Research on the Reform of Blended Teaching Model in Application-Oriented Universities in the Mobile Internet Era

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ABSTRACT

In the era of mobile Internet, the traditional teaching model is no longer suitable for the education and teaching in application-oriented universities. As a new educational method, the blended teaching model is based on the constructivist learning theory. Through the in-depth integration of traditional teaching and online course teaching, the current teaching situation of application-oriented universities is transformed to create a diversified autonomous learning space for students. Based on the current teaching status of application-oriented universities, this article analyzes the theoretical background of the blended teaching model, summarizes and elaborates the construction and specific implementation of blended teaching.

Keywords: mobile Internet, application-oriented universities, blended teaching model, specific implementation

I. INTRODUCTION

With the advent of the mobile Internet era, all kinds of new information technology have penetrated deeply into higher education. As the main position of application-oriented talent cultivation, the application of teaching means and methods is related to the overall effect of talent cultivation. Benefiting from the integrated development of electronic information technology and higher education, it lays a foundation for the application of blended teaching model. How to follow the law of blended learning and build a scientific blended teaching model on the premise of ensuring the quality of students' learning has become an important research topic for application-oriented universities and teachers.

II. AN OVERVIEW OF BLENDED TEACHING MODEL

The so-called blended teaching refers to the organic combination of network learning and the advantages of traditional teaching methods in education and teaching, so as to change the previous fixed teaching status and realize the mobilization of students' initiative and enthusiasm. It means that in the blended teaching, the initiative and autonomy of students' learning should be demonstrated on the premise of ensuring the full play of teachers' guidance and inspiration. The application of blended teaching is mainly based on the constructivism theory. The core idea lies in the embodiment of students' centrality. It attaches importance to students' acquisition of knowledge by means of communication and self-study. Therefore, on the one hand, blended teaching requires teachers to be the guides and promoters of students' knowledge construction. On the other hand, it requires students to be the active constructors of knowledge meaning. The implementation of the blended teaching model in the specific education and teaching means that teachers must give up their subject status, and abandon the backward concept of emphasizing the theoretical knowledge infusion and the passive acceptance of students. It emphasizes that students are the active subjects in knowledge learning, requires students to change into information selectors, and carries out education and teaching activities based on the original cognitive structure and psychological structure of students [1].

III. THE DESIGN OF BLENDED TEACHING MODEL IN APPLICATION-ORIENTED UNIVERSITIES

The students in application-oriented colleges have relatively solid learning foundation, but some students have not yet developed good learning habits and cannot achieve autonomous learning after class. The existence of such problems makes the teaching method of "flipped classroom" not suitable for the education and teaching in application-oriented colleges and universities. The application of flipped classroom mode focuses on students' mastery of knowledge after class, while classroom is the place where students' knowledge is internalized [2]. To some extent, it highlights the main learning status of students, but it has higher quality and ability requirements for students. Therefore, the implementation of flipped classroom mode in the teaching of application-oriented colleges and universities cannot achieve the expected teaching results. In the era of mobile Internet, the blended teaching mode is proposed. Taking the "Lanmo cloud class" as the platform, on-line, off-line, on-line and off-line blended teaching models are constructed to enrich the classroom teaching forms, and the course teaching is extended to the off-line to realize the real-time interaction between teachers and students and the real-time self-learning of students. At the same time, taking the Internet as the carrier, it is required to record the specific behaviors of teachers and students in the teaching period in real time. Through the improvement of the incentive evaluation system, the construction of the blended teaching system is realized. This paper analyzes the process of blended teaching model, including preschool analysis, division of learning units, teaching design and implementation of teaching activities.

IV. THE CONCRETE IMPLEMENTATION OF THE BLENDED TEACHING MODEL IN THE APPLICATION-ORIENTED UNIVERSITIES

A. Preschool analysis

Preschool analysis is not only the preparation of teaching, but also the basic premise for teachers to carry out blended teaching design and implementation. For the application of blended teaching model, teachers need to make clear that the cultivation of students' information acquisition, processing, cooperation ability and other qualities is the main goal of teaching. In the practice of preschool analysis, , it is required to select appropriate teaching methods, and guide students to recognize the specific purpose of blended teaching according to the analysis of teaching objectives. According to the analysis of students' basic situation, teachers can judge whether the professional teaching and the blended teaching mode is consistent with each

other [3]. Combined with the analysis of the teaching content of the course, teachers can grasp the specific degree of the blended teaching. According to the analysis of the teaching environment, including the analysis of whether the students have mobile terminals, whether the teaching network is smooth, whether the students master the teaching software, whether there is a mobile teaching platform, and students' operation habits of the mobile terminal, etc., it can ensure that the blended teaching is not affected by the limitation of influence factors.

