

# An Exploration Into Innovative Teaching Design of the Course of Economics

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## ABSTRACT

In order to teach the course of Economics in a different way that is beneficial for students, this paper proposes four aspects of the innovative teaching design. First of all, depending on the Xuexitong platform, this paper implements the BOPPPS six-step teaching approach. Second, by eliminating the boundaries between courses, it establishes an economics-centered cross-discipline knowledge network to enhance teaching efficiency. Third, the teaching becomes more effective by introducing in-class and out-of-class experiments. Following the process-oriented nature of learning, it adopts the diversified assessment system with equal emphasis on knowledge and capabilities.

**Keywords:** *Innovation; BOPPPS; Cross-discipline knowledge network; Experiment; Diversified assessment*

## 1. INTRODUCTION

Principles of Economics is one of the most compulsory basic courses for all majors in economics and management, including microeconomics and macroeconomics. It is a discipline that takes the microeconomic activities of consumers, enterprises, and other individual economic units and the macroeconomic activities of the whole process of a national economy as the object of study and tightly integrates such activities with reality. On the other hand, the course features diverse contents, abstract theories, graphical analysis, and the necessary foundation of mathematical and scientific knowledge. The high status and difficulty of Principles of Economics pose great challenges to teachers' "teaching" and students' "learning".

## 2. THE NECESSITY OF CURRICULUM INNOVATION

Since 2009, the author has changed from an economics student to an economics teacher and has personally participated in the "learning" and "teaching" of economics on many occasions and has deeply felt many shortcomings of the current teaching of Principles of Economics. In order to fully grasp the characteristics of economic management students and the teaching status of the course in College \*\*, so as to target the compilation of scientific teaching content and the reform and innovation of teaching methods, the author's economics course teaching team randomly selected a total of 100 students from two majors, financial management and international business, to conduct a questionnaire survey. The questionnaire included three modules: "teaching", "learning" and "results". The "teaching" module mainly involves the teachers' teaching design and methods. The "learning" module mainly

involves the students' acceptance of teachers' teaching. The "results" module mainly focuses on the students' learning effectiveness and influence factors.

The survey found that the following problems exist in economics classroom teaching. First, the teaching content is esoteric and difficult to understand. Students cannot carefully listen to teachers or understand what teachers have lectured, resulting in poor knowledge absorption. Secondly, because of the complexity of economics theory, students learn each class in isolation from each other, making students lack an overall concept of economics theory. With a restricted view of learning, students are confused about what they have learned, why they have learned it, and what they can do after learning it. Thirdly, cramming education for theories is boring. The extremely limited and simple multimedia teaching means have been unable to attract students born after 2000. Fourthly, teachers attach more importance to theory than practice in teaching, fail to combine economic theory with reality closely, and do not provide practical guidance for students to apply economic knowledge to the analysis of practical problems, which is far from the original intention of building an application-oriented undergraduate school. Fifthly, the course adopts traditional and simple methods to assess the effectiveness. It is mainly in the form of a closed-book examination at the end of the semester. There is no criterion for students' comprehensive analysis ability, practical ability, and innovation ability, which in turn leads to the teachers' insufficient attention to the training and cultivation of such abilities in the early stage of teaching.

### **3. INNOVATIVE CONCEPT AND THINKING**

Based on the problems in economics classroom teaching and the characteristics of students' learning situation found in the survey, the basic concept of the innovative course design is three-dimensional teaching led by an innovative teaching mode that focuses on practice-oriented teaching and diversified assessment to build a cross-discipline knowledge system.

#### ***3.1. Led by an innovative teaching mode***

The innovative teaching model is embodied in three major dimensions. (1) It adopts the student-centered concept. Students are the main body of both learning and teaching. This concept will be carried out in students' preparation activities before class, teaching activities during class, extended activities after class, self-assessment and mutual assessment, as well as the design and interpretation of real situations. (2) Design thinking is adopted as a means. The teaching and learning process is not the teacher's improvisation, nor is it the students' random performance. The course is based on the BOPPPS teaching method. Through scientific analysis and precise control by the team, teachers create targeted situations, design tasks, select cases, and build knowledge systems for the course. In this way, the course can be taught in chains. Behind every accidental surprise, there are countless scientific models and steps to boost innovation and creativity. (3) It is supported by intelligent information technology. The development of emerging technologies and the sudden global epidemic have driven an unprecedented pace of intellectual change in education, thereby revolutionizing the cognitive pathways and learning styles of a new generation of students. The single inefficient classroom teaching mode can no longer meet the needs of students. Relying on the Xuexitong teaching platform, this course computerizes course resources, pre-course previews, classroom interactions, and post-course reviews, thus making teaching eliminate the classroom's physical limitations. With the help of the college's innovation training room, we set up a smart business learning workshop. With the advanced computer technology to support the implementation of teaching, it provides multiple solutions to cultivate students' awareness of independent learning and problem exploration, and improve students' ability to analyze and solve practical problems, innovation ability and team communication ability.

