

Application and Innovation of Intelligent Mobile Terminal and QR Code Technology in University Practice Teaching Management Platform

Chuanjiang Li

Xinjiang Institute of Technology, Xinjiang Urumqi 839000, China.

Email: 38208963@qq.com

Abstract: Intelligent mobile terminal and QR code technology has a strong application in the university practice teaching management platform. Applied in the practical teaching in colleges and universities and the QR code technology, intelligent mobile terminal for education to promote the efficiency of teaching and the improvement of students' learning interest has great effect, the information storage, transmission, convenient and simple, so colleges and universities should make full use of intelligent mobile terminal and the QR code technology on teaching management platform application value, promote the further development of the college teaching.

Keywords: Intelligent Mobile Terminal; QR Code Technology; College Practice Teaching; Application and Innovation

1. Introduction

Under the background of Internet in the new era, with the continuous innovation and replacement of intelligent mobile terminals, especially intelligent electronic equipment is more and more widely used in university information teaching on university campus. Students can study, work out, shop, play and doing other stuff through smart mobile terminals, and they can complete payment and other social activities through QR code and scan. This phenomenon not only has an impact but also provides an opportunity for teaching management in colleges and universities. If the application value of intelligent mobile terminals and QR codes in practical teaching is reasonably utilized to realize the combination of online and offline course resources, it will have positive significance on teaching mode reform and teaching methods in colleges and universities^[1].

2. Advantage analysis of intelligent mobile terminal and QR code technology

2.1 Enrich teaching resources and improve students' performances

According to relevant research results, the application of QR code in teaching can effectively improve students' test accuracy. This is because the information content of QR code is much larger than that of paper resources, and the display form is much more flexible. For example, students can scan the code after the homework to check or correct errors by watching detailed explanation video, explanation text, electronic courseware and other links with QR. This learning way is in conformity with the contemporary college students' study habits. Students can use fragmented time and place to learn the video, such as micro course resources and knowledge, which promoted learning efficiency, brought great convenience for students and improve students' learning interests.

2.2 Enrich teachers' teaching methods and improve teaching quality

The construction of high quality QR code course resources and their application in teaching can not only improve students' learning efficiency, but also assist in improving teachers' teaching quality greatly. College students' computer level have reached at proficient level generally in the new era and relatively have higher requirements on curriculum resources. Teachers can pass

Copyright@ 2020 Chuanjiang Li

doi: 10.18686/ahe.v4i5.2232

This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

curriculum resources to students through online media such as mobile phones or computers and let them learn in advance to master the knowledge and information. In the classroom teaching teachers can control detailed difficulties on the students' mastery of knowledge and application specifically, using WeChat methods such as in-depth to guide the student to review and consolidate knowledge in class by doing quiz and extending related study and sublimate classroom teaching^[2].

2.3 Enrich teaching materials and innovate teaching methods

Teaching material resources are relatively monotonous by just using paper, and QR code embedded in teaching materials has obvious advantages. Digital teaching resources, such as electronic courseware, micro-class, operation video, teaching case analysis, online test and development resources, can be embedded into paper teaching materials through QR code. The teaching materials and teaching contents become richer and three-dimensional, and the teaching space is expanded and extended. QR code is different from the traditional tape, CD and other ways of storing information, it is more convenient to carry information, which is not afraid of lost, can be stored for a long time and it is in line with the contemporary students' preferences and habits. Students can obtain learning resources by scanning using their mobile phones anytime and anywhere, and teachers can update the teaching resources on the webpage under QR code at any time, which will effectively make up for the deficiency that the paper textbooks cannot be updated in time, and enables students to learn the latest knowledge and keep up with the forefront development of the discipline.

3. Application prospect of intelligent mobile terminal and QR code technology in college teaching

3.1 Application prospect of QR code technology in university practice teaching management platform

In the practical teaching management platform of colleges and universities, the application of intelligent mobile terminal and QR code technology is still in the initial growth stage. It needs to be further improved and adjusted due to its shortcomings and conflicts. This is also an opportunity for the future application of teaching management platform. In the process of practice teaching management application in the future, the core using direction of the QR code is to obtain all kinds of multimedia courseware links and videos by scanning, such as micro class knowledge resources. Constantly improving and optimizing various Internet platform to build and to better the practice teaching management system^[3]. Moreover, the intelligent terminal and QR code technology management and innovation must be strengthened, improve the quality, speed and accuracy of recognition, vigorously promote the intelligent terminal and the QR code application in the teaching of colleges and universities, and maximize the QR code application in colleges and universities.

