Application of Mobile Learning in English Teaching in Higher Vocational Colleges

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ABSTRACT

To study the development of mobile learning technology in the field of teaching, the application of mobile terminal technology in higher vocational English teaching is designed. Firstly, the present situation of basic English teaching in higher vocational colleges and the requirements of students for English learning and mobile applications are investigated and analyzed. Then, according to the analysis for previous needs, a My Word platform which is conducive to English learning has been developed. Taking the construction of new mobile learning model as the research target, the experimental subjects are divided into two groups for comparison and analysis. The experimental results show that the English learning efficiency of the students who use the mobile assisted English vocabulary teaching model is improved significantly, and the students in the experimental group are better than those in the control group. Therefore, it is concluded that the auxiliary teaching of mobile applications into higher vocational English teaching is in line with the requirements of the current information-based teaching and meets the needs of the new learning style of college students.

KEYWORDS

Mobile learning technology; higher vocational English teaching; My Word platform.

INTRODUCTION

With the rapid development of science and technology and the acceleration of the global integration process, a great variety of information technology products are flooded with people's daily life. Driven by the Internet of things, high-speed mobile networks and cloud computing technology, the popularity and update of smart devices represented by smart phones and PAD are particularly fast [1]. These electronic products are collectively referred to as mobile application terminals, which are essential in the pursuit of innovation and the progress of the college community.

According to the characteristics of the high-speed information era, the Higher Education Department of the Ministry of Education has issued The Requirements for College English Teaching. It puts forward new requirements for the setting and teaching model of English courses. It is clearly pointed out that colleges and universities should use advanced information technology according to the actual situation [2]. In addition, various computer and network based courses should be developed and built to provide students with good language learning environments and conditions. In the teaching mode, all colleges and universities should make full...
use of modern information technology, and adopt the English teaching model based on computer and classroom [3]. The new teaching model should be supported by modern information technology, so that English teaching and learning cannot be limited to time and place to a certain extent, and will develop in the direction of individualized and self-directed learning [4].

Mobile applications represented by mobile phones have been introduced into the classroom of higher vocational English teaching, aiming to improve the students' autonomous learning ability and develop their positive attitude towards learning. It is hoped that this research will bring the emerging mobile applications as effective means to English teaching in higher vocational colleges and provide some useful suggestions for the reform of Higher Vocational education [5].

**SYSTEM DEVELOPMENT FOR MOBILE APPLICATION LEARNING**

**System model design for mobile application learning**

At present, the relatively mature mobile applications depend on the network, mobile terminals and servers, while these three parts organically combine learners, teachers and teaching resources. Network: System requirements for the network are limited to lightweight data traffic, such as word query, form submission and other actions [6]. For audio and video information, students can browse through the campus WIFI network to ensure the efficient use of resources. Mobile terminal: At present, mobile phones are mainly positioned in mainstream Android and IOS systems. For running hardware, the requirements are as low as possible, and the versatility is guaranteed. Server is the carrier of learning resources and system program, and it is also the platform of resource management. The main function of the server is to provide learners with learning content, resources and corresponding client programs [7].

On the basis of constructivist learning theory, the mobile learning approach emphasizes the learners’ active processing ability for information, and enables them to actively construct knowledge meaning. The teacher breaks away from the role of the knowledge teacher in the traditional teaching, and turns into the guider and promoter to impel the students to construct the meaning actively. Teachers are more resource providers and integrators in the system, and the use of mobile applications plays a role of supervision and inspection, including resource management, learning progress, student information management [8].

Students use mobile phones or other mobile terminals to interact with each other through the Internet, and they can test and submit their learning results and learning experiences online.

**General framework of system design**

Figure 1 is the overall framework of the system, in the early stages of development, the system development needs are analyzed, and then the application teaching is analyzed. In the specific development stage, the content of the system and the UI interface are designed, and finally packaged test. After the relevant BUG is resolved, the information is released again.
TEACHING EXPERIMENTAL RESEARCH ON MOBILE APPLICATIONS

Vocabulary movement teaching design in higher vocational English

Taking the vocabulary teaching in Higher Vocational English as an example, we design a 90 minutes learning course. This paper expounds the instructional design process of bringing mobile applications into higher vocational English teaching and taking it as an auxiliary teaching tool.

Study in groups: the students were divided into two groups by means of English achievement and basic test. Each group is divided into good, medium and bad, rather than superior or inferior. The mixed system brings some fairness to the follow-up study and evaluation [9]. It can avoid the learning enthusiasm of the backward students, and lay the foundation for their confidence in learning. At the same time, this kind of class cooperative teaching also raises students' sense of teamwork and cooperation. In the following course of study, there is also a group competition and PK learning atmosphere, which can arouse the enthusiasm and initiative of the students.

Oral training: In the application software of My Word, there is a "Daily Sentence" function. The learning software will update a beautiful inspirational sentence every day. The teacher sets the day's theme at the end of the last lecture. Student groups organize content in their spare time by using mobile applications and web resources, and discuss ideas and present them in text, PPT, or video. In 10 minutes before the new lesson, the teacher randomly asked the students to conduct a "Daily Sentence" theme discussion. There can be different views between groups, as long as they can justify themselves. Each group took 2-3 minutes, and the teacher commented on it after the end. In the early days, teachers could use Chinese expressions and gradually switch to oral English. Teachers encourage students with excellent performance and mark them as one of the assessment results at ordinary times.

