Research on the Teaching Reform of the Online and Offline Mixed Course of "Innovation and Entrepreneurship Theory and Practice" Based on the OBE Concept

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Abstract: With the rapid development of the social economy and technology, cultivating high-quality talents with innovation and entrepreneurship capabilities has become a core mission of higher education. As a pivotal course in university innovation and entrepreneurship education systems, "Innovation and Entrepreneurship Theory and Practice" plays a vital role in stimulating students' innovative thinking and practical entrepreneurial skills. Against the backdrop of traditional teaching challenges—such as low student engagement, insufficient practical training, and a singular evaluation system—this study explores the reform of online-offline blended teaching based on the Outcome-Based Education (OBE) concept. Taking Lingnan Normal University as a case, the research integrates OBE principles of "student-centeredness" and "outcome orientation" to redesign course objectives, optimize teaching strategies, consolidate resources, and establish a diversified evaluation framework. By combining literature analysis, teaching practices, and empirical assessments, the reform demonstrates significant outcomes. Post-reform data reveal a 38.2% increase in students' online video learning duration, a 52.6% rise in classroom discussion participation, and an improvement in final exam average scores from 75 to 82.3. The proportion of excellent practical project teams increased from 15% to 27.5%, while innovative thinking scores rose by 14.6%. Teacher satisfaction with teaching effectiveness improved from 80% to 91.3%. These results validate that the OBE-based blended model effectively enhances students' knowledge acquisition, practical skills, and innovative capacities. This study not only highlights the synergy between blended learning and OBE but also provides replicable practices for curriculum reform in higher education, offering theoretical and practical insights to cultivate innovation-driven talents aligned with societal needs.

Keywords: OBE Concept; Innovation and Entrepreneurship; Blended Online and Offline Courses; Teaching Reform; High-Quality Talents.

1. Introduction

With the rapid development of the social economy and the continuous advancement of technology, innovation and entrepreneurship have become important forces driving the progress of the times. In the field of higher education, cultivating high-quality talents with innovative spirit and entrepreneurial ability has become an important mission of major universities. As a core course in the innovation and entrepreneurship education system of universities, the course of "Innovation and Entrepreneurship Theory and Practice" plays an irreplaceable role in stimulating students' innovative thinking and cultivating their entrepreneurial practical abilities.

Against the backdrop of deepening education reform, the OBE (Outcome Based Education) concept has gradually gained widespread attention. The OBE philosophy emphasizes student learning outcomes as the guide, focusing on the practical gains and ability improvement of students in the learning

process, which is highly consistent with the goals of innovation and entrepreneurship courses. Meanwhile, with the rapid development of information technology, the blended learning mode of online and offline has provided new ideas and methods for curriculum reform. This teaching model can fully leverage the advantages of abundant online teaching resources, flexible learning time and space, strong offline teaching interaction, and timely practical guidance, achieve complementary advantages, and provide students with more personalized and diversified learning experiences.

This article aims to explore the application of blended online and offline teaching mode in the course of "Innovation and Entrepreneurship Theory and Practice" based on the OBE concept. Through the analysis of the current situation of course construction, teaching reform practice, and evaluation of reform effectiveness, it provides useful references and inspirations for the teaching reform of innovation and entrepreneurship courses in universities, in order to better meet the social demand for innovation and entrepreneurship talents.

2. Literature Review

2.1 OBE Concept and Curriculum Reform

Since its proposal in the 1980s, the OBE concept has gradually been applied and promoted in the global education field[1]. The core of this concept lies in centering on students' learning outcomes and reverse designing the curriculum system, teaching methods, and evaluation methods[2]. In terms of curriculum reform, numerous studies have shown that courses based on the OBE concept can more clearly focus on the knowledge, abilities, and qualities that students should possess, thereby optimizing course goal setting, integrating course content, and making courses more in line with social needs and student development[3]. The study points out that curriculum reform under the OBE concept can break the limitations of traditional courses that focus on knowledge transmission, shift the curriculum focus to the cultivation of students' comprehensive literacy, and encourage teachers to pay more attention to the cultivation of students' practical abilities through clear outcome orientation[4].

