Effectiveness Analysis of College English Flipped Classroom Teaching Based on Micro Class

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Abstract: In today's information and globalization, with the popularization of the Internet and the wide application of computer technology in all fields of people's life, the application of information technology in the field of education will help to reform the traditional teaching mode. This kind of flipping classroom is the background of micro classroom. The flipped classroom teaching model based on micro classroom is an important practice of college English teaching reform. With its simple classroom content, clear teaching resources and convenient teaching network platform, it has become an important means of college English teaching. It has a good incentive effect on improving students' professional quality. By analyzing the concepts of micro classroom and flipped classroom, and through classroom teaching practice and after-school interviews, this paper analyzes the effectiveness of flipped classroom model based on micro classroom in college English teaching. The construction of flipped classroom teaching mode makes up for the defects of traditional English teaching to a great extent and improves the teaching effect.

1. Introduction

The development of Internet and multimedia technology provides more ways for English teaching. Flipped classroom teaching model has been widely used, and many college English teachers have begun to use this teaching model. It is found that the teachers and students participating in the research believe that this teaching model can stimulate students' interest in learning English, activate the classroom atmosphere, improve classroom efficiency and improve the overall teaching quality. Aiming at the problems found in the research, the researchers pointed out the improvement direction for teachers and students, and took this as the starting point to explore the practice and application of the flipped classroom model based on micro class in college English teaching.

2. Data and methods

2.1. Research object and curriculum design

Freshmen from a university in our city participated in the study. They come from two classes of the same major. Class A has 40 students (male to female ratio is 25:15) and class B has 39 students (male to female ratio is 32:7). The university has two semesters of English courses: the first semester of freshman year and the first semester of freshman year have a total of 80 class hours. The two classes have four days a week, and the teachers of the two classes are the same. This study flipped the teaching contents of College English and professional English. Class A is the control class, using traditional teaching methods; Class B is an experimental class, which adopts the micro class teaching mode of flipped classroom.

In addition to the textbook, the teacher will complete all the exercises in class A and use the traditional teaching methods. When the teacher explains the knowledge points, the students take notes accordingly. Before class, the students will be required to do the exercises after class in advance. In class, the teacher will lead the students to check the answers.

When class B adopts flipped classroom teaching, all videos provided to students before class are recorded by the teacher with screen recording software, and the relevant contents are explained with

multimedia courseware(As shown in Figure 1). The video length is about 20 minutes. Due to the screen recording software, the teacher did not appear on the camera, so the possible interference caused by facial appearance was eliminated. The teacher sends the relevant videos to the class group two days in advance so that the students can learn before class. When students study after class, they can communicate with teachers online at any time[1]. At the same time, teachers will also assign corresponding homework when uploading teaching videos. The purpose of the task is twofold.

First, encourage students to prepare well before class. Most assignments require students to watch the video carefully and answer relevant questions. They also need to complete some traditional questions designed according to the content of the text. After completing these questions, students need to upload all the answers to the class group.

Second, help students preview before class and repeatedly understand the classroom content. In the classroom, the teaching method of giving lectures by students is adopted. Use the courseware to present the questions collected and raised by students in advance, and then give students 3-5 minutes of discussion time to help them build understanding through cooperative learning. Finally, ask students to spend 1-2 minutes answering questions with their existing knowledge. After the students answer, the teacher will make corresponding supplements according to the answers. In the whole class, including after class, there is more interaction between students and between teachers and students.

Figure 1 Flipped micro class.

2.2. Evaluation method

By comparing the richness of teaching content, examination results and students' evaluation of corresponding teaching methods, we can evaluate the effectiveness of flipped classroom teaching mode[2]. During the teaching process, record the test results and final scores of each student. The test contents of the two classes are the same, and the test scores of the students in the two classes are 10 times. At the end of the semester, an anonymous survey was conducted on students' teaching feelings. The questionnaire is divided into five subscales. Students are asked to answer the following questions: course organization, teachers' use of classroom time, teachers' attitude and teaching style, the effectiveness of tests and examinations, students' personal efforts and the time of learning courses every week.

3. Result

3.1. Similarity between two classes

In order to find out the possible a priori differences between class A and class B, we compared their English scores in the college entrance examination and English final examination in the first semester. The data show that there is no significant difference between the two classes, indicating that their English level and learning ability are similar.

3.2. Content of courses

By analyzing the teaching log of each class, compare the similarities and differences of the teaching contents of the two classes. In order to reasonably complete the teaching tasks, the English Teaching of the two classes is carried out in strict accordance with the progress of the teaching plan. However, for class B, which adopts the flipped classroom teaching mode, because the students in this class spend more extra-curricular time studying, they only need to spend part of their time in class to complete the tasks specified in the teaching plan. Teachers use the remaining time in class to help students expand their learning and understanding of knowledge points and enrich relevant contents.

