

# Applications of Smartphone in College Education

Cao Mengqiang

Department of Transportation and Municipal Engineering, Sichuan College of Architectural Technology,

Deyang, Sichuan, China, 618000

Caomq2000@163.com

**Abstract:** The combination of smart phones and mobile Internet result in that anyone can study at any time and any place. The popularity of smart phones in college students provides conditions for its application in teaching, Students can take advantage of Wi-Fi for teaching resources, install a variety of learning software in smart phones, teachers also can use smart phones control multimedia device, which can overcome the shortages of interactivity of traditional multimedia teaching. The applications of smart phones make teaching more rich, vivid and image, which improve the students' learning interest and motivation.

**Keywords:** smart phone, college education, mobile internet

## 1. Introduction

With the advent of the era of information technology and the development of computer technology, the mobile terminal from the FM radio telephone evolved into smart phone that have the independent operating system, and can be installed software, games etc. Its function can be expanded through such procedures, and the wireless network also can be accessed to through the mobile communication network<sup>[1]</sup>.

“The national medium and long-term education reform and development plan outline (2010-2020)” pointed out that the combination of information technology and education will be a revolutionary impact on education. Human will be entered a new era by the revolution of wireless communication technology in the 21<sup>st</sup> century, and the combination of mobile internet and smart phone opened up a vast space for college education. Contemporary college students grew up in the digital age, they all have smart phone and pattern in networking, so smart phones will be inevitably and widely used in college education<sup>[2]</sup>.

## 2. The current situation of the applications of smart phone in college education

Gordon Dryden once said, if a dead of 100 years ago can be revived, then he will marvel at the transformation of the society, which Lionel typewriter was replaced by computer, the bullock carts and the carriages were replaced by cars,

and the hand phone was replaced by satellite communication and optical fiber cable transmission, there is only one occasion our visitors will find that it is no different with 100 years ago, that is our school and classroom<sup>[3]</sup>.

So far, most of the countries did not introduced relevant policies to encourage schools to use smart phones to promote education, many countries have even banned the use of mobile phones in campus. Survey found that the phenomenon which students using mobile phones is banned in class or in the school period can be seen everywhere. With the development of science and technology, more and more school found that mobile phone can't be banned in schools, so started to change management strategies, and gradually to allow the use of mobile phone<sup>[3]</sup>. But from the perspective of the development of society, smart phones are widely used in college education is the trend of the times.

## 3. The advantages of application of smart phones in college education

Multimedia teaching is a blend of images, text, animation, audio, video and other information, which makes knowledge have a strong sense of reality and expression, the application of smart phones in multimedia teaching will make college education more evident<sup>[4]</sup>. Teaching resources can be shared through professional LAN sharing platform, which students can use smart phones to browse and use these resources at any time, and to make learning more efficient. In short, mobile learning is no longer constrained at tables and chairs, computer and wires, students can study at anytime and anywhere, and universality, personalization, interactive is its typical features and outstanding advantages<sup>[2]</sup>.

## 4. The implementation of application of smart phones in college education

Due to the popularity of smart phone and wireless network coverage expanded, or the decline of the GPRS fee, anyone can study at any time and any place. Its actual application has the following several aspects.

#### **4.1. To carry out the study through campus wireless network**

Campus wireless network has the advantages of flexible layout, high bandwidth and the wireless access, and break through the limit of wired network, then people can surf the internet at the same time, teachers and students could access to information timely and conveniently. Teachers can transmit audio and video through the campus network, and release all kinds of auxiliary teaching materials, which learners can consult or play audio and video at any time. Schools can also open the mobile library, develop the corresponding mobile phone software, and purchase e-book lending machine, users could enjoy the service of retrieval.

#### **4.2. Study based on WAP technology**

The limitation of network structure and type, terminal device, study time and physical space were broken through by access WAP using smart phone, learning from the class extends to daily work and life, and this way of learning is welcomed warmly by students because of its mobility, flexibility, personalization and information real-time and richness.

#### **4.3. Developing mobile learning based on short message.**

The types of short message include SMS, EMS and MMS, a knowledge base can be created by the way of text or audio in this system, educators can create study groups that can customize learning content, and can send short message or voice mail to learners. Student can make the short message of study, and set the receiving of the density and frequency, and can customize review strategy. Besides, learners can ask educators timely through MMS, and long-distance communication with study partners.

#### **4.4. Using software to carry out the interactive learning**

Software that have the feature of openness, flexibility, integration, high collaborative and good experience become an indispensable tool for college students, which can reflect and promote the real social relations and communication activities. The advantages of no technical barriers and audio and video function laid a good foundation for mobile learning, which can extend the space, providing more learning resources and the broader learning channel, and break through the limit of time and space, the platform for the exchange cooperation can be set up, and convenient collaboration between teachers and students.

#### **4.5. Using the smart phone control multimedia devices**

Multimedia teaching has a strong sense of reality and expression, make teaching content more image, intuitive, and therefore was welcomed by teachers and students, but the lack of interactivity is the fatal drawback, the reason mainly has the following two aspects: 1. Teachers due to the limitation of the mouse, keyboard and the needs of the operation of multimedia courseware can't leave multimedia console; 2. Under the condition of the large-class teaching, the teacher needs to use amplification device, and the device effect directly affects the quality of teaching. But the problem will be solved well under the help of smart phones, Wi-Fi and application program. Smart phones can wireless control computer, and voice will be broadcasted to the computer through the mobile phone pickup<sup>[4]</sup>.

### **5. Conclusion**

It is the inevitable result of the development of science and technology to apply smart phones in college teaching, and it also is the need of the information age and a significant improvement on the teaching methods, it fits the college students' expectation field of vision, make the teaching content is rich and colorful, vivid, can also improve the students' learning interest and enthusiasm. But there are some problems to apply smart phones in college teaching, for example, the older teacher are not familiar with the use of smart phones, so it is difficult for them to apply smart phones in college teaching. Users can't reach the expected effect of experience because of the conflict between screen size and portability. Due to the quality of the network and the high charges, the frequency of the use of smart phones is reduced<sup>[2]</sup>. With the great development of science and technology, the above problems will be solved, and the application of smart phones in college teaching will get a great promotion and popularization.

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