

Research on the Flipped Class Model Teaching Model under the Background of Big Data

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Abstract: Informatization and big data are the inevitable trends in social and economic development. As the position of training talents, applied Colleges and universities are devoted to creating high-quality classes in undergraduate teaching. This paper combines the characteristics of human resources management courses and under the background of big data, establishes the reversal classroom model of inquiry learning and group cooperative learning, stimulates students' learning motivation, applies big data to information analysis and collation, deeply understands the knowledge and skills of human resources management, strengthens the use of hands and brains, consolidates students' professional practice, and meets the needs of social application.

1. Introduction

The development of big data driven by information has brought earth-shaking changes to all walks of life, education has been greatly impacted, and new teaching forms are constantly emerging. Big data is a powerful external force to promote educational reform and optimize the traditional teaching classroom. The roles of teachers and students need to be re-positioned. Students are the main body of the classroom and teachers are the guides of classroom activities. The abundant information brought by large numbers can be shared, shared and discussed by teachers and students. Students majoring in human resources management should cultivate their professional sensitivity to students. In view of the problems and phenomena in society, combined with large data analysis, students can explore the nature of the problems and discuss the root causes of the phenomena. Different groups can debate on the same issue. Flipping classroom teaching provides an effective mode of training students good data information analysis under the background of big data. Through classroom design in different stages of pre-class, in-class and after-class, students can make use of the information of big data platform to analyze and deal with problems, and develop the habit of constantly exploring and innovating.

2. Literature Review

Lage and Platt (2000) first proposed the concept of a flipped classroom. Salman Khan (2011) elaborated on how to use the flipped classroom model to implement the teaching. The flipping classroom is widely recognized and practiced abroad. For example, Shelley used broadcasting to implement flipped classroom in Canadian curriculum; American Highland Village Primary School

transformed the traditional classroom into "Starbucks" classroom to implement flipped classroom; California Riverside established digital interactive teaching materials to implement flipped classroom, etc.

In sorting out the literature related to the flipped classroom, scholars focus more on the theory and practice of primary and secondary schools in the study of the flipped classroom and less on the research in Colleges and universities. Based on the relevant research of scholars, this study combines the construction of flipped class model teaching mode with the specialty of human resources management in applied universities, hoping to provide a reference for the construction of flipped class model teaching mode in applied universities.

Big data is the product of the development of information technology in today's society. With the rapid development of information technology, intellectualization, digitization, and other technologies, big data analysis has become an effective means of obtaining, analyzing and collating information. However, in classroom teaching, there are few classroom innovations that integrate big data background. In colleges and universities that train applied talents, it is particularly important to optimize classroom design and improve teaching effect through the innovation and reform of classroom teaching mode.

3. The Current Situation of Flipped Class Model Teaching Mode under the Background of Big Data

As a new teaching mode, a flipped classroom has won many praises from teachers and scholars. Many attempts have been made in the classroom, and the teaching effect is good. However, at present, most people's understanding of the flipped classroom is still in the opposite form of traditional teaching, thinking that the flipped class model only strengthens the students' self-study before class and the students' questions and discussions in class. However, two important questions have been ignored: first, whether the students have really studied the course after class; second, whether the questioning and discussion in class have pushed the course content to a deeper learning process. To a certain extent, only when these two problems are realized in practice can students' learning subjectivity be really brought into play and teachers' guiding role in teaching be realized. Only in this way can students' interest in learning be improved, learning effect be improved and teachers' teaching efficiency be improved. This teaching form will effectively make up for the shortcomings of traditional teaching. In the survey of the use of flipped classroom teaching by University teachers, most teachers agree with the form of flipped classroom teaching very much. At the same time, it is suggested that the implementation of a flipped classroom should start around the fourth week of a semester. It should be carried out on the basis of establishing a certain relationship between teachers and students. The flipped classroom curriculum should not be too many at the same time, otherwise, students are tired of coping with it and may be appropriate. It is counterproductive. Under the background of big data, Flipped Class Model can grasp students' learning status in real time by means of many learning software to solve the difficulties they encounter, but the current application is relatively few.

