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Research on the Integration of "Multimedia Technology and Application" Teaching in Smartphone

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Abstract. As modern technology becomes more and more developed, mobile phones have entered the teaching process with their popularity and convenience, and the use of mobile phone classes has become more widely accepted by students. This article takes the "Multimedia Technology and Application" course as an example to analyze the teaching philosophy of the integration of mobile phones and teaching, discusses the impact of mobile phones on information-based teaching, and guides students to use mobile phones to implement information-based interactive classrooms with the support of mobile apps.

Introduction

With the popularity of mobile Internet technology and smart phone, mobile phone into the classroom has formed an irresistible trend, and the traditional classroom teaching mode has been strongly impacted. The use of mobile phones in the classroom has become a normal phenomenon. Some schools have formulated the management rules of "no mobile classroom" in order to reduce the dependence of students on the mobile phones in class, but the effect is not good. Therefore, in the light of the characteristics of the "Independent College" and the characteristics of the students, under the background of the project of "higher education reform project of Guangdong undergraduate higher education" and "innovative and entrepreneurial education and applied talents training course", the author carries out the exploration of the teaching mode of the mobile phone into the classroom and the micro course, and combines the modern technical means. The use of multimedia and three-dimensional teaching resources has achieved good teaching results. This paper discusses the implementation process and mode of information interactive classroom, and analyzes its application effect.

Interactive Classroom Implementation Process

Mobile classroom refers to the efficient learning classroom with mobile tools such as mobile platforms and pads. Mobile phone teaching provides the functions of supporting classroom teaching activities, including uploading classroom materials, issuing course announcements, initiating problem discussions, assigning assignment tasks, carrying out questionnaire surveys, and attending classroom functions. Almost all traditional classroom teaching activities can be completed through the mobile teaching platform [1].

Choosing the Right Mobile App. In the course of modern teaching, it is very popular to use information teaching tools to carry out classroom teaching. In the process of learning, mobile phones need a lot of tasks such as communication and communication, classroom in teraction and after-school homework [2]. At this time, a useful information teaching tool is indispensable. At present, many businesses have launched many mobile phone App mobile c lassroom applications, such as blue ink class, fast class network, excellent Moore class, etc. The main functions include: attendance in class name, online mobile phone viewing course ware, classroom testing, information sharing, online questioning, and other functions for clas

sroom teaching into a diversified teaching model. In addition, there are a lot of shared reso urce class App sites, such as Love Course Network, Netease Cloud Classroom, China Univ ersity MOOC, and so on, which provide many excellent national sharing class resources. Te achers can choose one or more applications according to their needs according to the softw are function and classroom characteristics, and provide a perfect solution for the interaction between teachers and students in traditional classroom teaching.

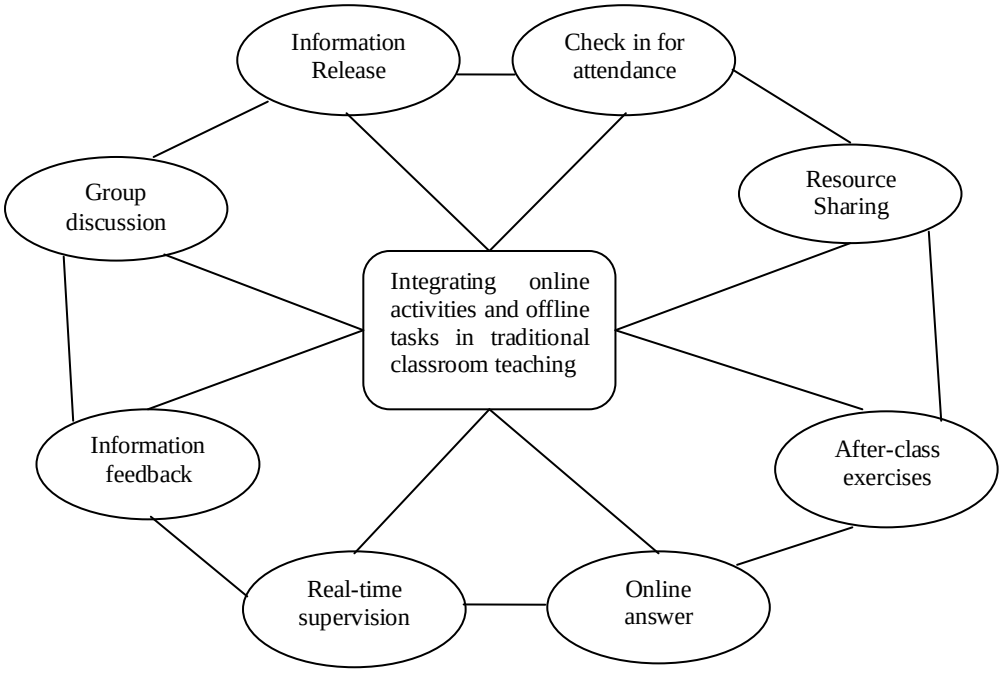

Figure 1. Finite Integrating online activities and offline tasks in traditional classroom teaching

