Exploring the Hybrid Teaching Model Integrating "Scenario Construction" and Modern Information Technology

Lei Wang*, Ping Wan

Taishan University, Tai’an, 271000, China
Vlan19831108@163.com
*Corresponding author

Abstract: The concept of integrating "scenario construction" with modern information technology in educational reform is inspired by the current trend of e-commerce live streaming for product sales. This approach embodies the "student-centered" teaching philosophy and is conducive to fostering students' abilities for independent inquiry, innovation, and teamwork. It serves as an effective exploration for higher education institutions to promote the "Three-Three-One" education model. This article, from the perspective of co-creating value, utilizes a hybrid teaching platform to create a diverse, content-rich, and flexible communication "teaching broadcast room" for students. This enables students to autonomously select learning materials of interest, facilitating in-depth learning from multiple angles and channels, increasing their knowledge reservoir, and improving knowledge conversion rates.

Keywords: Scenario Construction, Modern Information Technology, Hybrid Teaching, Reform

1. Course Basic Information

"Principles of Economics" is a foundational course offered to undergraduate students. It is a compulsory course and serves as a comprehensive description and summary of the operational mechanisms of modern market economies according to mainstream economics. The course content includes both microeconomics and macroeconomics. Given the development of the market economy in our country, the goal of universities is to cultivate high-quality economic professionals who understand and grasp the general principles of modern economic development from a Marxist ideological perspective. This is also a mandatory requirement from society for every individual pursuing a career in economics and management-related fields.

2. Key Issues Addressed in Curriculum Reform

Issue 1: The course content is overly theoretical, leading to a lack of student interest in learning.

Solution: To address the aforementioned challenge and enhance student engagement, various methods such as creating economic scenarios, simulating economic decision-making, and employing case-based teaching can be used. The aim is to increase students' interest in learning.

"Principles of Economics" is heavily focused on theoretical content, making it difficult for students to comprehend abstract concepts such as formulas, graphs, and functions. This results in longer study durations and less-than-ideal outcomes. To tackle this issue, the most crucial approach is to implement a blended teaching method. This approach allows students to immerse themselves as participants in different economic environments within scenarios constructed by the teacher. They assume the role of rational individuals, selectively acquire knowledge, practice, and expand their understanding. This approach comprehensively enhances students' abilities to understand, analyze, and address real-world economic problems.

Issue 2: Traditional learning assessment channels are limited and have a lag in data collection, making it challenging to meet the diverse needs of students.

Solution: The blended use of online and offline teaching tools not only stimulates students' learning interests but also allows for real-time data collection and feedback. This enables teachers to dynamically monitor students' learning outcomes and provide targeted guidance.
Traditional learning assessment methods have focused heavily on outcomes, often neglecting the learning process. This leads to a superficial understanding of knowledge, resulting in knowledge being quickly forgotten. For this course, we have already established the SuperStar Learning Online Teaching Platform and integrated university-level MOOC (Massive Open Online Course) resources. Teachers use a variety of assessment methods, including releasing MOOC videos, scenario introductions, task assignments, group discussions, and chapter quizzes. These methods allow for continuous interaction with students, increasing classroom participation and engagement, and enabling every student to experience a sense of achievement in their learning journey.

Issue 3: The study of economics inevitably involves ideological issues that must be promptly corrected and guided.

Solution: By incorporating ideological and political education (course-based ideology) and case introductions, students can develop the correct understanding of socialist core values.

We explore diversified teaching methods for "course-based ideology," integrating values guidance with knowledge dissemination. Leveraging online course construction and web platforms, we employ various teaching approaches such as thematic and case-based instruction. This subtly integrates the objectives of "course-based ideology" into the course design and students' learning tasks, enhancing students' identification with the socialist system and the implementation of national economic policies.

3. Teaching Philosophy and Principles

3.1 Teaching Philosophy

The teaching philosophy followed in "Principles of Economics" is based on the use of Outcome-Based Education (OBE) principles within a hybrid teaching model[1]. Specifically, it involves designing instructional contexts that combine virtual and real scenarios, in line with the demands for knowledge and skills by society in the field of management[2]. This approach utilizes modern teaching tools, such as micro-lessons, learning platforms, cloud-based education, and other cutting-edge online and offline blended teaching methods. It establishes an assessment system that seamlessly integrates formative and summative assessments. It emphasizes the characteristics of the hybrid teaching process, technological innovation, multi-scenario instruction, and flexibility. By gaining a comprehensive understanding of students and enhancing their capabilities, it reflects the deep integration of curriculum development and information technology.