3.3. Performance evaluation

In order to test the effectiveness of flipped classroom teaching model, this study compares the performance of class A and class B in the same test and examination. X^2-test is used to determine whether there is a statistical difference between the two. As can be seen from table 1, except for tests 1, 3, 4, 6 and 10, the scores of students in class B in the remaining tests and final exams are significantly higher than those of students in class A. There was no significant difference in the results of three of the first four tests. This may be because students need some time to adapt to the flipped classroom teaching mode when they first contact it.

Table 1 Comparison of test scores between the two classes.

Group	Class A	Class B	X^2	p
text 1	8	8	0.254	0.932
text 2	8	9	6.311	0.001*
text 3	8	8	0.461	0.326
text 4	8	9	0.219	0.764
text 5	7	8	5.244	0.001*
text 6	8	9	0.516	0.308
text 7	8	8	6.337	0.001*
text 8	7	8	7.210	0.001*
text 9	9	9	7.002	0.001*
text 10	7	7	0.119	0.352
Final Test	87	89	6.513	0.001*

3.4. Performance evaluation

At the end of the semester, students' evaluation of teaching was investigated by issuing anonymous questionnaires. The results of the two courses are similar. However, class B scored higher than Class A when answering the question "the teacher accurately evaluated the knowledge learned through the test" (5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree). The survey also asked students to evaluate the time they spent on English learning every week (1 = 5 hours, 2 = 5-6 hours, 3 = 7-8 hours, 4 = 9-10 hours, 5 = 11 hours). The results show that class B spends more time learning English every week than Class A. The average number of students in class B, equivalent to about 8 hours per week, while the average number of students in class A, equivalent to 5.5 hours per week.

In addition, when answering "what do you like about flipping the classroom", 30 of the 39 students in class B mentioned that the videos used in teaching were very helpful. More than two-thirds of the students believe that the class Activities after class are very helpful to enrich their perspectives on problems, promote the interaction between teachers and students and between students, and greatly improve their oral English.

4. Discuss

The results of this study show the comparative advantages of flipped classroom teaching model

in college English teaching. So far, the research results of applying this model in College English teaching are relatively limited. Therefore, this result is more important. One notable result is that teachers can cover more teaching content in English teaching using flipped classroom than using traditional teaching mode. As can be seen from the previous introduction, this is because in the flipped classroom mode, students spend a lot of time on English learning, so teachers can quickly complete the main contents in less time in the classroom, and can also use the remaining time to introduce more relevant knowledge. This also shows that when using the flipped classroom mode, students will actively cooperate with their classmates to solve problems. Teachers do not need to compress the course content and will not increase the learning burden of students.

The results also have guiding significance for comparing students' performance in tests and final exams. In these 10 examinations, the scores of class B were significantly better than those of class A for 8 times. Several tests without statistical significance are mainly concentrated in the tests at the beginning of the semester. With the increase of the implementation time of flipped classroom teaching mode, the scores of students in class B are steadily higher than those in class A.

The results of the questionnaire show two obvious differences. First of all, compared with Class A, class B has more time to learn English after class. This is consistent with another study on flipped classroom. This is because class B students need to complete many tasks after class, such as watching videos, collecting information on specific topics, communicating with partners, completing team homework and so on. The traditional teaching methods will focus on the number of extracurricular assignments. At the same time, even if students do not complete these assignments in advance, it is unlikely to affect their performance in class. On the one hand, teachers will spend a lot of time teaching the contents of textbooks and introducing relevant knowledge points. On the other hand, students' participation in the classroom is limited and can only passively accept the teacher's explanation.

Another significant difference between Class A and class B is that "the teacher correctly evaluated the knowledge learned through the exam". The examination contents and times of the two classes are exactly the same, and the examination time and length are basically the same. The reason for this difference may be that class B students are more confident in taking exams, so they feel that these exams better reflect their knowledge. In fact, at the end of the semester, most students in class B showed greater confidence in their knowledge. Classroom discussion shows that students need some time to adapt to the flipped classroom, but the adaptation time is very short. By the third week, students began to realize that if they were prepared before class, they could learn more in class. This behavior reflects personal self-discipline and helps to improve students' learning efficiency and test scores. The ability of students to undertake learning responsibilities independently is an important part of their intellectual development, and also lays a good foundation for learning English.

5. Conclusion

This study aims to explore the effect of flipped classroom teaching in college English teaching. By using the traditional teaching method in the control class and the flipped classroom model in the experimental class, the students' examination results and teaching evaluation are compared. The concept of flipped classroom makes it possible to use classroom time to solve students' personal and group problems. In this way, not only teachers can cover more content in teaching, but also students have achieved better results in exams. They quickly adapt to this teaching method and show the same or higher satisfaction with teachers' teaching. College English teaching should cultivate students' ability to communicate and solve problems in English, and master how to use existing resources to study with others or independently. Flipped classroom can help teachers and students make full and effective use of classroom time, solve questions, exchange existing knowledge and explore new knowledge, so that students can finally learn language independently.

References

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