In practice application of intelligent terminal and QR code technology, colleges and universities' primary task is to set goals according to their own actual situation and relevant requirements in the process of teaching management, track down the steps and standards for the practice management, so as to better education teaching task and the maximization of QR code application, ensure that students are in a safe, free, and more diverse environment to complete the study; secondly, colleges and universities should integrate the advanced technology of QR code based on their accumulated network information technology foundation and advantages, so as to make the perfect and seamless connection and transition, and steadily realize the informatization and high-quality quantification of practical teaching management. Finally, it is necessary to integrate the long version and advantages of traditional teaching, use and integrate practical teaching management, so as to improve the teaching quality more efficiently.

3.2 Application of intelligent terminal and QR code technology in university practice teaching management platform

In the process of the implementation of the practice teaching management platform in colleges and universities, intelligent terminal and QR code technology in the application has the following key points: first is to confirm the teachers' practice teaching management module functions and applications, such as the introduction of teachers' team interface through the improvement of the teachers' personal information and upload, help students and teachers to have more communication and meeting without distance, and form the close relationship between teachers and students; in the management process of classification and sharing of teachers' courseware, teachers can upload resources such as micro-lesson, video teaching and teaching information to the platform to facilitate students' learning and downloading. The establishment of modules such as the teacher star list and the election of star teachers plays a positive role in promoting the relationship between teachers and students by means of platform display and voting for the teachers in the information database, which also promotes the education quality and subject strength. Second is to verify the function of the students' practice teaching management platform and module, such as setting notices of students course information and remind students of the class time, place and content and so on, build student course Tieba, WeChat group, QQ group, etc., to facilitate

students to discuss the difficult points and learning methods of study, which can better help students to develop the capabilities of the cooperation and communication. What's more, the teaching management modules should be set up. For example, the bulletin board can release students' grades, make-up examination results, teachers' evaluation results and statistics of teaching data, etc., and relevant information such as school notices and announcements can be released to facilitate communication between teachers and students.

4. Application innovation of intelligent mobile terminal and QR code technology in college teaching

4.1 Use intelligent mobile terminals and QR code technology for innovative learning

The first step is to use intelligent mobile terminal and QR code technology for individualized learning. According to the requirements of the teaching mode reform in colleges and universities, it is necessary to develop the students' subjective initiative in college teaching, take the students as center, and set up the teaching goal to support students' individualized learning. The application of intelligent terminal and QR code in the practice teaching management can support students' learning before class, in class, after class by scanning QR code, which can bring up the learning and knowledge resources, and establish a solid foundation and a digital safeguard for students to realize the individualized learning. Student can download, store information, conduct targeted learning and install learning software according to their own strength. The application of intelligent terminal and QR code can help students to create a more individualized learning platform. Students can realize autonomous learning by using intelligent mobile terminal and QR code technology. According to QR code structures and the personalized learning platforms, students can learn and get access to information anytime and anywhere independently, which saves time greatly and extends the space limitations. This has high requirements in developing the students' self-driven learning ability and has a positive role in cultivating students' ability in independent exploration and autonomous learning^[4].

4.2 Innovative teaching by intelligent mobile terminal and QR code technology

The application of intelligent mobile terminals and QR code technology can transform the traditional teaching way of group discussion. For example, WeChat voice and other methods can be utilized to enhance communication and interaction. Teachers can directly delivery the answers and conduct teaching process to students through QR code. In the context of epidemic isolation in the emergency period, this can be more convenient to promote the classroom interaction effect.

5. Conclusion

To sum up, under the Internet context in the new era, colleges and universities should make full use of the application value of intelligent mobile terminals and QR code technology on the teaching management platform and innovate and reform constantly, so as to provide a practical and reliable foundation for the further development of information-based teaching process in colleges and universities.

References

1. Zhang O, Yang C. Application research of two-dimensional code in practical teaching of vocational education. *Journal of Yangling Vocational and Technical College* 2018; 017(003): 67-69.
2. Zhang M. Research on the application of two-dimensional code technology in university management.
3. Tang Z. Application of two-dimensional code and mobile Internet technology in the management of fixed assets in colleges and universities. *Computer CD-ROM Software and Applications* 2013; (14): 288-289.
4. Zhang K. Research on the application of big data and artificial intelligence in the teaching of private universities. *Science and Technology Innovation Herald* 2018; 015(018): 217, 219.