

Reform and Exploration of the Trans Professional Experimental Teaching Model of Economics and Management based on the Concept of OBE

—Take the Course of Enterprise Behavior Simulation as an Example

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Abstract: In recent years, the OBE concept and flipped classroom as the new idea and the new model have been applying to the teaching practice step by step. With the increasing demand of application-oriented talent training, there are new challenges for cross-specialty experiment teaching. In this paper, the traditional experimental teaching will be challenged, the OBE concept and flipped classroom are introduced into the interdisciplinary comprehensive experimental teaching of economic and management in our school.

1. Introduction

With the continuous development of social economy and Internet technology, the Internet has been integrated into all aspects of social life, profoundly changing people's production and lifestyle. Furthermore, new requirements have been put forward for the cultivation of talents, especially for the demand for composite and high-level applied talents. The development of Internet technology has brought new requirements and challenges to the training of higher education talents in China, and it also provides new opportunities for education reform and innovation in ordinary universities. Under the background of "Internet plus", various advanced technologies and ideas have been introduced to the education and the classroom. They provide a new way of thinking for the teaching reform for "Internet plus education"[1] and provide a solution to solve the contradiction between supply and demand of talent training and social demand. This paper explores the construction of classroom teaching mode based on OBE education concept through the innovated entrepreneurship experiment course "*enterprise behavior simulation*" as a breakthrough point. By optimizing the teaching structure and teaching process, we can improve the efficiency of the classroom, achieve the goal of cultivating students' application and innovation ability as well as providing reference for the teaching reform of the curriculum of entrepreneurship education in the ordinary colleges and universities.

2. OBE Concept

OBE (Outcome Based Education) concept is "result oriented" education, which means the whole study is built upon learning results or results oriented education concept [2,3]. The OBE concept firstly set off a trend of education reform in the United States, and then was gradually applied and promoted in Canada, Australia, New Zealand and other countries, yielding excellent feedbacks [4,5,6]. OBE emphasizes that, all educational process, structure and curriculum that aims at achieving specific educational outcome are considered methods instead of purposed [7]. The evaluation of education in the OBE mode is changed from the effect of teaching to the effect of learning, and the traditional teaching based on course content is transformed into a training process based on demand [8].

This mode of education, which focuses on the analysis of students' learning output, takes the

results of the students' learning as the driving force to design the teaching activities and the relevant evaluation system according to the requirements of the social goals. Different from the traditional education concept that the degree of knowledge mastery is the assessment method and evaluation objectives, OBE pays more attention to the requirements of career goals in the economic society, and thus raises students' ability to a higher standard and level. It can be seen that under the guidance of the OBE concept, the teaching mode has shifted from the traditional "content-based" to the "student-oriented" and "professional ability-oriented" teaching mode [9].

In the course of education, in addition to requiring students to have a more systematic grasp of professional theoretical knowledge and business ability, the OBE focus more on the training of students' comprehensive ability and innovation ability to analyze and solve problems. To a large extent, this is also the cultivation of students' professionalism, innovation spirit and entrepreneurial ability.

On May 13, 2015, the General Office of the State Council issued the "*Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Colleges and Universities*", which requires to deepen, reform and deploy innovation and entrepreneurship education in Colleges and universities in order to boost our country's innovation driven development strategy [10]. Among them, "to explore and establish the new adjustment mechanism of a demand oriented discipline structure and employment oriented talent training type structure in order to promote the close connection between talent cultivation and economic and social development, entrepreneurial employment needs " is regarded as one of the major measures to deepen the reform of innovation and entrepreneurship education in colleges and universities. It also points out the goal and direction of talent training in Chinese colleges and universities for a period of time in the future --- oriented by needs and professional ability, we will cultivate innovative and entrepreneurial talents with all-round development, innovative spirit and the courage to participate in practice for the society.

The OBE concept is highly compatible with the State Council's goal of cultivating innovative and entrepreneurial talents proposed by ordinary universities in China. This "results-oriented" education concept just provides a theoretical guide for the reform of innovation and entrepreneurship education in higher education institutions in China.

3. Teaching Mode of Economics and Management Interdisciplinary Experimental Course Based on OBE Concept

As an application-oriented undergraduate college, our school has been actively reforming and exploring in the field of training high-level talents in economics and management field, and has achieved remarkable results. Many positive explorations and beneficial attempts have been made especially in the experimental teaching of economics and management while a model teaching method has also been formed. However, facing the present social and economic environment and the major changes in Internet technology, especially the strategic requirements to deepen the innovation and entrepreneurship education in Colleges and universities from the State Council, it is also necessary to reform and optimize the existing innovative and entrepreneurial classroom teaching mode.

