Design and Practice of The Teaching Mode of Flipped Classroom Based on Micro Video

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Abstract

This paper makes micro video combine with flipped classroom, constructs the teaching mode of flipped classroom based on micro video. This mode specifically include three teaching processes, such as design and practice of pre class task, design and practice of classroom interaction task, task and practice of comprehensive evaluation after class, and tries in the teaching of the course of Financial Management, improves the students' autonomous learning ability, enhances the participation degree of classroom teaching, promotes knowledge absorption of students, the effect of teaching is good.

Key words: micro video; flipped classroom; teaching mode

1. INTRODUCTION

With the continuous innovation of educational ideas, the maturity and development of big data and cloud computing and other information technologies, the rapid integration of information technology and education teaching has formed an education system with educational informatization, networking, digitalization, personalization, lifelong. In this context, the teaching mode of flipped classroom which subverts the traditional classroom emerges as the times require. In the traditional classroom of our country, the learning and understanding of students to knowledge are done in class, but the application, analysis and evaluation to the knowledge are done after class. However, the teaching mode of flipped classroom is just the opposite, it uses modern information technology to reintegrate teaching content, reverses the learning process of traditional classroom, its core idea is "pre learning and post teaching". That is to say, the learning and understanding of students to knowledge are done before class; the application, analysis and evaluation to knowledge are done in class with guidance of the teacher and assist of classmates. As an important learning tool resource, micro video has the characteristics of short time, content refining, learning objectives clear, can support students' autonomous learning, mobile learning, ubiquitous learning; it also can be played by computers, mobile phones, etc., fully gives students the convenience of learning any time and any place. At present, in the research of teaching reform at home and abroad, the teaching mode of the combination of micro video and flipped classroom is the most extensive.

2. Problems Existing in The Teaching of The Course of Financial Management

2.1 Theorization is Relatively Strong, Difficult to Stimulate Students' Interest in Learning

The course of Financial Management has a certain theoretical, in order to complete the teaching plan, teachers spend a lot of time in the classroom to explain the relevant theoretical knowledge, students accept

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knowledge passively, the mastery of them to knowledge just stay in the textbook. In class, the students are lack of interaction with the teachers, feel the course is boring, it is difficult to stimulate students' interest in learning.

2.2 Teaching Form is Single, Difficult to Solve The Problem of Differentiated Teaching
In traditional teaching, most teachers use multimedia courseware to explain knowledge, students accept knowledge by taking notes, copying courseware and other methods. Due to the students' ability of understanding, learning interest, learning attitude, degree of acceptance are different, facing the same way of knowledge inculcation, the difference of learning effect will emerge in the medium term of teaching. This teaching method does not consider the individual differences of students, is not conducive to teaching students in accordance with their aptitude.

2.3 Evaluation Method is Simple, Difficult to Reflect The Assessment of Process
At present, the main form of assessment of the course of Financial Management is final closed book examination, the scope and form of examination is greatly restricted, students' knowledge of assessment is guided by teachers' key teaching points, evaluation method is single. The positive application and practice of the students to learned knowledge of finance in peacetime learning, maybe cannot enable them to get good grades in the final exam. The single evaluation of grades inevitably lead to students to invest less energy in process learning, the effect of teaching is poor.

3. Design of Teaching Mode of Flipped Classroom Based on Micro Video
The teaching process of teaching mode of flipped classroom based on micro video includes three stages, such as design of pre class task, design of in class interaction and comprehensive evaluation after class, as shown in Figure 1.
Figure 1. Design Chart of The Teaching Mode of Flipped Classroom Based on Micro Video.
3.1 Design of Pre Class Task

3.1.1 Teachers

First, making teaching micro video. The content of micro video must be selected on the basis of teaching objectives, teaching objects and teaching contents. According to the actual teaching situation, we can make instructional video by ourselves, or get free instructional videos through the Internet and other channels, promise to finish the transmission of knowledge with high quality.

Second, making the teaching design sheet of flipped classroom. The main contents of the teaching design sheet of flipped classroom include: analysis of learners' characteristics(analyse the cognitive level and the level of mastery of knowledge of students), design of pre class task(objectives of pre class learning, content of pre class learning, learning tasks, evaluation of pre class learning), design of classroom activity(target of classroom activity, content of classroom activity, tasks or strategies of classroom activity, evaluation to students' participation in classroom activities).

Third, build network learning and communion platform. After registering the account on the teaching platform and adding course material, teachers upload micro video and teaching design sheet of flipped classroom three days in advance, through the teacher client of WeChat platform to send a notice of learning ahead to the class students.

3.1.2 Students

After receiving the notice of learning from the teacher by WeChat, students download instructional video and related learning materials before class for learning through the student client of teaching platform, grasp relevant theoretical knowledge and can achieve simple application. In the process of self-study, communicating with online teachers before class through teaching platform.

3.2 Design of Classroom Interaction

3.2.1 Target of Classroom Activity

Through the learning of micro video before class, setting up some problems and exercise of case analysis in class, students can use relevant knowledge they have mastered to answer correctly, and can use the theoretical knowledge they have mastered flexibly to help solve practical problems.

3.2.2 Content of Classroom Activity

Introduction of new course. Create a situation to introduce a new class, so as to fully mobilize the students to think about the questions raised by the teacher, get into the learning situation and answer questions. At this time, the students' attention is highly concentrated and the thinking is very excited. The teacher introduces new course content, this has a positive role in guiding students to explore and learn new knowledge.