4. The Problems of Reversal Classroom Teaching Model under the Background of Big Data

In the investigation of the teaching mode of flipped class model, teachers and students hold a positive attitude towards the teaching mode of flipped class model, which can help students achieve a better level of knowledge cognition to a certain extent, but there are also some problems

4.1 Problems in flipped class model Teaching

Some students reflect that there are more discussions in the teaching of a flipped class model the seats in the classroom are fixed, the students need to twist their bodies when discussing, which makes the body very free when discussing. When the number of students in class is large, although the teacher leaves time for students to discuss, the teacher walks in the classroom and helps the students with problems at any time, the teacher alone can not take care of all the students. The discussion group will make the students feel that only the students are discussing less interaction with the teachers. At the same time, the phenomenon of not participating in group discussion, not cooperating with classmates and not speaking in the class of flipped classroom shows that some students are not suitable for this teaching mode, and also reflects the problems of students' interpersonal communication and cooperation ability. Therefore, in order to design the classroom content that attracts students, teachers should play the role of coaches in the classroom, fully guide them, and also with the help of the teaching and research room, let the two teachers participate in the discussion of flipping the classroom, in a more innovative way, better guide students to discuss and solve the problem of interaction with students. And these problems in the teaching process can also be optimized with the help of big data. Teachers and students can share information through learning, cloud courses, and other platforms. At the same time, teachers can track students' learning status, and then better design classroom discussions, so that more students can integrate into classroom discussions and stimulate students' interest in learning.

4.2 Cognitive Problems of Students in the flipped class model

For different students, there are some differences in their cognition. Reversing the pre-class learning in the classroom meets the students' needs of autonomous learning according to their own learning situation, and then improving their knowledge cognition through discussion learning in the classroom. However, students have different problems because of the differences in their cognitive stages. Some students say they don't like the way of discussion, they just want to listen to the teacher quietly, while some students show positive adaptation in the study of flipping class. Like to discuss with classmates, in cooperative learning, can effectively promote the progress of intra-group learning. This contrasts sharply with the students described above. As for the problem of student cognitive differences, we should not generalize in the teaching of flip classes. We should guide students timely according to their characteristics, cultivate students' cooperative learning ability, improve students' initiative and enthusiasm to solve problems and help students participate in the learning of flip classes more effectively. Teachers can also track and analyze students' learning situation through big data analysis, better-targeted guidance for students, for different students can set up differentiated problems, to ensure that students with different cognitive levels can master more levels of knowledge and skills.

4.3 Teachers' weak data analysis ability

In addition to the advantages of traditional classroom teaching, teachers can also better understand the learning ability and learning needs of students at different levels by using big data analysis. However, to a certain extent, this also puts forward certain requirements for teachers' data analysis ability. Some teachers are relatively easier to understand and master the learning software of these big data analysis, and some teachers can not make good use of learning software such as cloud classes, which can not better analyze and process the students' information. It can not better serve the classroom design, which puts forward higher requirements for teachers teaching ability.

5. The Design of Flipped Class model Teaching Model under the Background of Big Data

The flipped class model has general adaptability of the flipped class model design and development process, combined with the background of large data, in the environment of full information analysis, the flipped class model teaching process includes pre-class preparation stage, in-class teaching activities design stage and after-class learning evaluation stage.

5.1 Pre-class preparation stage

Under the background of big data, the importance of learning situation analysis is more prominent. Because the information material is very rich, and the students' learning of new knowledge is completed outside the classroom alone, the teaching materials used by teachers should be based on the students' existing knowledge structure and learning attitude. They should make use of the concept of big data analysis, carefully analyze the learning situation, and adore their concubines to understand the students' knowledge status. For example, teachers can insert some "pre-test" before playing micro-classes. Before learning a knowledge point, students need to do a few homework questions to test the mastery of relevant knowledge. The pre-class problems assigned to the students are slightly higher than the students' current knowledge level so that the students have confidence in completing the pre-class learning tasks.

