

# Digital Teaching Reform and Practice of ERP Sandtable Against Simulation Course

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**Abstract:** ERP Sandtable Confrontation Simulation is a public compulsory course set up by colleges and universities, which is increasingly valued by all colleges and universities. In the process of teaching reform, this course uses the online and offline teaching methods of "physical manual sandtable" + "commercial electronic sandtable", and adopts the teaching mode of BOPPPS, allowing students to independently learn theoretical knowledge through the online learning platform. Combined with the online platform of "Business electronic sandtable", the offline use of "physical manual sandtable" teaching AIDS to simulate confrontation, stimulate students' interest in learning, enhance students' active participation, improve students' subjective initiative in independent learning, realize online and offline mobile information teaching, and cultivate students' entrepreneurial spirit of honesty and trust, dedication, unity and cooperation. Cultivate innovative talents for enterprises. **Keywords:** ERP sand table simulation; BOPPPS teaching model; entrepreneurial spirit; online and offline blended teaching; mobile informationization.

**Keywords:** ERP sand table countermeasure simulation, BOPPPS teaching mode, Mobile informatization.

## 1. Introduction

"ERP Simulation Sandbox" is a public core course offered by higher education institutions, which adopts the traditional offline teaching mode and is highly dependent on teaching resources and laboratories. This course takes enterprise management theory as its basis and uses the offline "physical manual sandbox" as its teaching tool. It simulates the actual operation environment of a production enterprise, including strategic management, product development, production planning and operation, financial budgeting and expenditure, marketing planning, logistics management, etc. Each student in the team assumes a different role, and according to their roles and the teaching tools, they formulate reasonable enterprise development strategies, marketing strategies, production management, and financial accounting activities, so that students can immerse themselves in the role of enterprise managers. In the market changes and competition among groups, they can demonstrate the real enterprise management and operation modes, enabling students to combine their theoretical knowledge with practical ability, cultivate their innovative ability, team spirit, and professional ethics.

This course is a public core course specifically designed for marketing and business management majors at our school. It is offered in the senior year, and according to the curriculum plan, students have already studied management, accounting, marketing, and enterprise strategic management theoretical courses, and in the past, the course was taught offline, relying on the school's laboratory, and was more dependent on the laboratory. Taking this course's teaching reform as an opportunity, we will deepen the course construction, optimize the teaching content, enhance the teaching quality, improve the teaching resources, expand the teaching and practice platform construction, and transform the course's theoretical knowledge into micro video resources for online platform construction, making it convenient for students to learn independently. We will also leverage modern information technology platforms to build an online learning platform, realize a mixed online and offline informationized mobile

teaching model, and integrate course ideological and political education elements such as Chinese national brand stories and stories of Chinese entrepreneurs into the teaching process to cultivate students' entrepreneurial spirit.

## 2. Curriculum Teaching Reform Path

### 2.1. Characteristics of Curriculum Reform

#### (1) Innovation in Teaching Model

This course in ideological and political education reform applies the BOPPPS teaching model to teaching, which primarily emphasizes student participation in teaching feedback, including the six stages of "Bridge-in (introduction), Objective, Pre-assessment, Participation Learning, Post-assessment, and Summary" [2]. Currently, the BOPPPS teaching model is mostly used in theoretical teaching research, but it is less used in practical teaching classes in higher education institutions. Unlike traditional teaching methods, integrating the BOPPPS teaching model into the course teaching involves implementing participatory feedback teaching before, during, and after class, achieving a teaching mode where students can practice online and simulate opposition offline, avoiding learning disparities. After the course, students can also enhance their learning through the online "electronic sandbox" platform, maximize their learning effectiveness, participate in relevant course competitions, and establish a long-term mechanism for the course, achieving the "learn, think, practice, and realize" learning effect.

#### (2) Innovation of teaching content

In the past, this course adopted offline teaching mode, relying on the school laboratory and relying heavily on the laboratory. Taking the course teaching reform as an opportunity, we deepened the course construction, optimized the teaching content, deepened the teaching quality, improved the teaching resources, expanded the construction of the teaching platform and practice platform, and built the theoretical knowledge of the course into online platform resources in the form of micro-videos. It is convenient for students to learn independently. With the help of modern

information technology platform, we will build an online learning platform to realize the mixed online and offline information mobile teaching. In the teaching process, we will integrate Chinese national brand stories, Chinese entrepreneur stories and other courses' ideological and political links to cultivate students' entrepreneurial spirit.

## 2.2. Objectives of Curriculum Reform

(1) Strengthen the construction of new liberal arts and promote the cross-integration of subject courses and enterprise science and technology

The curriculum ideological and political reform of this course is the practice of the research and reform of the new liberal arts, promoting the deep integration of enterprise information technology and education and teaching, implementing the combination of "production-learning-research", strengthening the construction of the new liberal arts, and promoting the new development mode of cross-integration of subject curriculum and enterprise science and technology.

