

Research on the Teaching Reform of Operation Management Course Based on OBE Education Theory

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Abstract: Based on conducting industry research related to the operation management course and analyzing students' problems in the course teaching, the OBE education concept is adopted to carry out teaching reform on the course. First of all, we should determine the seven core competencies of curriculum teaching, use the six-step method to carry out teaching reform and carry out teaching with this as the goal. Carry out online and offline hybrid teaching on Chaoxing Learning Platform, build a SPOC course website and use a variety of teaching strategies. After multiple rounds of teaching, constantly summarize teaching experience and gradually improve the teaching effect. This reform of teaching practice has played a good role in the practical application of the OBE education concept in the curriculum and promoted the continuous improvement of the teaching level.

1. Introduction

The OBE education concept was first proposed by American Spady in 1981. It was implemented in American education in 1996 and has formed a relatively perfect theoretical system since its development. The core idea of the OBE concept is reverse and accurate curriculum teaching design and implementation, which should be reflected in students' learning achievements. ^[1] This kind of achievement not only means that the values, beliefs, and attitudes have reached a certain state but also emphasizes the students' "what they have learned" and "what they can do". ^[2] The purpose is to enable students to obtain learning results through such teaching courses and master the expected practical ability. ^[3]

2. Problems in the Teaching of Operation Management

According to the analysis of the curriculum of the global business schools, their common features include "operation", "finance" and "marketing" as the three pillar core courses. ^[4] As the core course of each major in commercial colleges, the operation management course aims to enable students to have a basic understanding of the main contents of enterprise operation management activities in terms of business strategy, production design decision, production operation decision, etc., theoretically and practically, understand the function, role, and importance of production operation management in the process of enterprise operation, and master the principles and methods of production operation activities.

According to previous teaching experience, students can not fully understand the content required for the course, and their practical ability is weak. In traditional course teaching, teachers follow the script, students have little enthusiasm for learning, and the learning effect is not ideal. Students complain that the course content is too boring, and it is difficult to understand the calculation part of the learning. If this course needs to improve the teaching effect, it is urgent to carry out teaching reform on the course. In combination with the OBE education concept, we carried out teaching reform on the operation management course, focusing on the student's achievements in acquiring knowledge, cultivating ability and improving quality in the process of practical teaching.^[5] Through these ways, we can improve the teaching effect of the curriculum and achieve good educational goals.

3. Six-Step Teaching Reform Based on OBE Concept

To achieve the above objectives, the six-step teaching method is adopted in combination with the OBE teaching concept and the cultivation of students' core competence. This six-step method is as follows: the first step is to understand the current learning situation; the second step is to determine the learning achievements; the third step is to reconstruct the teaching content; the fourth step is to determine the teaching strategy; the fifth step is curriculum teaching evaluation; the sixth step is teaching summary and feedback.

3.1. Understand the Current Learning Situation

Taking the students of logistics management, marketing, and e-commerce of Nanfang College of Guangzhou as the survey objects, 225 questionnaires were designed and 218 valid questionnaires were collected to investigate the basic situation of students' learning of the operation management course. The survey results show that 75% of the students lack understanding of the main content of the operation management course, and do not know what knowledge points to master and how much knowledge to master; 78% of the students lack the ability to use inventory data for inventory optimization analysis; 84% thought that their hands-on ability was insufficient and hoped to improve their practical ability; 75% of the students do not care about current affairs and social events, and pay too much attention to themselves.

3.2. Determine Learning Outcomes

Based on the above students' learning status, and through the research on outstanding enterprises in the logistics industry such as JD Logistics and SF Express, we understand the actual needs of enterprises for logistics students, combine the course training objectives with students' learning and industry needs, and determine the seven teaching achievements that students of Operation Management need to achieve.

The seven teaching achievements correspond to the seven core competencies in each chapter of the course. Students can meet the teaching objectives of the course by completing the course and achieving the seven competency goals. The seven capabilities are as follows: firstly, logistics facility location planning capabilities, including the ability to apply the center of gravity method, load distance method, and transportation table method to facility location planning; Secondly, the inventory classification capability can use the most basic data in the warehouse, such as the unit price and quantity of goods, to perform ABC classification on inventory, and use different inventory management methods to reduce costs and provide efficiency; Thirdly, the project management optimization ability, can use the double code network to draw the project management chart, and optimize the time and cost of the project; Fourthly, the ability to analyze inventory data. From the

perspective of optimal inventory cost, the ability to use the basic data of the warehouse to determine the optimal order quantity and master the calculation of economic order quantity with price discount; Fifthly, the processing and sequencing ability of multi-part single (multi) equipment can use SPT and EDD methods to process and sequence multi-part single (multi) equipment, so as to achieve the highest utilization rate of equipment or the best customer satisfaction; Sixthly, the ability to reasonably formulate raw material purchase plans according to orders, master the basic principles of MRP, and reasonably formulate production plans and raw material purchase plans according to the order quantity, including the preparation of bill of materials, ordering time and ordering quantity of each raw material; Seventhly, the queuing planning capacity of the service industry can adopt reasonable queuing methods based on the number of equipment and staff to improve the efficiency of the service industry queuing.

