Research on the Cloud Teaching Mode of Public English in Higher Vocational Education Based on Cloud Computing-Taking Lanmoyun Class as an Example

Zhenfeng Gao1,*
1Baoji Vocational Technology College, Baoji, China, 721000
*Corresponding author e-mail: zhenfeng@163.com

Abstract. The development of contemporary information technology and the popularity of the Internet have promoted the improvement of the teaching environment, which has also put forward new requirements for the innovation of traditional teaching models. As a mobile feedback-based interactive feedback teaching interactive software, Blue Ink Cloud Class provides a new idea for the study of public English cloud teaching mode. In the context of cloud computing, this paper combines with computer technology to analyze the problems existing in the traditional teaching classrooms of higher vocational colleges, and puts forward the concept and characteristics of using the blue ink cloud class platform, and expounds the basic teaching design of the public English cloud teaching mode based on the blue ink cloud class. In order to provide reference for the application practice of the public English teaching mode of higher vocational education.

Keywords: Blue Ink Cloud Class, Higher Vocational Public English, Cloud Teaching, Cloud Computing, Computer Technology

1. Introduction
With the continuous development of mobile information technology, various information-based teaching equipment based on Internet technology has greatly improved the teaching environment, which also puts forward new requirements for the innovation of traditional teaching mode. In recent years, higher vocational teaching is moving toward informationization in both teaching methods and teaching environment. In the context of the popularity of smart phones, the emergence of this teaching software of Blue Ink Cloud Class provides good technical support for cloud-based teaching mode based on mobile devices. Higher vocational students generally have a poor English foundation and lack interest in English learning. The traditional teaching methods make students extremely passive in their studies. The cloud teaching based on the blue ink cloud class can provide rich learning resources and classroom activities, as well as the learning experience of anytime, anywhere, which greatly promotes the enthusiasm and initiative of students to learn English[1].

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2. Problems in traditional teaching classrooms

2.1. Single teaching mode
The traditional high-level public English teaching is mainly to teach the knowledge in the classroom, after the students digest the knowledge and complete the related work. In this mode of teaching, due to the limitations of class time, the knowledge imparted is very limited, generally limited to textbooks, and students only follow the teacher's thinking to learn. Obviously, the traditional teaching methods have shortcomings such as single target, single learning method, single problem, single process, etc., which is not conducive to the development of students' comprehensive quality.

2.2. Learning style package
In the traditional teaching mode, the teaching content is usually designed by the teacher into a module, which is presented to the students in order, just like a "package". Teachers have carefully created these "packages", but they are not able to satisfy the "appetite" of all students. Students cannot choose to learn according to their own needs, and the learning effect is not satisfactory.

2.3. "point" type of interactive communication
In the traditional teaching class, no matter how instructive the teacher is, there are very few students responding. On the one hand, because most students do not have pre-study before class, or do not know where to prepare for it, they can't participate in the discussion. On the other hand, in one class, teachers face the whole class, the coverage of the two-way communication between teachers and students is very limited, and only one communication "point" can be formed.

3. The concept and characteristics of the blue ink cloud class
"Blue Ink Cloud Class" is a cloud service platform that uses mobile smart devices to carry out interactive feedback teaching inside and outside the classroom in a mobile network environment. First, teachers create class groups, send course notices on the platform, upload teaching resources such as teaching videos, micro-courses, and documents, and students learn before class. At the same time, teachers can conduct teaching activities such as answering questions, voting, discussion, testing, etc., and get feedback from students, and adjust the specific teaching activities according to this, so that the content of the class can better meet the learning needs of students.

There are five main functions in the teaching of Blue Moyun class: resource sharing, sign-in name, Q&A discussion, voting test, and teaching evaluation. Teachers can use these functions to provide students with a series of interactive, immediacy and personalized features. The learning experience, and the most prominent feature is the realization of the whole process teaching evaluation. In the blue ink cloud class, the teaching evaluation is mainly realized by the "experience value". The experience value is the direct expression of the academic achievement and also an important basis for the students to conduct self-evaluation. It can be before, during and after class. In the learning activities, students can always see their own learning results and understand their learning rankings throughout the class. The whole process teaching evaluation can be divided into three stages, namely, pre-school evaluation, class evaluation, and after-school evaluation. Table 1 is the classroom design of "Food and Table Manners" in the third unit of public English based on the blue ink cloud class platform.
Table 1. Higher vocational public English teaching process based on blue ink cloud class platform

| Teaching design for "Food and Table Manners": |
|-----------------------------------------------|
| ● Unit teaching goal analysis: Learn to master table manners and be proficient in English toasts |
| ● Teacher preparation: Edit the food clips in the documentary "China on the Tip of the Tongue" and record your own toast video |
| ● Student pre-class activities: Watch the video clips, complete the exercises and test |
| ● Teacher and student classroom activities: The teacher will discuss the difficulties in the toast video and the students will show the toast |
| ● Summary practice project: Vote for the best toast video work |

4. Higher vocational public English cloud teaching mode based on blue ink cloud class

The teaching design of the public English cloud teaching model based on the blue ink cloud class can be divided into three stages: pre-class, class, and after-school.