B. Division of learning units

Teachers should analyze the specific situation of the students and the teaching courses and knowledge points based on the characteristics of the discipline, the foundation of students and the teaching objectives, reasonably adjust the professional teaching content, and ensure that the application of the blended teaching mode is consistent with the professional teaching content. Combined with the analysis of the course knowledge point setting, the learning resources are reasonably divided into 10 ~ 12 learning units, and the teaching objectives, teaching strategies, etc. are set for each unit. Specific learning resources include teaching materials, teaching plans, microlectures, online text resources, video resources, MOOC and other resources. Before practical teaching, teachers need to upload learning resources according to different teaching contents, so as to provide resource basis for students to carry out online learning and independent learning [4]. In addition, teachers need to use the software platform to record students' learning behavior, so as to facilitate the real-time and comprehensive grasp of students' specific learning situation.

C. Teaching design

As the main basis of blended teaching, whether the teaching design is reasonable and feasible is directly related to the effect of blended teaching. Therefore, it is necessary to ensure that the teaching design meets the specific needs of the blended teaching, to make clear the specific teaching methods, forms, sequences, etc. in the design stage, to determine the teaching aids, and to ensure the smooth development of the blended teaching. In the specific teaching design, teachers need to upload the relevant curriculum resources to the platform software, and push the relevant learning resources for students in combination with the analysis of teaching requirements [5]. Teachers can use the "announcement" function of the platform to inform students of specific learning tasks of the new curriculum, guide students to combine the learning resources, clarify the key and difficult points of the new curriculum, and help students strengthen the connection with the curriculum content in the pre-class stage.

With the application of the "activity" function of the platform software, teachers can organize students to carry out brainstorming and other activities. After the activity, teachers will display and evaluate the results of the activity. In the classroom teaching stage, teachers can carry out assisted classroom teaching and enrich classroom teaching activities in combination with the analysis of students' actual learning situation. At the same time, teachers should group students reasonably, organize students to discuss online in groups, and guide the students to complete the tasks assigned by teachers according to students' individual characteristics.

D. Teaching implementation

The specific implementation of the blended teaching model is divided into three parts: classroom teaching, online learning and interactive discussion and learning. Teachers need to combine the students' specific learning needs and reasonably blend the three teaching models to ensure that the specific teaching process can meet the needs of students' blended learning.

1) Classroom teaching: Classroom teaching refers to the teaching of relevant knowledge for students by combining the analysis of curriculum content during classroom teaching. In the process of knowledge imparting, teachers do not just impart theoretical knowledge, but interact with students face to face with the help of situation creation, classroom activities and teaching summary. If the knowledge points of the course are too profound and theoretical, teachers can simplify the teaching content by using questioning teaching and case teaching methods, or guide students to feel the formation of knowledge in their own places by creating teaching situations. If the knowledge contents are more realistic, teachers can use case teaching to guide students to conduct in-depth analysis, or combine the knowledge content with students' real life to help students deepen knowledge internalization [6].

2) Online learning: The development of online learning is not limited to time and place, that is, teachers can guide students to have online learning at any time before, during and after class. If online learning is implemented in the pre-class stage, the functions such as "resources", "announcement" and "activities" of "Lanmo cloud class" are fully used to inform students of relevant learning tasks, push relevant learning resources in combination with students' actual situation, and guide students to make clear their specific learning situation through pre-class testing, while teachers can organize students to carry out pre-class group cooperative learning activities. In the in-class stage, with the help of the platform recording and statistics function, teachers can make clear the specific

learning situation of students, determine the classroom teaching content based on this, and organize students to conduct interactive discussion on the key and difficult contents of the course [7]. At the same time, teachers should make full use of the "activity" function of "Lanmo cloud class", organize students to carry out rich classroom activities, such as role-playing, brainstorming, shaking questions, classroom testing, etc. In post-class stage, teachers can use the supervision function of the platform to supervise and manage students' after-school learning, clearly grasp each student's specific learning path, and make clear the overall control of students' mastery of curriculum content. In addition, teachers can use the "Q & A / discussion" function to carry out the Q & A activities to help students solve the related knowledge questions online.

