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Innovation in Teaching Evaluation Reform of Entrepreneurship Introduction Course Based on "Two Modules and Four Projects"

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Abstract: The Innovation and Entrepreneurship Course is a compulsory course offered to college students in the context of the national policy of "mass entrepreneurship and innovation". This article is a teaching reform and innovation based on the OBE education concept for the teaching content of two modules and four projects. It mainly reforms the teaching content, teaching methods and means, teaching evaluation, and other aspects. The AHP Analytic Hierarchy Process is used to design a teaching evaluation index system with students as the evaluation subject.

In 2015, the General Office of the State Council issued the "Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Higher Education Institutions", which pointed out that "deepening the reform of innovation and entrepreneurship education in higher education institutions is an important measure for the country to implement the innovation driven development strategy and promote the comprehensive reform of higher education". The "Overall Plan for Deepening the Reform of Education Evaluation in the New Era" issued by the Central Committee of the Communist Party of China and the State Council clearly states: "Improve the academic evaluation system that organically combines process assessment and result assessment, strengthen classroom participation and discipline assessment, and guide students to establish a good academic atmosphere. The teaching method of the Introduction to Entrepreneurship course in universities is a large class teaching system, which cannot take into account each student, their low learning enthusiasm, low classroom participation, and the emphasis on summative assessment. Based on these issues, the OBE education concept is introduced, and the teaching evaluation of the Introduction to Entrepreneurship course is continuously reformed to improve students' sense of "gain" and "satisfaction".

1. Theoretical Foundation of Education and Teaching Evaluation Reform

1.1 OBE Education Theory

The "OBE education concept" (also known as "result oriented") is an innovative education model that emerged in North America at the end of the 20th century. The OBE education concept is a curriculum system construction concept that is oriented towards results, student-centered, and

adopts a reverse thinking approach. Its representative figure is the American scholar Spady. In 1994, he published the book "Outcome based education: Critical issues and answers", which provides a detailed discussion on the concepts, principles, and models of OBE education. His advanced educational ideas have had a widespread impact and attention on higher education worldwide. The core content of OBE education philosophy is that schools must first clearly set the goals that students should achieve in terms of their abilities and levels upon graduation, and then seek to design appropriate educational models and teaching conditions to ensure that students achieve these expected goals. Finally, through outcome evaluation, continuous improvement of this educational model is carried out. Learning output (result oriented) drives the entire curriculum activity, and the educational structure, conditions, and curriculum are viewed as means rather than ends. Therefore, OBE is an educational model that focuses on expected learning outcomes and organizes, implements, and evaluates the educational process. There are four main steps in implementing the OBE education model: preset learning output, achieve learning output, evaluate learning output, and continuously improve learning output, among which preset learning output is the core.

1.2 Methodology of Teaching Evaluation

1.2.1 CIPP Evaluation Mode

The CIPP evaluation model is a curriculum evaluation model advocated by American education evaluator Stavrbem. The CIPP evaluation mode is divided into four modules, namely Context Evaluation, Input Evaluation, Process Evaluation, and Product Evaluation. Background evaluation mainly involves a comprehensive evaluation of the background, evaluation objects, basic issues, and judgment objectives of curriculum implementation, laying the foundation for the input evaluation in the next stage; Input evaluation mainly evaluates various course planning schemes, with the aim of providing reference for researchers or decision-makers of activities; Process evaluation mainly evaluates the entire process of implementing activity plans, identifies problems and deficiencies in the implementation process, and provides timely revision methods; Achievement evaluation mainly measures, explains, and judges various achievements and judgments based on objectives, backgrounds, processes, and other aspects, in order to facilitate researchers or decision-makers to summarize experiences and identify gaps.[1]

1.2.2 AHP Analytic Hierarchy Process

AHP Analytic Hierarchy Process (AHP) was proposed by American operations researcher Satty in the 1970s. This analysis method divides evaluation indicators into target layer, criterion layer, and indicator layer, establishes a hierarchical structure model based on evaluation factors, combines qualitative and quantitative analysis methods, assigns values to each evaluation indicator, and establishes a matrix diagram by solving.[2]

2. Reform Measures for Teaching Evaluation of Introduction to Entrepreneurship

2.1 Focusing on Ability Training, Constructing a two Module and four Item Teaching Model

In terms of teaching content, a two module and four project model is constructed based on students' needs and talent cultivation goals. The two modules refer to the theoretical module and the practical module, and the four projects refer to the entrepreneur exchange and interview, simulation team building, entrepreneurial plan practice, mass entrepreneurship and "Internet plus" practice.