Unit test: German psychologist Ebbinghaus made a lot of experiments and reached a conclusion: The speed of forgetting is not linear; after learning, forgetting begins immediately. In the early days of memory, the information about new learning is
forgotten very quickly and there are so many forgotten things. As time goes on, in the middle and late stages of memory, the speed of forgetting gradually slows down, and the number of forgetting becomes smaller. This is the famous Ebbinghaus forgetting curve. According to the Ebbinghaus forgetting curve, the teacher used the "My Word" unit for classroom tests in the next week after unit learning. Students can use mobile phones for on-site testing and on-site submission. In the background of the mobile application learning system, the teacher can see the results of the student tests. This approach helps strengthen students' words and consolidate memory.

**Roles of teachers and students in English learning mode of higher vocational education**

In the traditional teaching mode, higher vocational English teachers tend to play the dominant role. The teacher took charge of the formulation of the teaching plan, the organization of the teaching content and the presentation of the evaluation criteria [10]. The teacher plays a role as a manager and executor in the whole teaching process, and emphasizes the principal position of the teacher. However, students are managers and passive participants, resulting in many negative emotions such as lack of enthusiasm in study, lack of initiative, or resentment.

However, in the mobile learning model, the teacher's role presents multiple dimensions, including collaborative work, the formation of student groups, the task of building a group, and in-depth interaction with the group. Therefore, in the mobile learning model, teachers need to change their ideas. Teachers should move closer to the "digital natives" (students) from "digital immigrants". Moreover, in order to educate these "digital natives", they must first understand students’ language and use the tools they are familiar with, which requires teachers to improve their own information technology quality. As far as English teaching is concerned, teachers should not only teach English, but also master certain computer, network and mobile applications. Based on this perspective, the relationship between students and teachers in the mobile learning mode is mutual relationship and mutual assistance. Students use this platform to learn English independently, communicate with teachers and students. Problems are solved in a timely manner and new knowledge, while new resources and new information are published. During this period, teachers and students promote each other and grow together to form a new and harmonious teacher-student relationship.

**Learning evaluation of English mobile learning mode in higher vocational education**

Learning evaluation mainly refers to the collection and value judgment of students' learning behavior, learning process, learning effect, language performance, and their own development. It not only includes formative evaluation and summative evaluation, but also includes capability evaluation, behavior evaluation, process evaluation and result evaluation. It focuses on the learning and development of students. Based on the mobile learning model of higher vocational English, the learning analysis is a kind of evaluation for students' ability of division and cooperation, autonomous learning ability, language organization and inductive ability. The evaluation form is mainly composed of student self-evaluation log, student group evaluation and teacher evaluation.
Analysis results

Two classes of English Majors in a vocational school were selected as the subjects, and the English scores in the two stages of the initial test and the final test were respectively counted. Among them, the Class 1 has 60 students, and Class has 49 students. Taking Class 1 as an experimental group, and the way of mobile application is used in vocabulary assisted instruction. Taking Class 2 as the control group in this study, English vocabulary teaching is conducted according to the traditional teaching methods. Therefore, this study first compares the entrance examination results of the two classes. In accordance with the above teaching experiment process, from September 2014 to January 2015, the author carried out an entire term of mobile English teaching in the process of fine-tuning. The specific analysis is shown in table 1.

The following conclusions are obtained by comparing the results of the two classes at the beginning and the end of the test. As can be seen from the statistics in the table, the English test scores of the experimental group and the control group are distinguished significantly. The English scores in Class 1 and Class 2 are very close at the beginning of the English test. But after a semester of mobile learning model, the experimental group is particularly prominent at the end of the period. The experimental group performed fairly well throughout the semester. Due to the relaxed environment of the university and the study of specialized courses, students' grades have declined at the individual level. Therefore, through the reform of the teaching model of mobile vocabulary learning, the English achievement of vocational college students has been greatly improved, which proves that the model is more successful.

CONCLUSION

Based on the constructivist teaching concept, the advantages of multimodal and mobile teaching are applied in higher vocational English teaching, and the mobile assisted instruction model is developed through the self-developed mobile learning platform. Practice has proved that the experimental research on English teaching based on mobile applications is more successful. It is a useful exploration of the reform of teaching mode, the information technology and the utilization and development of network resources in mobile environment. This experiment is a comprehensive practice of mobile learning theory and instructional system design theory. It not only has a great positive impact on the related students and teachers, but also provides some reference for the teaching reform of English mobile learning.

<table>
<thead>
<tr>
<th>Class</th>
<th>Number</th>
<th>≥ 70 score</th>
<th>69-60 score</th>
<th>≤59 score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1 in initial test</td>
<td>60</td>
<td>12</td>
<td>20%</td>
<td>28</td>
</tr>
<tr>
<td>Class 2 in initial test</td>
<td>49</td>
<td>7</td>
<td>14.29%</td>
<td>26</td>
</tr>
<tr>
<td>Class 1 in final test</td>
<td>60</td>
<td>32</td>
<td>54.34%</td>
<td>15</td>
</tr>
<tr>
<td>Class 2 in final test</td>
<td>49</td>
<td>5</td>
<td>10.2%</td>
<td>32</td>
</tr>
</tbody>
</table>
REFERENCES