3) Interactive discussion and learning: Teachers should make it clear that students' interactive discussion and learning should be implemented in the whole teaching process, including the discussion between teachers and students, students' online and offline discussion. In the specific teaching, teachers need to carry out face-to-face interaction between teachers and students according to the situation, and carry out offline interaction for the relevant key and difficult knowledge. At the same time, teachers should organize students to carry out online interactive discussion and learning based on the "Lanmo cloud class" platform before or after class. It should be noted that the development of online and offline interactive discussion and learning activities must be based on the group, and the effect of interactive discussion and learning must be strengthened through the application of internal group discussion, group discussion, group and teacher discussion, etc.

E. Teaching evaluation

Compared with the application of traditional teaching model, blended teaching pays more attention to the evaluation and summary of students' learning process. The so-called process evaluation refers to the evaluation and summary of students' specific learning situation, learning behavior and learning performance in the pre-class, in-class and post-class stages. Based on this, in the specific teaching evaluation, teachers can count the experience value of students' attendance, pre-class learning, discussion and Q & A, like, classroom performance, activity participation, etc. in the "Lanmo cloud class" platform. Through the experience value, students' learning attitude, knowledge mastery, etc. are reflected. Based on this, teachers can make a summary evaluation [8]. Secondly, teachers need to evaluate and summarize the performance of students according to their specific performance in participating in classroom

learning. Finally, teachers need to carry out unit test, classroom test, homework arrangement and class speech regularly and irregularly in the process of blended teaching to summarize and evaluate the specific performance of students, so as to reflect the specific learning process of students.

In addition, the development of summary evaluation is also crucial. Teachers need to organize and carry out the written examination and practice report at the end of the semester. Through the comprehensive application of summary evaluation and process evaluation, teachers can give students a fair, objective and reasonable evaluation.

V. CONCLUSION

In the era of mobile Internet, the application of blended teaching model has become the main direction of teaching reform in application-oriented universities. In this regard, colleges and universities need to innovate the teaching concept based on the comprehensive cultivation of the quality of application-oriented talents, build a blended teaching model based on the corresponding platform software, carry out the integrated application of online, offline, in-class and off-class teaching, and promote the teaching reform of application-oriented colleges and universities.

References

[1] Zhou Qi. Research on the construction of blended teaching model in applied undergraduate colleges and universities — Taking "Probability Theory and Mathematical Statistics" as an example [J]. Science and Technology Information, 2017, v.15; No.499(34): 188-190.

[2] Qi Jingjia, Li Lei, Jiang Wei. Research on the blended teaching mode of applied talent cultivation under the "Internet +" environment [J]. Financial Theory and Teaching, 2017(5):100-102. (in Chinese)

[3] Meng Na, Hao Guang. Research on teaching reform in applied colleges under the blended teaching model of "MOOC+ flipped classroom" [J]. Think Tank Era, 2019, 173(05):227+231. (in Chinese)

[4] Ding Heping, Zhu Juan, Liu Hongjun. Research on the mixed teaching model of applied undergraduate colleges and universities: Take Suzhou University as an example [J]. Journal of Hebei University of Engineering: Social Science Edition, 2019(2):107-109. (in Chinese)

[5] Shao Xuemei, Zhao Shenghui, Liu Jinjun, et al. Exploration and practice of blended teaching model for computer network courses in applied universities — Taking Chuzhou University as an example[J]. Journal of Chuzhou University, 2019, 021(002):127 -129. (in Chinese)

[6] Zhang Jiamin. Design scheme and implementation of blended teaching mode of online courses — Taking the course of "Transportation Hub Design" of provincial local universities as an example [J]. Journal of Higher Education, 2019, 107(11):134- 136. (in Chinese)

[7] Liu Boqun. Research and practice of implementation strategies of online and offline blended teaching models for applied undergraduates [J]. Youth, 2019, 000(015):196,198. (in Chinese)

[8] Li Ruijin. Exploration and practice based on MOOC blended teaching mode — Taking Chengdu University as an example [J]. Journal of Hubei University of Education, 2018, v.35; No.249(02):131-133. (in Chinese)