#### ***3.2. The goal of building a cross-discipline knowledge system***

The discipline classifies knowledge, but the solution of practical problems requires the integration of knowledge. In Western countries, economics is called "the Queen of all

Social Sciences, the oldest art, and the most innovative science". [1] First of all, it is a natural science, which uses a lot of mathematical reasoning and models to prove the interrelationship between economic variables under strict assumptions. But at the same time, it is a social science, rich in worldview, values, and thinking training, making it necessary and possible to integrate the teaching of economics courses with other disciplines. This course will be combined with the faculty of "Corporate Investment and Capital Budgeting", "Strategic Business Management", "Tax Law" and other courses to help students build a diversified knowledge system.

#### ***3.3. Practice-oriented teaching***

Students in independent colleges tend to pay special attention to the practical application of theory and have the intelligence structure characteristic of image thinking, which is suitable for the teaching mode that bases itself on practical knowledge learning. [2] Therefore, this course will introduce field experiments to bring real situations into the classroom or relocate the classroom to the real market. In this way, it can promote students to build a professional knowledge system of economics and internalize the knowledge they have learned.

#### ***3.4. Based on the diversified assessment***

The diversified assessment system is constructed according to the training objectives of different majors, the nature of the course, the teaching objectives and requirements, and the needs of students for personality development, so as to stimulate students' self-learning, explore their motivation and potential in self-fulfillment, and mobilize their enthusiasm and initiative.

### **4. INNOVATIVE METHODS AND APPROACHES**

#### ***4.1. Implementing the BOPPPS teaching method based on the Xuexitong platform***

The BOPPPS teaching model is an instructional goal-oriented and student-centered teaching model. It consists of six instructional components: Bridge-in, Objective, Pre-assessment, Participatory Learning, Post-assessment, and Summary.[3]

Bridge-in: Teachers design inspiring cases or stories according to the content of each chapter. Students act in shooting some micro-videos, which are available for students to watch and learn before class in the form of chapter task points on the Xuexitong platform so that students can try to discover and generate questions to stimulate their interest in further learning.

**Objectives:** According to the economics syllabus, the teacher designs the teaching objectives of each chapter and records a micro-video, so that students know clearly the knowledge, ability and emotional objectives to be achieved after learning the current chapter.

**Pre-assessment:** The teacher sets up a pre-assessment session at the beginning of each lesson. The teacher uses the Xuexitong platform to post a number of quick-answer multiple-choice questions to assess the students' foundation and ability, and to review what they have learned in the previous lesson, thus giving the teacher enough feedback to adjust the contents to be taught in classroom and the teaching schedule. **Participatory Learning:** Through class discussions, in-class experiments, role plays, brainstorming and group debates, students become the master of the class, making the class more practical, innovative, open, interesting and prompt in feedback.

**Post-assessment:** The teacher designs the test questions closely related to the teaching objectives, involving knowledge comprehension, application analysis, skill demonstration, attitudes and values and other aspects. With the statistical function of the Xuexitong platform, teachers can grasp the dynamics of students' learning effect and the achievement of teaching objectives in real time.

**Summary:** The teacher will summarize the lesson in the last three minutes of each session. In this part, the teacher should echo the content of the bridge-in session and lead the students to review what they have learned throughout the lesson.

In the teaching of Opportunity Cost, for example, the BOPPPS teaching program is designed as Table 1 below:

**Table 1.** The BOPPPS teaching program about opportunity cost

<p><b>Bridge-in:</b> The teacher writes out the case or the story, and the students volunteer to take a micro-film for five to ten minutes. The story is rough as follows: Act 1: Xiao Ming, Xiao Hong and Xiao Gang were in the same class in high school. After the college entrance examination, they came to Starbucks for a get-together and had a conversation about "what will I do after graduating from high school?" Act 2: Three years later, Xiao Ming is in the library of Tianhua College preparing for the postgraduate entrance examination. Xiao Hong runs a Sichuan restaurant near a school. Xiao Gang is in front of the mirror preparing his introduction for the company interview the next day. Act 3: Ten years later, Xiao Ming is passionately explaining the theory of demand and supply to students at the podium; Xiao Hong is playing mahjong and excitedly drawing a good blueprint for a restaurant chain; Xiao Gang is discussing a marketing plan for a new product with his team members in the conference room. Through the above video, students were prompted to think about "Where will I be five years later? What choices have I made? What did I give up?" This leads to opportunity cost, the point of this lesson.</p>
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<p><b>Objectives:</b> Students should be proficient in the concept of opportunity cost and the difference between it and other accounting costs; Students should apply the concept of opportunity cost to consumption and production decisions; Students should learn to use opportunity cost thinking to deal with trade-offs in economic activities and life.</p>
<p><b>Pre-assessment:</b> Design five multiple-choice questions related to cost knowledge, as shown in the Xuexitong's "Pre-Lesson Test" module.</p>
<p><b>Participatory learning:</b> Adopts snowball and case discussion, as shown in the teaching plan.</p>
<p><b>Post-assessment:</b> There are five questions about knowledge understanding, 1 question about application analysis, and 1 question about attitude and value, as shown in the Xuexitong's "Post-assessment" module.</p>
<p><b>Summary:</b> In response to the students' reflections after watching the introductory video, every choice in life implies an opportunity cost. Opportunity cost is the cost of choice and exists on the premise that resources are scarce. The development of opportunity cost thinking helps students to allocate and use resources reasonably.</p>