3.1 Teaching Status and Challenges of Economics and Management Interdisciplinary Experimental Courses.

The interdisciplinary comprehensive experiment teaching is to enrich students' professional knowledge and develop students' ability to solve practical problems comprehensively with the basic theories and methods of their major and other related majors. Take the "*enterprise behavior simulation*" course of innovation and entrepreneurship experimental course of our school as an example. As a provincial-level quality course, this course has accumulated years' teaching experience. However because of the adjustment of teaching plan and the need of teaching practice, the teaching of this course has encountered many new problems and challenges:

The course is an interdisciplinary experimental course with rich experimental content, multiple

fields of knowledge and rich theoretical knowledge. However, the contradiction between too much teaching content and too little school hours has become increasingly prominent as the school hours in the curriculum plan are gradually reduced from the original 72 hours to the present 48.

The course is designed with many experimental links, and each experiment involves many business rules, requiring students to be familiar with all the rules in a short time. The traditional classroom teaching mode takes up a lot of class time when it is introduced in the early stage of the course, which makes it difficult for students from different majors to understand and master the business requirements and rules of the relevant posts, leading to the poor acceptance of the students and directly affecting the business quality and result of the experiment.

The course is a team competitive experiment course. Because the team members come from different majors, the students' professional basic knowledge is different, and there is little transverse correlation between their previous academic knowledge and the actual problems encountered. Because of the lack of relevant theoretical knowledge, the experimental progress of each team in the experiment course is different, so it is difficult to effectively control and synchronize the progress of teaching.

According to the characteristics and the needs of the experimental content of the course, the teacher should have sufficient professional knowledge in accounting, computer, enterprise management and logistics as well as the experience of ERP management. Therefore, it is necessary to participate and cooperate with a teaching team at the same time to effectively implement such a large-span course. Obviously, as a traditional classroom teaching, such an ideal state is hard to achieve.

3.2 Experimental Teaching Design Based on OBE Concept.

The OBE concept requires teachers to have a clear idea of the students' learning results, namely what the students can do after completing their studies, and to promote and ensure the students achieve these educational goals by designing appropriate teaching models [11]. Combining with the construction of the training mode of Applied Talents in our school and the four steps of OBE implementation, we have made the following teaching design to the experiment course "*enterprise behavior simulation*".

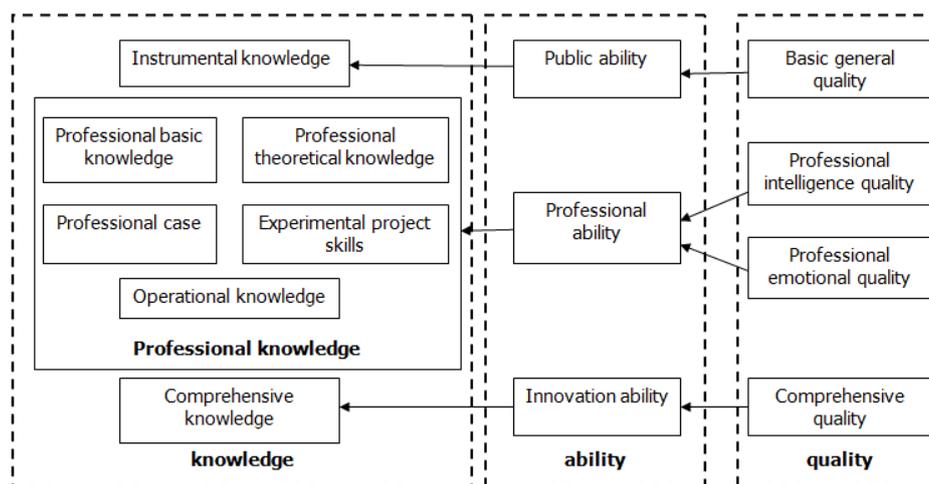


Fig. 1. Reverse teaching content design based on OBE concept

In the OBE concept, educators must have a clear vision of the abilities and levels that students should achieve. By designing in reverse the student's teaching structure and related evaluation systems, the quality of teaching can be quickly improved. Combining the elements of the training model of Applied Talents in our school, we have formed the design of teaching content based on OBE, as shown in Fig.1, and designed the professional knowledge that the curriculum needs to convey to the students according to the quality and ability required by the professional. The course is composed of two parts: the sand plate deduction and the application of the ERP. Through the completion of paper documents and the information operation of professional cases, we can complete the practical

experimental training of various professional knowledge and experimental items.

