

# *Research on Application of Teaching Resources Information Platform Based on Mobile Internet in Teaching*

Yuqin Zhao, Kunlai Sun, Yin Chen, Bin Wang, Youle Qu  
School of Food and Pharmacy  
Zhejiang Ocean University  
Zhoushan, Zhejiang 316000, China

**Abstract**—With the development of informatization, the Internet has popularized in our lives. In teaching, it is also more applicable to Internet technology. The teaching method is no longer a traditional unilateral education. The organic combination of the Internet and teaching methods is a major step forward in education. The change is of great significance. This paper puts forward its own views on the application of informatization of connected teaching resources in teaching.

**Keywords**—*Mobile internet; informationization; teaching*

## I. INTRODUCTION

In the face of the era of mobile internet and teachers in the intelligent age, the improvement of teaching ability in the information environment must change the concept, and the concept has changed everything! The concept remains the same, and the network does not necessarily replace the teacher, but teachers who make good use of the network will have more advantages than teachers who do not use it [1]. The information age has greatly enriched the teaching resources. The network is the best teacher for students, and the authority of teachers is also facing challenges. Good teachers are more likely to move from the podium to the network, and teachers will also have class differentiation. The current classroom is developing into online classrooms and mobile classrooms, and teaching has become a hybrid teaching on the offline [2]. The role of the teacher is changed-to be the protagonist; the passive learning becomes active; the teaching content is more from the network than the book; the teaching method is changed from teaching to activity. Teachers can use information technology to collect all the data from the student's learning process from time to time. Based on these data, teachers can conduct personalized analysis on the one hand, adjust the teaching content in a targeted manner, and use the "timely feedback" of big data on the other hand. The process of student's learning process is automatically generated and the process evaluation is changed. Through various resource libraries and platform software to assist our teaching, technology is no longer a problem, and the change of concept is the most important.

Nowadays our society is gradually developing towards automated informationization. The Internet is now inseparable from our lives. In terms of teaching, the most widely used in

China is in the library. Our traditional way of borrowing books is to go to the library, and then you can register the book before you can take it out. Now, mobile phones and tablets have stepped into every household. We only need to download the corresponding APPs to complete the borrowing of various books. Many colleges and universities now sign agreements with libraries to share resources.

## II. THE CONSTRUCTION OF MOBILE INTERNET TEACHING PLATFORM

1. Preparation for the informatization of teaching resources. The informatization of teaching resources will surely become the theme of the development in the social era. The teaching resources will be displayed on a platform through the Internet, so that more people can use them. Internet technology is the core of this series of work. The current teaching resources are not single, and become rich and diverse. When building a resource information platform, we must ensure the freedom and convenience of resources and enable people to find the resources they need quickly and accurately, which is more humane. Among them, the cloud service system can use the Internet to reasonably classify the teaching resources, present them in different forms in front of the students, and apply the flexible resources. This is what people are now pursuing.

The teaching resource informatization basic platform is the premise of informatization teaching. The platform built with cloud technology is the best way to deploy the basic platform, and provides good support for the development of mobile internet-based teaching activities. The cloud technology platform is characterized by high efficiency and flexibility, which meets the diverse needs of the teaching resource information platform and can provide functions such as multi-application system, data redundancy support, application load balancing, middleware service, data migration and flexible management. The efficient and stable operation of the information platform provides protection. In addition, it is necessary to build a cloud classroom, deploy a cloud desktop classroom, and realize integrated management of the cloud platform.

2. Construction of a teaching resource information platform. The development of a software is all about the convenience of people's lives. The information resource

---

This research was supported by Zhejiang Ocean University "Thirteenth Five-Year" Transformation and Development Project - General Education Course Construction Project.

platform is no exception. The purpose is to enable people to get the resources they want at anytime or in anywhere, regardless of location and equipment [3]. In the school, the teacher is able to transfer the required teaching video or audio at any time during the course of teaching, which makes the classroom teaching more vivid and the efficiency will be greatly improved. The ultimate goal of the platform is to serve the masses, make them safe, easy to manage, and to be highly applicable.