4.1. Pre-class preparation stage

The pre-class preparation phase of using the blue ink cloud class is essential. First of all, the teacher allows the whole class to download the blue ink cloud class software and join the cloud class created by the teacher in advance through the mobile phone QR code, so that the teacher can manage the students in the class through the cloud class; Secondly, the teacher analyzes teaching objectives, according to the chapter decomposition of teaching content, according to the learning objectives to prepare learning resources, such as PPT courseware, micro-courses, video, electronic documents and other materials; At the same time, according to the teaching content to design self-study tests related to knowledge points, test students self-study Effectiveness; Then, the teacher should create a student study list based on the prepared teaching resources, and show the students specific learning plans and learning plans; Finally, two weeks before the physical classroom teaching, the teacher publishes teaching resources, self-study tests and learning lists to cloud class platform. Teachers prepare English learning resources for students to prepare for pre-study, publish "answer discussion" and "test" on words, reading comprehension, etc., in order to understand the students' acceptance of new knowledge. Through the analysis of the data generated by the test results, the teacher can find out the part that makes the students feel confused, then re-adjust the time allocation of the classroom teaching, focus on the knowledge points that the students are difficult to master, and improve the efficiency of classroom teaching\(^4\).

4.2. Online learning stage

Students mainly use their smartphones to learn online through the Blue Ink Cloud Class Platform. First, students complete PPT courseware, micro-courses, videos, and electronic documents according to the guidelines of the study list, and master English language knowledge points or cultural knowledge points. A unique feature of the Blue Moyun class is that you can't fast forward when you watch the video for the first time. This urges students to watch the instructional videos posted by the teacher. Students then complete self-test learning by completing online exercises and tests related to current knowledge points. This stage requires students to complete their own work, so that students gradually form the habit of self-learning. After completing the study of language knowledge points or cultural knowledge points, students generally perform questions and discussions in the blue ink cloud class platform activity area one week after the release of the study materials. Students can explore the difficulties and doubts in self-directed learning between teachers and students and students to deepen their understanding of knowledge points\(^4\).

4.3. Classroom teaching

Based on the test and analysis function of the blue ink cloud class, the teacher can find the difficulties
in the students’ self-learning, the doubts in the interactive communication, and the error points in the pre-class test, so as to adjust the teaching content and design the learning task in a targeted manner. Students further complete the internalization of knowledge. For different learning content and teaching objectives, teachers can design related tasks, requiring students to complete project tasks independently or in groups through independent exploration or collaborative learning, and conduct them to show in class through reports, presentations, PPT presentations, etc. Then the teacher immediately commented on the task completion status and the advantages and disadvantages of each task, so that the students can deepen their understanding of the knowledge points. In this way, targeted task exercises and flexible presentations make the classroom more interactive and interesting, and make learning more efficient. Table 2 is an analysis of the effect of public English classroom teaching based on the blue ink cloud class platform\(^5\).

**Table 2.** Comparison of student achievement before and after the public English cloud teaching mode based on blue ink cloud class

| Group                     | Score  |
|---------------------------|--------|
| Test group (n=73)         | 76.6±5.9 |
| Control group (n=73)     | 67.1±1.2 |
| T                         | 10.9   |
| P                         | <0.05  |

4.4. After-school evaluation stage

The unique questionnaire and voting function of the Blue Moyun class allows the whole class to evaluate and score the results of the class. This kind of evaluation can effectively improve the motivation of learning and the attractiveness of the classroom. Blue ink cloud class can also record the student's learning trajectory, topic participation and unit test results, which is convenient for teachers to carry out process evaluation. In addition, the blue ink cloud class also has the role of after-school Q&A, after-school notification, and post-class homework case analysis, which can help students further deepen their understanding of knowledge points\(^6\).

5. Conclusion

The times are developing, and the public English teaching mode of higher vocational education is also continuously improved in continuous practice. The high-level public English flip classroom teaching based on the blue ink cloud class can improve the teaching effect and motivate the students' learning enthusiasm. At the same time, it can also conduct a more scientific multi-dimensional evaluation of the teaching effect of public English. But it also presents new requirements and challenges for teachers. Therefore, teachers should strengthen the effective supervision and guidance of students' self-learning process. In order to increase learning interest and mobilize students’ learning interest, teachers should improve their multimedia literacy, actively use computer technology in the teaching process, and learn to design and produce micro-courses and micro-videos, so that traditional classrooms and cloud teaching can form an organic combination.

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