

Research on Teaching Reform of SPOC Flipped Classroom in Applied Undergraduate Education under the OBE Theory

Jiajun Chen¹, Guanxi Chen²

¹Business School, Nantong Institute of Technology, Nantong, Jiangsu, China

²School of Media and Design, Nantong University of Technology, Jiangsu, China

Abstract: Currently, flipped classroom is an important teaching form in the process of applied undergraduate education. Its application and promotion in teaching have effectively improved the quality of teaching, but there are still some problems. Based on analyzing the driving force of teaching reform in applied undergraduate courses, this study proposes a teaching reform path of SPOC flipped classroom under the OBE theory in applied undergraduate courses. It aims to provide certain assistance for the reform of flipped classroom teaching mode in applied undergraduate education in China.

Keywords: OBE Theory; SPOC Flipped Classroom; Teaching Reform

1. Introduction

The core concept of flipped classroom teaching mode is "student-centered, teacher assisted", emphasizing active student participation, cooperative learning, and practical operation. It promotes the development of students' independent thinking ability and initiative. In the field of higher education in China, flipped classrooms have gradually been introduced and have received a certain degree of recognition and admiration. Among them, the OBE theory, as one of the important theoretical foundations supporting the implementation of flipped classrooms, has a profound impact on the evaluation of the effectiveness and teaching design of flipped classrooms. Therefore, in the teaching practice of introducing flipped classroom into applied undergraduate colleges, it can better promote the improvement of student learning effectiveness, learning motivation, and teaching effectiveness, by fully leveraging the guidance and support of OBE theory.

2. Motivation for Teaching Reform of

Applied Undergraduate Courses

2.1 Lack of Learning Motivation

In the current reform of applied undergraduate course teaching, the lack of student learning motivation is an important problem that needs to be solved, and it is also a key focus of applied undergraduate course teaching reform. This phenomenon is mainly manifested as a lack of enthusiasm and initiative among students in the learning process, a lack of interest and enthusiasm for course content, as well as a lack of identification and spontaneity in learning professional theoretical systems. There are various reasons why students lack motivation to learn, which can be attributed to unreasonable curriculum design, poor learning atmosphere, and weak personal psychological qualities. Firstly, the unreasonable curriculum design is one of the important reasons for students' lack of learning motivation. [1] In the teaching of applied undergraduate courses, there are phenomena such as overly complex course offerings, abstract content, and disconnection from practical applications. These issues can easily lead to students feeling bored with learning and losing interest in learning. Some overly theoretical courses make it difficult for students to see the practical significance of learning in a short period of time, often leading to a lack of learning motivation. In addition, the course content is too single and lacks diversity, which can also reduce students' learning enthusiasm and lead to insufficient learning motivation. Secondly, a poor learning atmosphere is also one of the reasons why students lack motivation to learn. In applied undergraduate teaching, some classes have a negative learning atmosphere, including chaotic academic atmosphere, intense competition, and tense interpersonal relationships. All of these will have a certain negative impact on students' learning. In such a learning environment, students are prone to

feeling stressed and lack motivation and enthusiasm for learning, which can even affect their confidence and enthusiasm for learning.

2.2 Single Teaching Method

In many applied undergraduate courses, teachers often only use a single teaching method for teaching. This hinders the improvement of students' learning outcomes. The manifestation of a single teaching method is mainly reflected in the following aspects. Firstly, classroom teaching places too much emphasis on traditional lecture style teaching. In many applied undergraduate courses, teachers often focus too much on classroom teaching and overlook the application of other teaching methods. This single teaching method can easily lead to a decrease in students' interest in learning, fail to stimulate their learning motivation, and thus affect their learning effectiveness. Meanwhile, due to the lack of interactivity in lecture based teaching, student participation is low, and teaching effectiveness cannot be effectively guaranteed. Secondly, there is a lack of targeted practical teaching. [2] In applied undergraduate courses, practical teaching is a crucial part, but many teachers rarely use practical teaching methods. Students often passively receive knowledge in the classroom and are unable to apply it to practical problems, resulting in a disconnect between their theoretical knowledge and practical application abilities. This situation seriously affects the improvement of students' comprehensive quality and practical abilities, and is also not conducive to their future employment and development. Finally, there is a lack of personalized teaching methods. In applied undergraduate courses, students have different backgrounds, interests, and learning methods, but many teachers do not develop personalized teaching methods tailored to the characteristics of different students. Overly unified teaching methods often fail to meet the diverse learning and development needs of students, resulting in differentiated learning outcomes. Moreover, the lack of personalized teaching methods cannot stimulate students' innovative thinking and practical abilities, which limits their comprehensive development.