Assessment and evaluation are the necessary means to test the teaching effect of the course. Different from the traditional teaching, the OBE concept is to design the teaching activities with the students' learning results as the driving force, and to determine the corresponding ability evaluation standard [12, 13]. OBE concept pays more attention to the flexibility and diversity of curriculum evaluation and assessment. In the course of the experimental teaching assessment, we are in line with the people-oriented concept and have been actively exploring the diversification of the assessment method while combining the individual assessment, team assessment and results. In the selection of examination observation points, we not only pay attention to the specific requirements of professional competence, but also to the comprehensive examination of students' theoretical quality and business ability from multiple angles. Therefore, we try to construct the evaluation index system for the course, as shown in Fig.2, which involves both the business capability like the report quality required by the operating results and the experimental process, and the comprehensive competence quality, such as communication ability, team spirit, management decision, work performance, summarization and so on.

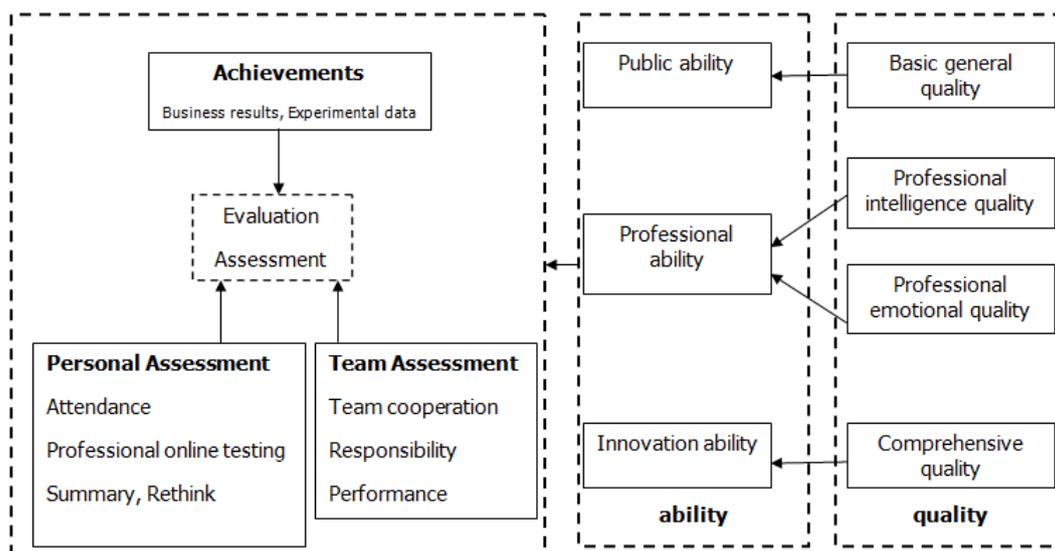


Fig. 2. Curriculum evaluation index system based on OBE concept

With the popularity of the Internet and the application of computer technology in the field of education nowadays, the teaching of "flipped classroom"[14,15] has become feasible. Flipped classroom is to readjust the time inside and outside the classroom, and give the initiative to students. OBE is also one of the student-centered education concepts, which mean it does not limit itself to a certain teaching method, but a variety of teaching methods and evaluation tools to find students' variety [16]. Therefore, we will introduce the flipped classroom into the curriculum teaching and try to establish a teaching mode based on OBE concept.

According to the concept of OBE, it is necessary to transform the traditional transmission teaching mode into a student centered teaching mode. In the course of teaching design, we should first emphasize the central position of the students in the teaching, fully reflecting "student based" teaching view. Second, we should pay attention to the innovation and practicality of knowledge so as to innovate and develop knowledge through research and practice while achieving the transformation from memory knowledge to application and innovative knowledge. Third, pay more attention to the emphasis on the teaching goal for knowledge, ability and quality as well as the teaching idea of "all-round development". Last not least, we should combine the teaching and learning closely while integrating the class with the extracurricular.

We do consider students, teachers and teaching assistants as a whole. In this paper, the teaching activity itself, the analysis preparation of the learners in the early stage and the feedback of the later evaluation are integrated, so that the flipped class teaching mode based on the OBE concept, as shown in Fig.3, is constructed.