2.2 Highlight Process Evaluation and Restructure Diversified Assessment Standards

Strengthen the process assessment method and implement the assessment throughout the entire learning process of students. Based on two modules and four project contents, six course evaluation projects were set up. Among them, 15 points are required for chapter tasks to complete the learning tasks set in the course; 10 score are required for sign in ,but more than 15 times with the maximum score; 30 points are required for homework exam, including 1 course assignment and 1 exam each; 30 points are required for group task,it involves four group tasks: entrepreneurial interviews, simulating the creation of entrepreneurial teams, writing entrepreneurial plans, and applying for big innovation projects, with group representatives sharing and exchanging ideas; 10 points for discussion, 1 point for participating in online discussions, publishing or replying to course topics, and a cumulative score of 2 points; 5 points for Course points, such as voting, questionnaires, quizzes, talent selection, discussions, and in class exercises(Table 1).

Table 1: Diversified Assessment Content and Scores

Assessment content	Chapter Tasks	Sign in	Homework Exam	Group Tasks	Discuss	Course Points
Evaluation score	15 scores	10 scores	30 scores	30 scores	10 scores	5 scores

2.3 Utilize Smart Classrooms to Densely Arrange Teaching Interactions

Based on the online resources built on the Superstar platform, smart teaching activities are carried out to firmly grasp students' learning energy and stimulate their enthusiasm for learning.

2.3.1 Diversified Check-in to Ensure Student Attendance Rate

Online check-in is conducted five minutes before the start of each class. There are usually five modes of check-in: regular check-in, which is equivalent to traditional check-in; The second is dynamic QR code check-in, which updates the QR code every 10 seconds, effectively reducing forwarding check-in; The third is GPS check-in, where students need to sign in at the designated area, otherwise the actual distance from the check-in location will be displayed. Dynamic QR codes and GPS check-in have a significant deterrent effect on students, and students generally attend. Fourth, sign in with gestures. Teachers randomly show sign in gestures in class, and students sign in; The fifth is the sign in code. The teacher randomly gives the number of the sign in code in the classroom, and the students input the number to sign in.

2.3.2 Online Discussion Solves the Drawbacks of Traditional Teacher-student Interaction

For some important knowledge points, publish topic discussions to students, and all students in the class participate in the classroom discussion. Screen topic words based on students' answers and summarize the answers of most students. In order to improve classroom activity and students' enthusiasm, we also adopt methods such as answering quickly and conducting random checks to allow students to answer questions. Based on the 15 point evaluation score of "Discussion" and "Course Points" in the course evaluation, students actively respond to topics of interest, with a maximum number of responses to a single discussion question. Teachers can generate word clouds based on the content of students' answers. The stronger the consensus, the larger the word size, and the weaker and smaller the periphery. Students can check the similarities and differences between their own views and those of the "public". Because of the anonymity displayed at the front desk, students can get rid of "shyness" and speak freely; The real name nature of the backend allows

teachers to accumulate teaching data, provide individual tutoring for individual students after class, and record students' participation in a quantitative form .

2.3.3 Release Tasks to Promote Students' Autonomous Learning and Practice

On the one hand, the course has set up video resources as self-learning task points, allowing students to complete the preview task of knowledge points in advance after class. Students who learn to complete all task points can receive an evaluation score of 15 points for "chapter tasks" in the course evaluation. On the other hand, release group practical tasks and collaborate with each other to complete them. The four projects of course restructuring are all assigned in advance as group tasks. Each group appoints a team leader who is mainly responsible for task allocation, organization and coordination of group practical activities. After the group completes the tasks, the results are uploaded to the group tasks, and the group representatives present them in class. Each group evaluates and scores each other, accounting for 40% of the weight. The teaching teacher scores, accounting for 60% of the weight. The comprehensive conversion of the scores of all tasks in each group results in a "group task" evaluation of 30 points for the practical stage of the group members.