2.3 Single Assessment Method

At present, many applied undergraduate courses still use traditional methods such as

exams, papers, and reports as assessment and evaluation mechanisms for students. This single assessment method has some problems. Firstly, it is not possible to comprehensively evaluate the comprehensive abilities of students. Traditional exams often focus on students' memory and comprehension abilities, while neglecting their development in areas such as analysis, innovation, and application abilities. This is inconsistent with the training objectives of applied undergraduate courses; Applied undergraduate courses emphasize more on students' practical abilities and problem-solving abilities. Therefore, a single assessment method is difficult to accurately and effectively evaluate the knowledge and ability level that students have learned in applied undergraduate courses. Secondly, a single assessment method can easily lead to a tendency towards exam oriented education. In order to pursue good grades, students often focus their learning on preparing for exams and neglect the practical application of course knowledge. This not only affects students' learning motivation and interest, but also weakens the teaching effectiveness of applied undergraduate courses. Because in this situation, students usually only focus on exam taking skills, rather than truly understanding and mastering knowledge, and may even forget what they have learned. Therefore, a single assessment method can easily lead to utilitarian learning of course content by students, rather than in-depth understanding and mastery. In addition, a single assessment method is also difficult to meet the learning needs of different students. Each student has different learning styles and abilities, but traditional exam methods cannot flexibly adapt to these differences. Some students may score high in books, but lack the ability in practical operations; Some students may have strong practical skills, but their performance in written exams is mediocre. Therefore, a single assessment method is difficult to fairly evaluate the academic performance and ability development level of different students.

3. The Teaching Reform Path of SPOC Flipped Classroom under OBE Theory in Applied Undergraduate Education

3.1 Teaching Forms and Curriculum Reform

Under the OBE theory, effective reform of

teaching forms and teaching hours can be achieved through the use of SPOC network platforms. Firstly, in response to the reform of traditional teaching methods, the SPOC network platform can provide rich resources and diverse teaching content, allowing students to engage in self-directed learning through micro videos, extracurricular knowledge expansion, and small assessments. In this way, students can learn at the appropriate time and place according to their own learning pace and needs, improving learning efficiency and outcomes. Secondly, teachers need to transform their roles, that is, they are no longer simply imparting knowledge to students, but playing the roles of guides, facilitators, and motivators, providing students with learning paths and methods. This can promote students to shift from passively receiving knowledge to actively participating in learning, and continuously improve their learning efficiency through simulated scenario training and full utilization of pre class, in class, and post class time. [3] Once again, teachers need to combine participatory classroom teaching with guided, heuristic, and case-based SPOC online teaching to stimulate students' interest and initiative in learning. In classroom teaching, teachers can leverage the advantages of SPOC network teaching to introduce more activities such as case analysis, problem solving, and team collaboration, enhancing students' practical operation ability and innovative thinking ability. Finally, teachers should encourage students to make full use of their pre and post class time, improve their autonomy and enthusiasm in learning the curriculum, and expand their comprehensive abilities. Through the SPOC flipped classroom teaching model, students can better formulate and execute learning plans, cultivate habits of self-directed and lifelong learning, and thereby improve their comprehensive quality and innovation ability.