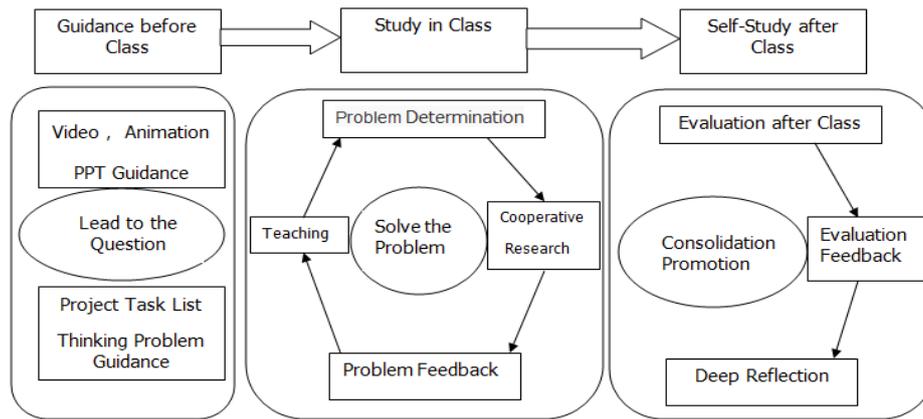


Fig. 3. Flipping classroom teaching model based on OBE concept

According to the experimental task and the composition of the selected students, we chose the necessary preamble professional knowledge, come up with the learning video and PPT handout that was later uploaded to the BB platform before the class. Students can use mobile terminals (mobile phones, IPAD, notebook, etc.) to land on the BB platform in order to study and think at any time and any place to complete the preparatory work before the experiment.

In the process of teaching, we have made relevant deductive rules and experimental cases into small videos and PPT for students to learn and discuss in class. Different from the experimental class that the reform, class teachers would not take up a lot of class time to tell the business content and business rules at every class. They only need to guide and answer some students according to the feedback of the students in the interactive process of the online testing. Thus, Student have more time to discuss, analyze and make decisions. Through the study, discussion, individual guidance and in-depth communication, the students' understanding and mastery level of the business content and their requirements are improved, so as the quality of the students' business operation are improved.

After the experiment, teachers could carry out necessary test to determine students' level of understanding towards the course as well as the mastery of the key knowledge through online test. The collected information could also be used to prepare for the follow-up experimental projects. Prepare for the preparatory work for the follow-up experimental projects. At the end of the experiment, both summary and evaluation will be carried out.

Under the new teaching mode, students can solve the difficult problems through the group collaboration through the interactive communication and use of all kinds of teaching resources both online and offline. It transform students' passive learning to active studying, thus improving the students' subjective initiative and enthusiasm for learning, and the quality of the business completion of the students' experimental projects.

The difference between traditional teaching model and the flipped classroom is that the latter allows teacher and student perform "information transfer" before the class while student carry out the "knowledge absorption" part during the class. In the whole teaching activities, with students as the main body of teaching activities and learning as the center of teaching activities, the main role of students and the guiding role of teachers are brought into full play. Teachers shift their main task from the classroom teaching to the designing and organizing of the experimental course content, which are the guidance of the teaching process and the examination of the content of the experiment. The content that student learns also change from originally the teacher and class to further include the classmate and the network platform.

The reform and implementation of this teaching model can effectively solve the lack of class time problem in the past. Teachers can now have more time to organize student experimental projects and provide customized guidance according to students' actual business operation. The hectic situation in class that teachers were struggling to cope with in the past got really changed. It greatly improves the quality of the teachers' guidance to the experimental project, and enhances the teachers' ability of synchronous propulsion control over the business progress of each experimental group. Thus, the

teaching effect of the experimental course is improved effectively, and the achievement of teaching goals is improved.

4. Concluding Remarks

The rapid development of Internet technology has caused unprecedented changes over today's higher education field and promoted the deep integration of education and Informational technology. The teaching mode, teaching methodology and teaching concepts of the economics and management experimental course have met great challenges. At the same time, the progress of Internet technology has also brought great opportunities for the reform of experimental teaching. Under the guidance of the new educational concept and the help of new technology, the positive research and exploration of the teaching model regarding of the economics and management experimental course will undoubtedly help improve the students' comprehensive ability and prove itself an effective way to practice the application-oriented talent training mode.

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