Designing the Proportion of Teaching in Interactive Classroom Rationally. The teaching hours of multimedia technology and application courses are 48 hours (including 16 hours of classroom teaching and 32 hours of practice class). The above teaching mode is the main teaching mode while classroom teaching is subsidiary. The classroom teaching content of 16 school hours mainly includes: multimedia technology basic knowledge (2 hours), data compression (2 hours), application of image processing software (4 hours), application of animation software (4 hours), application of audio processing software (2 hours), application of video processing software (2 hours) [3]. In the whole teaching link, we integrate the line with the offline before class, while class and after class, as shown in Fig. 1.

In the 32 hours of hands-on classroom operation, students can concentrate on experimental class time to complete task requirements based on the tasks posted online, and submit the assignments online at specified time points. The initial stage of the reform was to use the existing teaching resources of the third-party certification platform, using multimedia teaching equipment, network classroom resources, and an online teaching platform. Using the task-critical model, students' enthusiasm for ingesting knowledge was generally improved, and the richness of classroom content and student learning were enhanced. In the process of interaction with the network platform system, students can self-learn knowledge points and self-test at any time, and teachers can also grasp the students' completion status and knowledge status through the Internet platform. As reforms continue to advance, mobile phones have now been introduced into experimental teaching, and the proportion of mobile applications has been continuously increased. Students directly log into the online teaching site through the mobile phone app, refer to online video teaching steps, self-learning corresponding knowledge points, and complete the corresponding experimental teaching task.

Organizing Teachers to Develop Three-Dimensional Teaching Resources. The research group regularly organizes teachers to carry out curriculum reform research, and invites App development

experts to develop the training and application of mobile phone software. In addition to the task of classroom teaching, teachers also include the construction of various kinds of teaching resources, including courseware making, the publication and maintenance of the information resources of the network learning platform, the construction of test questions in the examination system, the release and maintenance of the information of the mobile phone, the online discussion and answer of the students. The teaching team of this course, with young teachers as the main force, is very sensitive to the new teaching mode, and is very responsive to the teaching idea of mobile phone classroom. While improving teachers' teaching enthusiasm, it also promotes the attention and recognition of other classroom teaching mode reform.

The three-dimensional resources are built according to the different professional characteristics, including the supporting materials, the network course video, the teaching electronic courseware and the experimental process video. Finally, the results are uploaded to the student network teaching platform, and the mobile App is released simultaneously to realize the three-dimensional resources sharing. All the teaching resources are obtained through the Internet, and two supporting teaching materials are compiled and published according to professional characteristics: classroom teaching materials and experimental teaching materials. Other electronic teaching resources include: supporting ppt courseware, after-school exercises, and experimental teaching reference videos are distributed on the network platform and mobile phone sharing. Diversified curriculum resources create a three-dimensional learning atmosphere, textbooks are no longer the only curriculum resources, students not only have a more comprehensive but abstract paper material, but also have information media and network teaching materials, including electronic teaching cases, CAI courseware, case base and streaming media. The network learning platform based on multimedia and network technology greatly expands the space time latitude of curriculum resources [3].

Selecting a Teaching Class as a Pilot for Reform and Gradually Promoting It. The multimedia technology and application courses were conducted in the three departments of the Chinese Department, the Foreign Language Department and the Music Department. The number of students involved is approximately 3,000. In order to examine the application of the teaching mode of the mobile classroom, the first course of the Chinese language course is selected to take the lead. The teaching reform of multimedia technology and application courses is carried out. The teaching modes of self-learning, collaborative learning, classroom teaching, experimental training and so on are combined to set teaching content for professional features and students are encouraged to adopt a variety of learning methods for course study. Through the comparison of the results of a semester's teaching reform, it is obvious that the students’ ability to accept new things is very fast and is very popular with the teaching model to realize the real individualized learning. The second academic year is gradually popularized in the rest of the major, and combined with the experience of the previous Chinese teaching class, this teaching model has been popularized on the basis of existing teaching resources, which has formed an intelligent interactive classroom model with new forms and fast information dissemination. It is to innovate the teaching model of the Zhuhai college class, promote the teaching of wisdom and improve the teaching of the Jilin University. An important step has been taken in the utilization of high number of teaching resources.