***4.2. Eliminating boundaries between courses and building an economics-centered cross-discipline knowledge network to enhance the teaching efficiency***

Economics, as a basic course, is a prerequisite for all majors in management. The core theories of economics are common, but the relationship between economics and the courses of different majors varies. In classroom teaching, teachers should tailor lesson plans for students of different majors and sort out the connection between theoretical study of economics and other professional courses. Therefore, they can systematize fragmented and independent knowledge points, turn the flat knowledge system into a three-dimensional one and build a cross-discipline knowledge network for students, thus enhancing the overall effectiveness of teaching and cultivating students' systematic thinking ability. For financial management students, the teacher can extend the concept of GDP and its formula of accounting by income method to the core course of the major, Tax Law, so that students can understand more deeply the reasons and basis of national tax laws and systems. The concept of "opportunity cost" introduced by economic theory also has a profound impact on students' subsequent learning of "Investment". In teaching, teachers can use this concept to inspire students to think about why opportunity cost should be taken into account when measuring investment value and why another name for the expected return on investment is the opportunity cost of capital. Moreover, the judgment and

research of economics on the whole macro-economy is perfectly aligned with the external environmental analysis taught in the course of Strategic Business Management that students take in their junior year. The students may not be able to understand the theories of other courses in economics thoroughly and deeply. But I believe that when they really learn these courses in the future, they will be enlightened to connect their knowledge together to form a complete knowledge system, which will provide them with solid and systematic theoretical support for their future employment and further study.

**4.3. Introducing in-class and out-of-class experiments to enhance teaching effectiveness**

It does not work for students to integrate the fundamental economic theories into their minds, and thus establish their cognitive systems solely by imparting the theories. The teacher should let students conduct experiments in real situations to verify the theories they have learned or to deduce new theories, and gradually construct their own theoretical cognitive system, which can significantly enhance the effectiveness of teaching. Taking the theory of demand and supply in Chapter 1 as an example, the following shows one of the in-class and out-of-class experiments designed by the course team.

- Experiment title: Two begging letters
- Applicable knowledge points: Perfect rationality hypothesis
- Experiment objectives: To help students understand the content of the hypothesis of "perfect rationality" and to help them determine whether respondents in

the real economy are necessarily perfectly rational in their decisions.

- Experiment plan: The teacher first randomly divides the students into two groups and gives each of them a begging letter. One group is given a letter that reads as follows: "Dear students, millions of children in Africa are suffering from hunger, cold and sickness. They lack medical care and are in dire straits. Please reach out and help them!" The other group gets the following letter: "Dear students, there is a little girl named XXX in Africa. She lives in XXX village, XXX city, XXX country. She is very motivated in her studies and has excellent grades. But now she was short of food and clothing, sick and dying. Please reach out and help her!"
- Experiment results: The latter letter received significantly more donations than the former letter, even though the first letter stated that millions of children were in need.

**4.4. Following the process-oriented nature of learning, and adopting the diversified assessment system with equal emphasis on knowledge and capabilities**

The traditional "one-shot" assessment approach based on final exams focuses on the examination of students' mastery of theoretical knowledge, but cannot assess students' quality and application ability comprehensively. The course follows the process-oriented nature of learning, and adopts the diversified assessment of both knowledge and ability, as shown in Table 2:

**Table 2.** The diversified assessment plan for Principles of Economics

Routine assessment (40%)					Final assessment (60%)		Pluses for individuals
	Pre-course test module (10%)	In-class pop test module(10%)	After-class test module (10%)	Experiments inside and outside the classroom (10%)	Test paper (40%)	Comprehensive presentation (20%)	Students' participation in micro-video production before class; active thinking and participation during class
Completed by	Independently completed	Independently completed	Independently completed	Group collaboration	Independently completed	Group collaboration	
Assessed by	Teacher	Teacher	Teacher	Self-assessment (20%) Assessment by other teams (40%) Teacher assessment (40%)	Teacher	Self-assessment (20%) Assessment by other teams (40%) Teacher assessment (40%)	

## 5. CONCLUSION

The innovation and reform of Economics teaching is urgent. The four innovative reform methods proposed in this paper will help to cultivate students' practical and innovative ability. But, of course, the reform is not achieved overnight, teachers need to explore and optimize future teaching activities.

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