Platform development must first be able to move the Internet, enabling its access anytime, anywhere and supporting a variety of mobile device access. Secondly, it can be integrated with the existing online teaching platform of the school or the school information teaching application system that will introduce later, and realize the shared resource library service platform integrating teaching resources management, network teaching, teaching resource library and evaluation feedback. It provides communication services for teachers and students, quality services for students to learn independently, and support for improving teaching quality. Finally, the platform adopts B/S architecture, and it is recommended to use LAMP and EB2.0 technologies, and it is safe, stable, easy to manage, easy to maintain, and versatile.

3. The improvement of the teaching information resource library. All the information needed in the teaching process comes from the resource library, so the resource improvement of the library plays a vital role in building the resource information platform. It is very important to establish a fixed information resource transfer station between the resource library and various places in the society, such as libraries, news agencies, newspapers, etc., so that users can access resources at any time. The opening of the resource library enables teachers to independently acquire relevant videos in the classroom, or to design a certain PPT and other classrooms to become vivid, while also improving students' interest in learning and cultivating their ability to learn independently.

Informatization teaching undoubtedly focuses on the teaching resource library. Teaching resources can be built by purchasing independently. Each has its own advantages. However, independent construction can enable teachers to play a leading role in teaching, and actively carry out teaching activities that are beneficial to the classroom. Therefore, the platform must provide teaching resource management functions, so that teachers have certain management authority to actively develop courseware, record media, quote video, and upload their teaching materials to the platform for teaching use. Through accumulation, we can enrich the library of teaching resources and form a unique resource area for teachers' courses. The platform, as a working platform for teaching resources, not only facilitates teachers to teach in the classroom, but also allows students to learn anytime and anywhere. The platform supports all kinds of mobile terminals to access from time to time, which will have a far-reaching impact on information-based teaching activities, so that information-based teaching can keep up with the times.

### III. THE ADVANTAGES OF TEACHING RESOURCE INFORMATION PLATFORM

The establishment of the teaching resource information platform diversifies the teaching methods, and people can learn more independently. The diversity of resources can also broaden people's thinking and cultivate students' creativity. This is also the demand of education now. The development of society requires not only people with knowledge, but also talents with ideas to create, so that the space for progress will be even greater.

1. Diversification of teaching methods. Many people nowadays learn through online classes. The number of students is limited each time in teachers' face-to-face teaching, but they can record their own teaching process and send them to the Internet. Students just want to watch. You can watch and learn at any time and place, so that the student number is not limited, and the value of the teacher can be fully reflected. Students can watch the video repeatedly even if they don't understand for a while, so that the students' learning effect can be improved. With the development of the Internet, the teaching content is not single, and the content of the class can be combined with social practice. In the past, students only watched PPT in the classroom. PPT can sum up the content of the class very well. It is very useful for the after-class review. Now, using the terminal technology, the PPT can be sent to the mobile phone or tablet, and the students can learn at any time. Through the terminal technology, even if the students are not in the classroom, they can interact with the teacher and ask him/her questions online.

2. Diversity of extracurricular activities. The time we spend studying in the classroom is limited, so it is very important to take extracurricular study after class. Nowadays, there is a new mode of education that combines teaching content with animated TV or news. Students can not only learn the knowledge in the classroom but also integrate with the society, and the aspects of understanding are more extensive.

3. Diversified resources. In traditional teaching, the school mainly relies on the purchase of materials to send students to the main, so that it costs a lot, and the preparation of the teaching materials is not the teacher of the school, so there will be some passive impact in the teaching, the Internet makes the teacher. We can write courses on the Internet by ourselves, and let students use their own teaching materials when teaching. It will make it easier for students to understand the teachers' ideas when they are teaching, and it will be much easier to learn.