3.2 Reform of Online Teaching Environment

In terms of reforming the online teaching environment, the application of SPOC flipped classroom can provide new possibilities and practical paths for education and teaching. Compared to traditional teaching methods and MOOC courses, SPOC teaching methods have the characteristics of privacy and targeted learning, which can better meet the personalized learning needs of students,

stimulate their sense of urgency and initiative in self-directed learning. At the same time, the SPOC model can also compensate for the shortcomings of MOOC and traditional teaching. Teachers can set course navigation according to the actual situation of students, use the platform to push learning tasks to students in sequence, thereby better guiding students to learn independently and improving learning efficiency. Firstly, teachers need to have a deep understanding of the concept and characteristics of the SPOC model, combine their own teaching practices, design course content and teaching methods that meet the actual needs of students, and fully leverage the advantages of the SPOC model. [4] Secondly, teachers can fully utilize the flexibility and convenience of SPOC mode to guide students to learn anytime and anywhere according to their own time and space arrangements, without being limited by time and space, thereby effectively improving the convenience and comfort of student learning. At the same time, teachers can also synchronously check the learning progress of students and adjust and improve teaching plans based on their learning situation, in order to better adapt to the needs of students and complete teaching feedback, promoting personalized and comprehensive development of teaching.

3.3 Reform of Teaching Evaluation Methods

In response to the current problem of single assessment methods in applied undergraduate course teaching, improvements can be made in the following aspects. Firstly, diversified assessment methods can be introduced. In addition to traditional written tests, various forms of assessment can also be used to assess students' learning outcomes, such as open-ended questions, case studies, experimental reports, and display of design works. Through diversified assessment methods, it is possible to comprehensively evaluate students' knowledge acquisition and ability development level, as well as stimulate their learning interest and motivation. Secondly, project-based evaluation of courses can be implemented. Project based evaluation is a way of placing students in real-life situations and evaluating their learning outcomes by solving problems or completing tasks. Through project-based evaluation, it is possible to have a more intuitive understanding of students' actual

abilities and comprehensive quality levels, as well as to cultivate their practical hands-on ability and teamwork spirit. Therefore, project-based evaluation can be introduced into applied undergraduate courses to enrich and improve assessment methods. Finally, a personalized learning evaluation system can be established. A personalized learning evaluation system refers to an evaluation method that tailors corresponding learning plans to the learning characteristics and needs of different students. Through a personalized learning evaluation system, it is possible to better meet the learning needs of different students, stimulate their interest and potential in learning.

4. Conclusion

Through the above research, it will help to deeply understand the guiding role of OBE theory in flipped classroom practice, explore the innovative application of flipped classroom mode in applied undergraduate education, and promote teaching reform and quality improvement in applied undergraduate colleges. At the same time, this will also provide theoretical support and practical experience for the in-depth promotion and practical application of flipped classroom teaching mode, and make positive contributions to the digital transformation and educational model innovation of higher education in China.

Acknowledgments

This paper is supported by Jiangsu Province Modern Education Technology Research Project, Project Name: Research on Teaching Innovation of SPOC Flipped Classroom in Art Creation and Practice Courses under Modern

Information Technology (Project Number: 2022-R-104715); 2023 Campus-level Teaching and Research Reform Project in Nantong Institute of Technology, Project Name: Research on Practical Teaching Reform of 'Catering Management' Course Based on OBE Theory; 2021 Ministry of Education Industry-University Cooperation Collaborative Education Project, Project Name: Research on Industry-University Cooperation Teaching Models in the Context of Digitization--Taking the Composition Design Course as an Example (Project Number: 202101101011).

References

- [1] Jiang Qing, Li Xi, Liu Ruiling. A Study on the Hybrid Teaching Model of International Business Negotiation SPOC Based on Output oriented Method [J]. Gansu Education Research, 2023, (12): 134-139
- [2] Che Wei, Yang Zhenbai. Construction and Practice of Online and Offline Blended Teaching Mode for Introduction to Civil Engineering Course Based on SPOC Flipped Classroom [J]. Journal of Architectural Education in Institutions of Higher Learning, 2023, 32 (06): 88-96
- [3] Liao Ruiyun, Zheng Yanfen. Research on the Construction of Online Course Resources for Continuing Education for Teachers under the OBE Concept: A Case Study of Guangzhou City [J]. Knowledge Library, 2023, 39 (16): 179-182
- [4] Yang Xuran, Wang Jingzhi. Exploration of flipped classroom teaching mode based on OBE concept in the context of educational informatization [J]. Journal of Xingtai University, 2023, 38 (02): 160-166