3.2 Teaching Design Principles

In the design of blended teaching, we consistently adhere to the "consistency principle," meaning that teaching objectives, the teaching process, and teaching assessment feedback are aligned[3]. The specific operational steps involve, firstly, designing teaching objectives in accordance with the requirements of professional development goals. This is followed by analyzing student characteristics and expectations to select different technological tools for designing task points and creating instructional resources. Secondly, during the teaching process, we aim to transform what the teacher knows and does into what the students know and do. This is achieved through exercises, interactions, and other forms that enable students to comprehend and grasp the content. Lastly, by collecting information and data in a timely manner, we design a specific assessment system comprising online assessments (30%), regular assessments (20%), and final assessments (50%). This comprehensive, objective, and fair assessment system evaluates students' overall abilities.

3.3 Teaching Design Approach

The idea of teacher teaching design is: first, design a teaching plan from three aspects: knowledge, skills, and quality. Secondly, utilizing the "online learning platform" and MOOC (large-scale online open course) resources for college students, the activities of teachers and students are divided into three stages: before class, in class, and after class[4]. Develop implementation pathways and evaluation criteria for each stage. Finally, conduct post class reflection and maintain teaching feedback records. The specific process is shown in Figure 1: Teaching Case Design Approach.
4. Case Implementation Status

4.1 Teacher Activities

4.1.1 Before class

Teachers establish a learning background for the classroom, focusing on two scenarios: grain markets and small commodity markets, and encourage students to explore the supply and demand curve from the perspectives of suppliers and consumers. Teaching videos and real-world examples showcase the practical application of equilibrium price theory. Task assignments will help students understand the dynamics of equilibrium.

4.1.2 In class

Teachers implement a flipped approach, allowing students to independently learn the economic principles of "low prices hurting farmers". Through group discussions and graphic analysis, students are guided to summarize supply and demand patterns. In addition, teachers also need to integrate course content related to food security, common prosperity, and the government's commitment to serving the people into the context of a market economy, cultivating students' understanding of socialist core values[5].

4.1.3 After class

The teacher assigns homework to strengthen key concepts and deepen students' understanding of the relationship between market economy and government macroeconomic regulation through group discussions and online quizzes.

4.2 Student Activities

4.2.1 Before class

Students should start from the economic phenomenon of "low food prices harming farmers" and "low profits but fast turnover" to engage in self-directed learning. Teachers introduce new knowledge through teaching videos, increase students' interest in learning, and evaluate the effectiveness of students' learning by setting preview questions.

4.2.2 In class

Students' activities include group discussions and brainstorming, using independent thinking and collision of ideas to propose and solve new problems.

4.2.3 After class

Students choose to strengthen and review or explore advanced knowledge based on the completion
of homework and their own abilities, laying a good foundation for future learning.

5. Case Characteristics and Innovation

5.1 Content Innovation in Blended Teaching

This case study introduces content innovation in the context of blended teaching. The reform in this case combines 'scene setup' with modern information technology, drawing inspiration from the successful marketing model of live streaming e-commerce. It brings the efficient live streaming experience into the economics classroom, providing students with a novel and convenient learning environment. This approach not only caters to the students' need to excel in economics but also helps them develop the ability to think, analyze, and solve problems using economic thinking[6].

5.2 Method Innovation in Blended Teaching

In the era of the digital economy, businesses can leverage big data and cloud computing to create precise consumer profiles, enabling targeted marketing. In blended teaching, teachers have achieved innovation in teaching methods by adding online teaching tools such as the "Learning Pass APP", the Rain Classroom APP, and the Cloud Classroom APP. Utilizing their robust data processing and analysis capabilities to enhance classroom learning efficiency, this approach frees teachers from a substantial amount of repetitive and unproductive work, making it an efficient teaching method.

5.3 Shaping Socialist Core Values - An Ideological Development Innovation

Socialist core values in China represent the contemporary evolution of Marxism in China. They are a combination of the objective requirements of modern Chinese societal development and the theoretical qualities of Marxism. In the teaching of "Economic Principles," there is a steadfast commitment to the guidance of this ideology on economic theory and practice, constituting an innovation and development in the realm of ideology.

6. Future Improvement Measures

The implementation of the blended teaching reform for the course 'Principles of Economics' has yielded the anticipated results. Key reform measures include leveraging information technology to transform traditional teaching methods, increasing the proportion of research-oriented learning content in course design, cultivating students' habits of self-directed learning through the construction of multi-scenario learning processes, and enhancing the formative assessment mechanism to make the assessment methods more objective and equitable[7].

"In future course instruction, we will continue to explore blended teaching reforms that combine online and offline elements, with a focus on refining measures related to lecture delivery, practice, and interaction[8]. Specifically, it is manifested in the following three aspects.

Firstly, in lecture delivery: We will continue to leverage the convenience and efficiency of the Internet and big data to promptly access high-quality information and apply it to classroom instruction.

Secondly, in practice: We emphasize not only delivering information but also guiding students through exercises and targeted instructions, helping them enhance their practical skills through continuous feedback.

Thirdly, in interaction: By creating more seamless and diverse interactive communication platforms, we will encourage students to engage in self-discovery and heuristic discussions, facilitating their understanding and application of knowledge construction.

References