urge students to complete their academic tasks through continuous supervision. For students with poor self-control, the emergence of this teaching mode is necessary. Generally speaking, the hybrid teaching mode has grasped the advantages of online teaching and offline teaching of Pathology, and it has abandoned their shortcomings. According to a large number of practical research, educators found that the mixed teaching mode of pathology is very effective for students' medical professional learning.

6. Conclusion
In fact, there is a shortage of medical personnel in our country. The development of Chinese medicine needs the cultivation of medical students. As a necessary basic medical discipline, the content of pathology is very complex. However, its study is also the most important in the learning career of medical students. According to the overall description above, we understand the current situation of online teaching and offline teaching of pathology [6]. In my opinion, the mixed teaching of pathology can realize the reform of the whole teaching process of medical courses. There is no doubt that it is necessary and important to study the online and offline mixed classroom teaching of pathology based on computer technology. In a sense, it is also a successful research project.

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