### IV. APPLICATION OF TEACHING RESOURCE PLATFORM

The establishment of a teaching resource platform allows students to enjoy various resources without leaving home. Students download APP software through mobile phones or computers, and download the required data through network cloud technology, which is not limited by geographical time. Teachers in different places in teaching can also exchange ideas, try to teach the simplest learning methods to students, and promote the innovation of the education system. Teaching should also keep pace with the times and the development of

society. We should combine the teaching system with the Internet, so that the teaching resources can be fully utilized and the scope of teaching can be wider and wider. In the teaching, students use the knowledge to learn and use, constantly set goals for themselves, and experience the sense of accomplishment in the process of realization, which is more conducive to cultivating the ability of independent learning [4-6].

1. For a long time, the teaching resources of colleges and universities have relied on purchases or links. There are very few teachers who develop their own teaching. However, in fact, teachers are mainly based on their own teaching materials. Most teachers will have their own education resources. Every year, schools provide teaching and research funding for education reform, which is used to develop quality courses, course websites, and research and application of the latest teaching results. However, these teaching resources are rarely used directly for teaching because of the lack of corresponding platforms for teachers to share resources. The teaching resource platform based on mobile internet is to solve the problem that teachers resources cannot be shared. Teachers can use this platform to develop more teaching resources for teaching, enhance the initiative and enthusiasm of teachers, and provide independent teaching resources for the platform.

2. The success or failure of education reform lies in the level of teachers' informatization teaching, which is reflected in the ability of teaching resources development. At present, various Internet learning methods have already impacted our college education. Some colleges and universities directly hire network classroom lecturers to replace the teachers of the university to carry out teaching, not to mention the current network colleges have covered all major cities. There is a tendency to replace traditional college teaching. In addition to the ability to issue diplomas, colleges and universities have no advantage. This requires the majority of college teachers to keep pace with the times, improve the level of informatization teaching, and meet the challenges that social education brings to college education. Only by improving the ability of educational resources development and applying it to teaching can we win the reputation of the society and provide suitable talents for the society.

3. The teaching resource platform is prepared for teachers to provide personalized teaching. Teachers have their own space in the platform. They can upload their own teaching resources, develop teaching links, carry out flexible teaching, and interact in real time. Students can customize their own

learning plans according to their personal preferences in the platform, and learn and evaluate themselves through mobile terminals. At the same time, teachers are further encouraged to enrich their individual teaching resources and provide better learning resources [7].

## V. CONCLUSION

Mobile learning is a new model for information learning in the future, and it is also the direction of information teaching reform. It integrates mobile internet, cloud computing, big data, and next-generation Internet to jointly build the information-based teaching era with characteristics.

The teaching mode of the mobile Internet is more convenient for people's lives, allowing the teaching method more flexible and more expansive. The students' self-learning is also stronger. The construction of the teaching resource information platform adapts to the requirements of the current teaching model and enjoys the characteristics of the information age.

## ACKNOWLEDGMENT

This research was supported by Zhejiang Ocean University "Thirteenth Five-Year" Transformation and Development Project - General Education Course Construction Project.

## REFERENCES

- [1] Tao Wei. Construction of Computer Network Course Information Teaching Platform [J]. *China New Telecommunications*, 2017, 19(03), 138.
- [2] Wang Huaiyu, Li Jingli. Application Research of Network Teaching System Based on Mobile Internet Research [J]. *Modern Economic Information*, 2016, (01), 407-408.
- [3] Peng Wei, Zhang Liwu. Research on the Construction of School-enterprise Interactive Information Teaching Resources Platform [J]. *Software Guide*, 2015, 14(04), 194-196.
- [4] Bai Juan, Wang Jingfang. Investigation on the Choice of College Students' Graduation [J]. *University Education*, 2014(11), 107-109.
- [5] Liu Tianjun. Research on Motivation and Influential Factors of College Students' Entrance Examination—Based on Empirical Analysis of Sample Surveys of Six Universities in Shaanxi Province [J]. *Studies in Higher Education of Finance and Economics*, 2013, 16(4), 71-75.
- [6] Du Xiaojing. Analysis of College Students' Professional Values in the New Situation [D]. Shijiazhuang: Hebei University of Economics and Business, 2013.
- [7] Jiang Yangfei. Research on the Professional Values of Contemporary College Students [D]. Wuhan: Central China Normal University, 2004.