Analysis and communication. First of all, knowledge review: teachers use PPT to demonstrate the content of students' autonomous learning before class, help the students review the knowledge they have learned systematically; Secondly, site answer: according to the questions raised by the students in the teaching platform, the teacher carries out concentrated solution, helps students understand and master the learning content; Finally, the comprehensive evaluation: by setting questions, cases, etc., evaluating the degree of mastery of students to the knowledge they have learned comprehensively, helping students to use the knowledge they have learned to solve practical problems.

Group cooperation. Firstly, students take group as unit, group leader divides the work, group members work together to solve problems and exercise of case analysis raised by the teacher; Secondly, the students discuss the problems raised by the teacher in groups, arrange and complete analysis results in class.
Communication between groups. Each group communicates the results of their analysis with other groups, this is not only conducive to cultivating students' team spirit, more conducive to cultivating students' ability of expression, finding and solving problems.

Teacher's comments. Each group sent representatives to report the situation of completion of the group, the teacher comments on the situation of the report, at the same time, groups can also comment on each other. Through the comments of teachers and other groups, students can have a deeper understanding to knowledge.

Induction and summary. Teachers summarize the situation of classroom communication, explains the content of knowledge that students need to master, help students form a complete knowledge framework.

### 3.3 Comprehensive Evaluation after Class

The evaluate of students participation in classroom activities in the form of evaluation of self, evaluation of group, and evaluation of teacher, completing the learning assessment form of students(Table 1),and publishing the results of evaluation on the teaching platform.

#### Table 1. Comprehensive Evaluation Table of Learning Effect of Flipped Classroom.

<table>
<thead>
<tr>
<th>Evaluation Project</th>
<th>Evaluation Criterion</th>
<th>Very Good</th>
<th>Better</th>
<th>General</th>
<th>Worse</th>
<th>Very Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>evaluation of self</td>
<td>learn micro video teaching resources before class actively</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>complete the task of teaching design sheet of flipped classroom</td>
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<tr>
<td></td>
<td>participate in the teaching of flipped classroom, complete assigned work</td>
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<tr>
<td></td>
<td>good at thinking, build a knowledge framework</td>
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<tr>
<td>evaluation of group</td>
<td>team work, participate in the discussion</td>
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<tr>
<td></td>
<td>complete tasks according to the division of group leader</td>
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<tr>
<td></td>
<td>contribution for the group to complete the mission</td>
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<tr>
<td>evaluation of teacher</td>
<td>situation of knowledge learning before class</td>
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<tr>
<td></td>
<td>situation of performance of learning and communication</td>
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<tr>
<td></td>
<td>situation of completion of group task</td>
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<tr>
<td></td>
<td>total(number of grades)</td>
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<tr>
<td></td>
<td>Total(score)</td>
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<tr>
<td></td>
<td>Explanation: very good(10 points), better(8 points), general(6 points), worse(4 points), very poor(0 point)</td>
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</tr>
</tbody>
</table>
4. The Practice of Teaching Mode of Flipped Classroom Based on Micro Video

4.1 Preparation before Class

Teacher's preparation: In the teaching unit of "financial decision method of project investment", the author makes "payback period method", "net present value method", "present value index method", "internal rate of return method" and other methods in financial evaluation method of project investment into micro video; At the same time, making the teaching design sheet of flipped classroom, and uploading micro video, teaching design sheet of flipped classroom, etc. to teacher client of teaching platform three days in advance.

Student's preparation: Students through student client of teaching platform to download teaching micro video, learn calculation and simple analysis of financial evaluation method of project investment decision by themselves. In the process of self-study, communicating with online teachers before class through teaching platform.

4.2 Classroom Interaction

After watching the video of micro learning resource, students come to class, in class the first thing that the teacher needs to do is to answer the question of the students to the knowledge points of this lesson after watching the micro learning resource. Teachers understand the students' learning situation firstly, then guide the questions of individual students separately, explain the questions of most students emphatically. Through group discussion, case analysis students internalize knowledge.

4.3 After Class Evaluation

The evaluate of students participation in classroom activities in the form of evaluation of self, evaluation of group, and evaluation of teacher, completing the learning evaluation scale of students.

5. Conclusion

In the teaching of the course of Financial Management, the application of the teaching mode of flipped classroom based on micro video, can improve students' autonomous learning ability, enhance the classroom participation, promote knowledge absorption, the effect of teaching is good. In the micro information age, as an important learning resource, micro video gradually accepted and recognized by students, and can stimulate their interest in learning to a greater extent, help them improve their learning efficiency. For college teachers, integrating micro video into the teaching of flipped classroom has brought vigor and vitality to the teaching reform. The teaching mode of flipped classroom based on micro video makes students pay more attention to autonomous learning, and internalize knowledge through classroom discussions, teamwork and other teaching activities, makes teachers’ pay more attention to the guidance of student learning, guarantee the students to form a complete knowledge framework. This mode also has some problems, for example, how to ensure the effect of students' autonomous learning after class; how to design the teaching activity link adapt to each student, improve the classroom participation of all students. The teaching mode of flipped classroom based on micro video is beneficial to the reform and innovation of education and teaching of colleges and universities, but how to promote this mode on a large scale, still need the majority of educators to carry out further exploration.

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