The completion of the traditional classroom depends on the faithful presentation and interpretation of the textbooks. Many teachers basically regard the content of the textbooks as the content of the classroom. In the flipped classroom, teachers should present the textbooks in a new way, requiring teachers to have a deeper understanding of the content of the textbooks. Big data and informationization can help teachers design teaching content from a wider range and more comprehensive content.

5.2 Implementation Stage of Classroom Teaching Activities

Students watch videos before class and browse the "tutorial plan" uploaded by teachers. In the "tutorial plan", students should include learning objectives, reference materials, discussion questions, and other contents to ensure that they understand the knowledge points involved in the videos. Where there are doubts, record them in time and ask the teacher questions in class. In the flipped class model, the following activities can be used to organize teaching: first, problem-solving. For example, in the course of "Introduction to Social Security" of human resources management specialty, in view of the treatment of social security disputes, students analyze the given cases. In the administrative disputes and labor disputes cases of social security, the distinction between the two cases is not clear. Students bring doubts to the classroom. Teachers analyze the differences and processing procedures of the two cases in detail according to students' doubts. It improves the teaching efficiency. Second, practice accordingly. The practice is the necessary process of knowledge internalization. But in the traditional classroom, the time in class is occupied by knowledge imparting, and the internalization of knowledge is usually completed by students after class, lacking the guidance of teachers. For example, in the course of Job Analysis and Job Evaluation, in view of the Heidegger Evaluation Method in Job Evaluation, a case is given to students. Students are asked to calculate the evaluation points of three posts in the case, namely, Human Resources Director, R&D Designer, and Production Workshop Director, according to the data of three tables in the Heidegger Evaluation Method. The composition of the three posts is analyzed, the weight is given, and the comprehensive calculation is made. The number of posts. Through these three positions, students have a clearer understanding of Heidegger's evaluation method and can apply it to cases. This exercise is a process of knowledge internalization. Third,

cooperative learning. Cooperative learning can be discussed in groups or between groups. Teachers can observe the group by group and give help and guidance when necessary. For example, in the course of Recruitment and Employment, whether there is a leading group discussion in the teaching of interview content is the interview method. Given the case of "Survival in the Desert", every eight students have a group discussion without leading group. Students discuss actively, the group members learn from each other, strictly control the time, recommend the group members to make concluding remarks, although there are also disagreements in the process of cooperation, but exercise the spirit of cooperation among students, group comparison between each other, cultivate the collective spirit, expand the meaning of learning. There are also scenario simulation, case discussion, and other forms, which enrich the teaching form and improve the enthusiasm of students' autonomous learning. □

5.3 Evaluation of after-class learning

Teachers can have a deeper understanding of students in the flipped classroom, students watch videos before class, preview knowledge, find problems, and perform in group communication, so as to evaluate students' expressive ability, problem-solving ability, innovative ability, as well as students' emotions and attitudes.

In the Flipped Class Model, the group takes turns to show the learning results, the other groups listen carefully, then evaluate the overall activities of the group, and finally give the overall score, the score of the group is the score of each student. This kind of evaluation method can promote students to actively participate in group activities so that students can change their perspective on the problem. Help teachers understand students from the side.

6. Conclusions

With the rapid development of information technology, the flipped classroom teaching mode has more advantages. On the one hand, teachers and students can use more information platforms to collect and organize information, which provides a better premise for the implementation of the flipped classroom. Secondly, the big data background can make the classroom more flexible. With the help of more mobile devices, classroom teaching will create infinite possibilities. This paper is only a reflection on deepening teaching under the background of big data and is the epitome of teaching reform in Colleges and universities. In the future teaching practice, it will continue to summarize and explore more ways to deepen teaching.

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