2.2 Theory and Practice of Blended Curriculum Teaching Mode

The blended learning model combines the advantages of online and offline teaching, and has become a hot topic in educational research in recent years. Online teaching platforms provide rich learning resources and flexible learning methods, allowing students to independently arrange their learning according to their own progress[5]. Offline teaching strengthens the understanding and application of knowledge through teacher guidance, interaction among classmates, and practical operations[6]. At the practical level, many universities have applied blended learning to various courses. Some scholar found through case analysis of multiple universities that blended learning mode can effectively improve students' learning enthusiasm and participation, and enhance learning effectiveness[7]. At the same time, this model also provides teachers with more choices of teaching methods and tools, which helps optimize the teaching process[8].

2.3 Research on the Teaching of Innovation and Entrepreneurship Courses

Innovation and entrepreneurship courses, as an important component of higher education, have always been highly regarded for their innovative teaching methods and models. Researchers have explored innovation and entrepreneurship courses from different perspectives, including case-based teaching, project-based teaching, and practical teaching models. Some scholar emphasizes the importance of case-based teaching in innovation and entrepreneurship courses[9]. Through the analysis of real enterprise cases, students can better understand the entrepreneurial process and the practical application of management knowledge. The project-based teaching method enables students to exercise innovative thinking and entrepreneurial abilities through practical projects, and cultivate teamwork and problem-solving skills. These studies provide rich theoretical support and practical references for the teaching reform of innovation and entrepreneurship courses[10].

2.4 Insufficient Research

Although there have been numerous research achievements in OBE concept, blended

learning mode, and innovation and entrepreneurship course teaching, there are still some shortcomings. Firstly, there is relatively little systematic research on the deep integration of OBE concept and blended curriculum teaching mode in innovation and entrepreneurship courses, and there is a lack of comprehensive reform practice cases for specific courses. Secondly, there is still insufficient research on the applicability of blended learning models in innovation and entrepreneurship courses, as well as how to optimize and adjust them according to the characteristics of different courses. Finally, there is a lack of follow-up research on the long-term impact of curriculum reform on students' innovation and entrepreneurship abilities and overall quality improvement. Further empirical research and data collection and analysis are needed to comprehensively evaluate the effectiveness of the reform.

3. The Current Situation and Problems of Curriculum Construction in Lingnan Normal University

Lingnan Normal University has 78 majors and over 200 classes of freshmen, all of whom offer the course "Innovation and Entrepreneurship Theory and Practice". The course is arranged for 16 weeks, with 2 class hours per week, totaling 32 class hours. This reflects the school's emphasis on innovation and entrepreneurship education, attempting to popularize innovation and entrepreneurship knowledge through courses, and cultivate students' innovation consciousness and entrepreneurial spirit. However, currently the school has only conducted a pilot reform of first-class blended courses online and offline in three classes of Cooking 24, Financial Management 24-1, and Financial Accounting Education 24-1. The pilot scope is relatively small, which greatly limits the full release and promotion of the advantages of blended curriculum teaching mode, making it difficult for most classes to enjoy the learning experience and effectiveness improvement brought by this advanced teaching mode.

3.1 The Issue of Teaching Methods and Tools

Although the school has offered the course of "Innovation and Entrepreneurship Theory and Practice" for many years, there are still some problems in teaching methods and tools. In the traditional teaching mode, teacher lectures are the main focus and student participation is limited. In the classroom, teachers dominate and mainly impart innovation and entrepreneurship related content by explaining theoretical knowledge, while students are in a passive receiving position and lack opportunities for active thinking, interaction, and communication. This teaching mode is difficult to fully stimulate students' innovative thinking and active learning enthusiasm, which is not conducive to the cultivation of students' innovative consciousness and the improvement of their entrepreneurial ability. At the same time, due to the lack of diversified practical teaching activities, there are deficiencies in cultivating students' abilities in practical entrepreneurial operations and problem-solving. Innovation and entrepreneurship education is not only about imparting theoretical knowledge, but also requires students to accumulate experience and enhance their abilities through practical operation and practice. However, the practical teaching aspect in the current curriculum is relatively weak, which may cause students to feel at a loss when facing real entrepreneurial scenarios and unable to effectively apply the theoretical knowledge they have learned to practical operations.

