Research on the Application of Normal Recording and Broadcasting System in College Teaching

Li Pang, Haiyun Xiang

Network and Information Center, Southwest Petroleum University, Chengdu 610000, China

Abstract

The reform and development of education can not be separated from the support of information technology. Building an information platform can provide a good teaching environment for teachers and students. As a product of the information age, the normal recording and broadcasting system plays an important role in improving teaching quality. This paper first introduces the functions of the normal recording and broadcasting system, then analyzes the actual problems in college teaching at present, and finally expounds its practical application from three aspects: enriching the teaching resource base, paying attention to the all-round development of students, and improving teachers' teaching ability, which provides certain reference value for colleges to improve teaching quality by using information technology.

Keywords

Recording and broadcasting system; Information teaching; Classroom application.

1. Introduction

With the continuous development of multimedia technology, information technology and network technology, more and more teachers begin to use information technology to serve teaching, such as micro class, mooch, short video, flipped class, maker space, remote interaction and other teaching forms. The diversification of teaching methods makes obscure knowledge points easy to understand, which can help students improve their learning enthusiasm and learning effect. The use of new technologies to serve teaching generally requires teachers to have high information literacy. Young teachers are the main force in the use of new technologies, which is a challenge for old teachers and teachers who are not skilled in the use of information technology. Therefore, the normal recording and broadcasting system came into being, which can help teachers operate after relatively simple learning and achieve the purpose of new technologies serving teaching.

2. Normal Recording and Broadcasting System

The normal recording and broadcasting system is developed based on the multimedia system. It uses computer network and multimedia technology to digitize the teaching process in real time [1]. It adopts B / S architecture and has multiple functions such as full-automatic intelligent tracking, high-definition recording, online class tour, multi-channel input, audio and video synchronization, multi picture editing [2]. Therefore, the normal recording and broadcasting system can realize the functions of teachers' production of teaching videos, online class tour by teaching managers paying attention to students' class status and other functions will help to achieve better class quality.

3. Problems in College Teaching

3.1. Difficulties for Teachers to Establish Micro Curriculum Resource Bank

Colleges and universities have higher and higher requirements for young teachers' teaching. Every year, there are various forms of competitions such as micro classes, quality classes, micro videos, and excellent open classes. There are a large number of teachers, and the school has few venues for micro class recording. In addition, excellent works often need the assistance of professionals in camera shooting, post editing, video dubbing and so on. Teachers with poor information technology ability can generally not complete their works independently, It is difficult to establish your own micro curriculum resource bank, which leads to the fact that good teaching resources can not be saved conveniently.

3.2. Some Students' Learning Enthusiasm Is Not High

Compared with primary and secondary schools, college classes are more free. Students' initiative in class is affected by many factors. First, Students with insufficient self-discipline tend to be distracted during class. If they don't listen carefully to their knowledge points for a while, they may fail to keep up with the later courses; Secondly, the content of some courses is obscure and difficult to understand, which makes students lose interest in learning the courses; Finally, the discipline requirements for students in college classes are low, there is no strict supervision mechanism, and some students play mobile phones in class, resulting in poor learning results.

3.3. Some College Teachers Have A Weak Sense of Teaching Responsibility

Before teaching, college teachers will participate in pre job training and course trials. Some teachers will practice teaching with old teachers for a few years before formally undertaking the course independently. Some teachers start teaching through pre job training and course trials. However, most of the ordinary teaching has no special assessment standards. In addition, teachers have great pressure on scientific research, teaching tasks and transactional work, As a result, some teachers are unwilling to spend too much time and energy on teaching, resulting in random teaching content and affecting the learning effect of students.

4. Application of Recording and Broadcasting System in Teaching

It is an important duty of colleges and universities to improve the quality of classroom teaching and cultivate more talents for all walks of life. In view of the problems existing in college teaching at present, the normal recording and broadcasting system can help teachers apply it to the classroom and improve the classroom teaching effect by using its relatively perfect functions and simple operations.

4.1. Convenient Establishment of Micro Course Resource Library

The normal recording and broadcasting system is equipped with a high-definition camera at the front and rear of the classroom, which is used to capture the teacher's panorama, teacher's close-up, student's panorama and student's close-up. According to the algorithm set in advance, it automatically captures the teacher's moving track, captures the teacher's picture and PPT picture, switches to the PPT picture when there is a change in PPT, and gives close-up to students when there are students answering questions. The last recorded video is the teacher, students PPT automatically switches the synthetic video according to the algorithm, avoiding the trouble of consuming manpower for multiple stands and editing and synthesizing multiple stand videos in the later stage. At the same time, it also supports the output of three signals separately and editing according to the needs of teachers, which helps teachers to easily make micro videos and establish a course resource library.

4.2. Strengthen Classroom Supervision and Pay Attention to Students' Development

Students' classroom learning status is an important factor affecting classroom teaching effect. The regular recording and broadcasting system provides a supervision platform for teachers, counselors and relevant functional departments, and can grasp the class situation of students at any time. According to the recorded video, teachers can find out the students' listening status in time, adjust teaching methods in time according to the students' status, and focus on students with poor learning results; Counselors can also combine the evaluation of teachers, observe students' class status, strengthen the inspection of students' classroom style of study, strengthen communication with students, urge students with poor consciousness to pay attention to their own development, and help them improve their learning results.

4.3. Improve Teachers' Teaching Ability

Teaching reflection is an important link in improving teachers' teaching ability. Through teaching reflection, teachers can check, analyze, feedback and adjust their own teaching process to form a systematic and scientific teaching concept[3]. Although teachers can learn a lot of knowledge through training, observing excellent open classes, and discussing with each other, it is often difficult to find problems in their teaching process. The recording and broadcasting system records the whole recording process of teachers, which helps teachers find out the shortcomings of their teaching, such as teacher-student interaction, mantras, and students' acceptance and attitude towards different teaching methods, It can help teachers to complete normal teaching reflection, constantly correct problems in the teaching process, and improve their teaching ability and professional quality.

5. Summary

The progress of information technology has provided new opportunities for the teaching reform and development of colleges and universities. The functional environment provided by the regular recording and broadcasting system, such as course recording, classroom supervision, online class patrol, online observation and so on, helps teachers to solve many problems in the teaching process. Making full use of the recording and broadcasting platform helps to create a good classroom atmosphere, pay attention to student development, and improve teachers' own teaching ability, so as to improve teaching quality.

References

- [1] Zhi Li, Yimin Tang. Research on intelligent recording and broadcasting system based on normal teaching [J]. China modern education equipment, 2010 (24): 23-26.
- [2] Houcong Lin. Research on the application of intelligent recording and broadcasting system in primary and secondary education and Teaching [J]. China education informatization, 2011 (02): 59-62.
- [3] Xin Zhang. Research on improving the teaching ability of new college teachers based on teaching reflection [J]. Scientific consultation (education and scientific research), 2021 (07): 67-68.