3. Effectiveness of Teaching Evaluation Reform in Introduction to Entrepreneurship

One is to enhance students' learning enthusiasm. Interactive teaching design with diversified assessment and evaluation has stimulated students' interest and motivation in learning, significantly improving the "attendance rate", "head up rate", and "participation rate". The second is to implement the "student centered" educational concept. Strengthening process assessment and achieving an organic combination of process assessment and summative assessment in academic evaluation have enhanced students' sense of gain and happiness. Some students expressed that "practical projects are particularly meaningful, allowing them to meet more classmates, communicate together, and gain a lot". The survey showed that the proportion of "relatively satisfied" or above reached 91.9%. The third is to enhance the teaching effectiveness of the course. After studying this course, students have significantly improved their innovation and entrepreneurship theories as well as their basic abilities to complete entrepreneurship. From the statistics of students' course grades in the past two years, the average score has increased from 76 points to 80 points, and the excellent rate has increased to 75%. The improvement of students' academic performance reflects an increase in their learning engagement, as well as a continuous increase in learning gains and satisfaction.

4. Design of Student Evaluation Index Classification for Entrepreneurial Introduction Course

The observation points of current university classroom teaching evaluation belong to the third level indicators among various evaluation indicator systems, most of which belong to the second level indicators such as teaching attitude, teaching content, teaching methods, teaching organization, teaching methods, teaching effectiveness, etc. Most of the existing classroom teaching evaluation indicator systems do not match the teaching practice activities under the OBE education concept. We believe that the indicator system and observation points for classroom teaching evaluation need to be reconstructed. According to the OBE education philosophy, classroom teaching in universities is first the predetermined output of classroom teaching, followed by the implementation and evaluation output, and finally continuous improvement.

4.1 Student Evaluation Index System and Observation Points

As college students, they are limited by their own knowledge and abilities and find it difficult to make objective and reasonable judgments about the cutting-edge content, the rationality of teaching design, and the flexibility of teaching methods in teaching. The main observation points of student evaluation include six elements: a1 teaching preparation, a2 teaching enthusiasm, a3 language and behavior, a4 classroom atmosphere, a5 sense of achievement, and a6 sense of satisfaction. Based on this, a student evaluation index system is constructed as shown in Table 2.

Table 2: Student Evaluation Index System

First indicator	Second indicator	Observation Point
Output	Impart Knowledge and Educate People	a1: Teaching preparation a2: Teaching enthusiasm a3: Speech and behavior
Evaluation Output	Teaching Achievement	a4: Classroom atmosphere a5: sense of gain a6: Satisfaction

4.2 Empowerment of Student Evaluation Iindex System

Table 3: Student Evaluation Index System Matrix and Weight Values

A	a1	a2	a3	a4	a5	a6	weight
a1	1	1/2	1/3	1/3	1/5	1/5	0.0441
a2	2	1	1/2	1/3	1/5	1/5	0.0594
a3	3	2	1	1/3	1/5	1/5	0.0801
a4	3	3	3	1	1/7	1/2	0.1362
a5	5	5	5	7	1	1/2	0.3363
a6	5	5	5	2	2	1	0.3438

According to the 6 observation points listed in Table 2, the importance of each observation point is assigned using the AHP analysis method. A matrix is established for values 1, 2, 3, 3, 5, and 5, and their weights are calculated using the Analytic Hierarchy Process. The results are shown in Table 3. By calculating CR=0.083<0.1, consistency check was passed. The weight of the first level indicator "achieving output" in student evaluation is 0.1836, which is the sum of the weights of a1, a2, and a3; The weight of the first level indicator "evaluation output" is 0.8164, which is the sum of the weights of a4, a5, and a6. In the indicator system of student evaluation, the weights of students' sense of gain and satisfaction are 0.3363 and 0.3438, respectively, accounting for more than half of the evaluation indicator weights, fully reflecting the teaching evaluation orientation under the student-centered OBE education concept (Table 3).

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