Mobile Classroom Model Research and Application Effect Analysis

The emergence of smart phones and mobile Internet makes traditional classroom more and more difficult to continue. When the smart phones enter the classroom, the classroom is no longer closed, as the wall of the classroom is hit by a big hole, and the students often go out through the hole, and the peace in the classroom is broken. Smart phones, like a window, take us to the outside world, let us see the people and things outside, communicate with people outside, and bring the outside information into the classroom, bring multiple views into the classroom, and close the distance between learning and life, the distance between theory and practice [4]. Although many teachers with strong traditional ideas still think that mobile phone entering the classroom will affect the students' attention, the temptation brought by the smart phone is hard to stop. The mobile phone and network in the information society have become the necessities of life. The traditional classroom

has not adapted to the teaching mode of some courses, and the reform is imperative. The teaching reform practice of "multimedia technology and application" course has abandoned the traditional teaching mode in the reform mode, made full use of the three-dimensional teaching resources and mobile terminal teaching mode, and achieved certain results. The application effect is analyzed:

Research on Model of Mobile Interactive Classroom. Learning in the information age is based on the era of personalized learning in the mobile Internet. Mobile phone classes will gradually be promoted to university classrooms, middle school classes, and even basic education. Any different learner can choose different micro classrooms according to their own goals and interests to carry out the individual setting progress of personalized learning. Anyone can access various mobile micro-classrooms from different paths. In different micro-classrooms, they can learn from a certain teacher together with different classmates. They can watch the lecturer's courses together with these temporary classmates, read related learning materials, participate in relevant discussions and sharing, and complete assignments and exercises. When learning, learners can receive personalized help from the teachers, assistants, and peers. The entire society forms a personalized lifelong learning environment. This change is likely to be revolutionary and will bring about fundamental changes in education and teaching [5].

Improving Teachers and Students' Ability to Use Network Resources. The mobile phone classroom provides many classroom teaching auxiliary activities such as uploading information, sharing resources, issuing notices, initiating discussions, setting up assignments, carrying out questionnaire surveys, and class number statistics [6]. Almost all of the traditional classroom teaching activities can be completed through the mobile App learning platform. Even the topics in the classroom can be extended to after class to engage in relevant topic discussions for any time and place [7]. The promotion of this teaching method has a relatively high requirement for teachers' informatization application ability. Teachers are required to master the basic mobile phone terminal operation capabilities and network application technology foundation. Students must learn how to make reasonable use of network resources and extract and use effective information from various information data.

Analysis of Advantages and Disadvantages of Application Effect. In the early stage of teaching reform, some teachers are not suitable for the new teaching methods because of the transformation of teaching forms. Some skills need teachers to restudy and teachers have great pressure, but after repeated investigation and practice, the professional level of teachers is rapidly improved [8]. With its convenience, novelty and speed, mobile phone classroom mode is popularized among students, connecting online and offline, extracurricular and extracurricular learning. But at the same time, there are some drawbacks. First, the classroom supervision is not convenient, the proportion of the students to use mobile phones is as high as 90% in class. The function of the specific use of mobile phones is varied, and most of them are used for entertainment and chat. Second, the size of the mobile phone is small and light, easy to hide in the classroom, increase the difficulty of the teacher's supervision, if the teaching method is more boring, students can easily take the mobile phone to kill time [9]. If we want to bring students' attention back to the classroom, we must work hard from the basic setup of teaching content and mode. This kind of teaching mode is more free and autonomous to students, and requires students to learn independently, discover and cooperate, so as to cultivate the students' self-learning ability in the information society [10].

Conclusions

Teaching reform is a long-term and arduous task that cannot be accomplished overnight. The Zhuhai University curriculum reform has taken the first step. This article takes the multimedia technology and application curriculum reform as a background and achieves good teaching results. The results show that the integration of students' smart phones into classroom teaching has become an independent learning tool and information interaction platform, creating favorable conditions for innovating university classroom teaching models, advancing smart teaching, and improving the

utilization of digital teaching resources. We will gradually promote it in different courses in the future teaching practice.

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