3.3. Reconstruct the Teaching Content

According to the above seven core competencies, the course chapters were modified. From the MOOC courses of Chinese universities, high-quality video resources and online evaluation questions related to the operation management courses were selected, and SPOC courses were established on the Chaoxing Learning Platform, to establish the chapter content system of this course. The course contains rich course material, including 51 videos, 14 sets of unit test questions, and 1 set of final test questions. The self-built SPOC course resources include 1 set of test question banks, 38-course videos, 17-course courseware, 735 assignments submitted by students, and 15 videos of frontier expansion reading in operation management-related industries. These materials enrich students' horizons, increase their knowledge and broaden their horizons.

3.4. Choose Teaching Strategies

In the past two years, we have carried out five rounds of curriculum construction. The number of clicks on the student curriculum website has exceeded 400000. Students have conducted various activities on the platform, such as case analysis, topic discussion, after-school exercises, course registration, online classroom answering, teacher curriculum evaluation, and student-student mutual evaluation, and achieved good teaching results.

During the teaching process, combined with the online and offline hybrid teaching method, students learn online course videos, read relevant materials and initially understand the curriculum system before class; In the course, the teaching content of the course should pay attention to six integration, including ideological and political integration of the course, virtual simulation, case practice, industry demand, professional certificate and scientific research training, and adopt diversified teaching methods, including teaching methods, case teaching methods, situational teaching methods, participatory teaching methods and project-based teaching methods; After class, we carried out course expansion training activities, organized students to set up project teams, carried out summer practical projects with well-known logistics enterprises such as jd.com and sf.com, exercised and improved students' practical ability, encouraged students to carry out entrepreneurial activities, established student entrepreneurial groups, incorporated them into the college based maker space, and actively guided them to participate in various college students' innovation and entrepreneurship competitions such as "Internet +" combined with "three innovation competitions". Through entrepreneurial practice and entrepreneurial competition, students' entrepreneurial awareness and ability are constantly improved.

3.5. Course Teaching Evaluation

Teaching evaluation is a test of teaching quality, feedback on teaching, and also an external pressure and strong guarantee to achieve good teaching results.^[6] A perfect curriculum evaluation system should have the characteristics of a "closed loop".^[7] The form of "online score 45%+offline score 55%" is adopted for student performance evaluation. Online scores include online course video learning records (10%), attendance records (5%), online assignment submission records (20%), and participation records (10%); Offline scores include virtual simulation training records (10%), course ideological and political social practice activity results (5%) and final exam results (40%). At the same time, bonus items are formed around activities such as innovation and entrepreneurship, student competition, rural revitalization, and "three trips to the countryside". Through these extra points, students' enthusiasm for participating in extracurricular activities can be improved, so that the evaluation results are more objective and conducive to the cultivation of students' high-level abilities.^[8]

The learning output of students is the final result.^[9] For the evaluation of teachers' teaching effect, 360 all-around evaluation is carried out from four dimensions: supervision evaluation, student evaluation, peer evaluation, and expert evaluation. The focus is on student evaluation. In the learning pass, after each week's class, students evaluate the class and put forward their opinions. Teacher's timely feedback on students' opinions. The opinions put forward by most students, need to correct in time to improve the teaching effect.

3.6. Teaching Summary and Feedback

After a round of course teaching, a course teaching seminar was held at the end of the semester, and experts, peers, and student representatives were organized to discuss the typical problems in the course teaching. We discussed the solutions together, and evaluated whether the teaching effect could eventually match the students' learning achievements, whether the seven core competencies corresponding to the seven teaching achievements could reach the goals, and if not, what are the problems, what are the effective solutions? Through the teaching reform practice, the OBE teaching concept is further improved, and the students' good learning habits are developed.^[10]

4. Conclusions

Based on the seven core competencies of students and the OBE teaching concept, the six-step approach to the teaching reform of the operation management course requires five rounds of the teaching process. Through continuous summary, feedback and improvement, the teaching content is constantly improved during the teaching process. Appropriate teaching strategies are adopted, and a reproducible teaching model is finally formed. Finally, ideal teaching results are obtained, and students' practical skills and innovation, and entrepreneurship abilities are trained and increased.

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