(2) Cultivate students' entrepreneurial spirit and provide high-quality talents for the society

Through the learning of professional knowledge and practical ability, students can provide the foundation for the future career. The school can train high-quality talents in a targeted way by understanding the changes in social talent needs and the needs of enterprises, so as to make use of what it has learned and achieve success in what it has learned, so that the school can connect with enterprises point-to-point and apply the theoretical knowledge learned in school to enterprises.

## 3. Implementation of Curriculum Teaching Reform

This course is based on BOPPPS teaching mode and enterprise management theory, and simulates the operation mode of a production-oriented enterprise through the combination of offline "manual sand table" and online "electronic sand table" teaching methods. Students can experience the operation and management process of enterprises through post role simulation, rules and teaching AIDS. Through this course, students can cultivate the entrepreneurial spirit of innovation and entrepreneurship, dedication, hard work, unity and cooperation, honesty and trustworthiness, risk-taking and risk ability, and improve their professional quality [3].

(1) Introduction (Bridge-in)

Apply theoretical knowledge to professional practice. Through the explanation of relevant cases of Chinese national brands, compare the enterprises in the cases, learn the strategy formulation and development plan of each enterprise, so that students can better understand the purpose of the course and understand and apply the knowledge taught in the course more easily.

(2) Teaching Objective

The course takes knowledge goals, ability goals and ideological and moral goals as its teaching objectives, and focuses on the simulation of enterprise operation and management. Through the simulation of different positions, students can participate in the management and operation of enterprises, including enterprise development planning, financial accounting, production and operation, and marketing programs, so as to understand the operation and

management process of enterprises and cultivate their entrepreneurial spirit.

(3) Pre-assessment

By using the online learning platform and taking the lead of students, course instructions, online teaching video materials and online QQ discussion groups are distributed in advance, so that students can master and understand the content, teaching form and assessment method of the course before class. Students can use the mobile version of the online "electronic sand table" to conduct online independent practice.

(4) Participation Learning

Offline "manual sand table" is used to conduct team simulation confrontation to strengthen the effect of independent learning. Teachers guide students offline, and students are divided into several groups. According to the simulation background, they run an enterprise independently, and through the trinity of role playing of different positions, case analysis of Chinese enterprises, and offline guidance of teachers, students can learn through participation. Integrate the theoretical knowledge of online autonomous learning into the simulated confrontation of classroom teams. In the process of teaching, in order to stimulate students' learning enthusiasm, cloud discussion, telling stories of Chinese entrepreneurs, online mutual evaluation, classroom sharing and other methods are adopted in teaching design to strengthen and improve students' subjective initiative.

(5) Post-assessment

Establish a multiple evaluation system. a) Multi-participation in the evaluation subject. The traditional teacher evaluation has been changed to a combination of teacher evaluation, student self-evaluation and student mutual evaluation. b) The evaluation content is diversified. The evaluation of students' performance is not only based on the usual attendance and participation, the quality of report writing, but also on the results of practical training, namely the business results of simulated competition and the reflection and summary of course learning.

(6) Summary

Through the joint construction of the comment and summary chain, the purpose of in-depth understanding of theoretical knowledge and reflection and summary of the effect of enterprise operation practice is to help students understand and grasp various practical problems arising from the application of theory in practice, and deepen students' understanding of inadequate management practice.

## 4. Effect of Curriculum Teaching Reform

Through curriculum reform, students can achieve the teaching effect of "learning -- thinking -- practice -- understanding", apply BOPPPS teaching mode in teaching, improve students' innovation ability and practical ability, master enterprise management skills, teamwork spirit, and persistent entrepreneurial spirit, comprehensively improve students' management quality and ability, and apply theory into practice. Solve practical problems with the knowledge learned, and apply the knowledge learned in this course to discipline competitions and entrepreneurial practice.

After the end of the course, the teaching effect of the overall teaching implementation of the course was investigated. The results of the questionnaire showed that: 98.16% of the students are interested in this course, 95.28% of the students think that the course knowledge is very helpful,

more than 82% of the students think that the assessment method of the course is appropriate, 73.25% of the students are involved in the simulation operation process of the most impressive course content, and 86.78% of the students think that the course is excellent. 66.86% of the students said that they were very willing to participate in the ERP sandtable competition after class, so the implementation of the course reform has a good effect.

## 5. Summary

The teaching supply chain system is formed through "teacher teaching, student participation, diversified evaluation and teaching satisfaction", and the traditional mode of "infusion" is transformed into "heuristic" teaching, so that students can change from passive acceptance of knowledge to active acquisition of knowledge, and let students personally experience the complete process of operating and managing enterprises as enterprise managers. Let each student find the corresponding "professional role" through the simulation of the workplace, cultivate students' innovation ability, communication ability, integrity spirit, unity and cooperation spirit, and develop the preliminary development orientation and professional quality for their future career direction.

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