3.2 The Problem of Curriculum Evaluation System

The course evaluation system is also relatively single, mainly based on final exam scores. This evaluation method cannot comprehensively and objectively reflect the progress and achievements of students in the process of cultivating innovation and entrepreneurship abilities. The evaluation of innovation and entrepreneurship ability should not be limited to the mastery of theoretical knowledge, but should also include students' innovative thinking, practical operation ability, teamwork ability, business plan writing ability, and other aspects. A single examination evaluation model will make students overly focus on memorizing and memorizing theoretical knowledge, while neglecting the improvement of practical ability and comprehensive quality, which is not conducive to the cultivation and long-term development of students' comprehensive

innovation and entrepreneurship ability.

3.3 The Problem of Integrating Teaching Resources

In addition, the integration of online and offline teaching resources is not yet perfect. On the one hand, the richness and quality of online resources vary greatly. Although the school has established an online teaching platform, some teachers' uploaded resources may have problems such as insufficient depth of content, untimely updates, and relatively single forms, which cannot fully meet the diverse learning needs of students. On the other hand, the connection between online and offline teaching is not tight enough, which affects students' learning coherence and overall effectiveness. For example, there may be duplication or disconnection between online teaching content and offline classroom teaching content, which can cause students to feel confused during the learning process and unable to organically integrate online and offline learning, thereby reducing learning efficiency and quality. These issues have hindered the further development of the course "Innovation and Entrepreneurship Theory and Practice" in cultivating high-quality innovation and entrepreneurship talents, and urgently need to be addressed through teaching reform.

4. Practice of Blended Online and Offline Course Teaching Reform Based on OBE concept

4.1 Course Objective Setting

Based on the OBE concept and student-centered approach, the goal of the course "Innovation and Entrepreneurship Theory and Practice" is to cultivate students' solid knowledge of innovation and entrepreneurship, strong innovative thinking ability, practical operation ability, and teamwork spirit. Specifically, students should master core knowledge such as identifying entrepreneurial opportunities, building business models, and developing entrepreneurial plans; Be able to apply innovative methods to solve practical problems and carry out entrepreneurial practice activities; And enhance communication, coordination, and collaboration skills in team projects.

4.2 Teaching Methods and Strategies

In terms of online teaching methods, utilizing the school's online teaching platform, carefully recorded course videos, electronic textbooks, case libraries, and other resources are released, allowing students to independently learn theoretical knowledge. At the same time, online discussion forums are set up where teachers post topics to guide students' thinking and communication, such as "Analysis of Current Popular Entrepreneurial Fields", to stimulate students' innovative and critical thinking. In addition, online quizzes are used to assess students' mastery of knowledge and provide timely feedback to help them consolidate their learning outcomes.
In terms of offline teaching methods, in the classroom, teachers explain and answer questions about the key and difficult points of online learning, organize group discussions, case analysis and other activities. For example, selecting successful business cases and having students analyze their entrepreneurial processes and business models in groups can cultivate their ability to analyze and solve problems. Carry out practical teaching activities, such as simulating entrepreneurial project roadshows, where students form teams to complete the preparation of entrepreneurial plans and present them, to exercise practical operation skills and teamwork spirit.

4.3 Integration and Optimization of Teaching Resources

In terms of online resource construction, we will continue to improve online teaching resources. In addition to basic course materials, we will add cutting-edge industry information, entrepreneurial policy interpretation, and other content to broaden students' horizons. Optimize the presentation of resources, such as using visual aids and animated demonstrations, to enhance their attractiveness and learnability.
In terms of offline resource preparation, we will enrich offline teaching resources and invite entrepreneurs and entrepreneurial experts to give lectures and share their experiences on campus; Cooperate with off campus entrepreneurship bases to provide students with on-site visits and practical opportunities; Construct an innovation and entrepreneurship laboratory on campus, equipped with relevant software and

equipment, to support students in carrying out entrepreneurial project practice.

4.4 Construction of Teaching Evaluation System

Build a diversified teaching evaluation system, covering online learning performance (30%), offline classroom participation (20%), practical project achievements (30%), and final exams (20%). Online learning performance is evaluated comprehensively based on students' video viewing time, participation in discussions, test scores, and other factors; Offline classroom participation, attendance assessment, group discussion contributions, etc; The results of the practical project will be jointly evaluated by teachers and enterprise mentors on students' entrepreneurial proposals and roadshows; The final exam tests students' comprehensive application ability of course knowledge in an open book format. By combining process evaluation with summative evaluation, comprehensively evaluate students' learning outcomes and development of innovation and entrepreneurship abilities.

5. Reform Achievements

Through the reform practice of blended online and offline course teaching based on the OBE concept, significant results have been achieved, as shown in Table 1.

Table 1. Effectiveness of Curriculum Reform

Project	Before the reform	After the reform	Change amplitude
Average video viewing time of students (hours)	2.5	3.46	38.2%
Student participation in discussion frequency (times/semester)	4.2	6.43	52.6%
Average score of final exam	75	82.3	7.3
Excellent rate (85 points or above)	20%	28.7%	8.7%
Proportion of excellent teams in practical projects	15%	27.5%	14.6%
Score for evaluation of innovative thinking ability	65	74.5	14.6%
Teacher satisfaction with teaching	80%	91.3%	11.3%

The learning enthusiasm of students has significantly improved. Online platform data shows that the average video viewing time of students has increased by 38.2% compared to before the reform, the frequency of participating in discussions has increased by 52.6%, and the quality of discussions has also significantly improved. Proactive questioning and sharing of opinions have become the norm. In terms of knowledge mastery, the average score of the final exam has increased from 75 points before the reform to 82.3 points, and the excellence rate (85 points or above) has increased from 20% to 28.7%. This indicates that students have a deeper understanding of the theoretical knowledge of innovation and entrepreneurship. In terms of practical ability, students demonstrate more outstanding performance in simulated entrepreneurial projects. In the evaluation of practical project achievements after the reform, the proportion of teams that received excellent evaluations increased from 15% to 27.5%. These teams' entrepreneurial proposals have clear logic and detailed content, and their roadshows can accurately answer judges' questions, demonstrating strong practical operation ability and business thinking. At the same time, students' innovative thinking is fully stimulated, and they are able to propose novel viewpoints and solutions in case analysis and discussion. The average score of innovative thinking ability assessment has increased by 14.6%. In addition, the teaching effectiveness of teachers has also been improved. Through blended online and offline teaching, teachers can better meet the learning needs of different students and have more diverse teaching methods. In the school's teaching evaluation, the satisfaction rate of teachers participating in the reform curriculum has increased from 80% to 91.3%, and students have given more positive feedback on teachers' teaching, believing that teachers play a more prominent role in guiding learning and inspiring thinking.

6. Conclusion

The blended online and offline teaching reform of "Innovation and Entrepreneurship Theory and Practice" based on the OBE concept has effectively

improved students' learning outcomes and innovation and entrepreneurship abilities. The reform has clarified the student-centered curriculum objectives, and by optimizing online and offline teaching methods, integrating teaching resources, and constructing a diversified evaluation system, it has stimulated students' learning enthusiasm and enhanced their practical operation ability and innovative thinking. Significant progress has been made in students' participation, knowledge mastery, and practical project outcomes in the course, and teachers' teaching methods have become more diverse, resulting in improved teaching abilities.

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