

# Thinking on the Reform of Experimental Teaching Scene Based on the Integration of Industry and Finance

Yuqiang Zhang <sup>1,\*</sup>

<sup>1</sup> Chengdu University of Information Technology

**Abstract.** The technological transformation of big data, artificial intelligence, mobile internet and cloud computing have promoted the transformation of enterprise business model, and the experimental teaching in colleges and universities also needs to be reformed. Based on the business integration experiment teaching, this paper puts forward some thoughts on how to reform the experiment teaching from the aspects of teaching scene design, teaching scene selection, teaching scene interest, teaching method design and so on; It is proposed that the business integration experiment should pay attention to the students' experience, enhance the enthusiasm and initiative of the students in the experimental teaching, strengthen the training of the students' data thinking ability, and cultivate the students' data analysis ability under the integration of industry and finance.

## 1 Introduction

The background of the integration of industry and finance is the impact of information technology on the current accounting posts, and the financial work is changing from financial accounting to management accounting. Big data, artificial intelligence, mobile internet and cloud computing have a great impact on financial management. Finance is integrated into the business. More importantly, the financial management work is information data collection management and analysis ability, financial analysis and prediction ability. The experimental teaching of the integration of industry and finance in colleges and universities also needs to be reformed. In the business integration experiment, we should pay attention to the difference between the experiment and the practical training, stimulate the enthusiasm, initiative and creativity of students through the design of experimental cases, and cultivate the students' ability to solve problems; Experimental teaching should also pay attention to the balance of software, hardware and experimental content, as well as the appropriateness of technical application.

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\* Email: [yqz@cuit.edu.cn](mailto:yqz@cuit.edu.cn)

## **2 Some basic concepts to be clarified in the reform of experimental teaching**

### **2.1 Difference between experiment and practical training**

During the course design of students' experimental teaching, there is often no specific difference between practical training and experiment. However, practical training and experiment have different connotations. The practical training is to give standardized operation steps, and the students can operate step by step to get standardized answers. The experiment raises questions, analyses problems and solves problems, teaches students the tools and methods to analyse problems, gives questions, and students explore to solve problems. The experiment is exploratory, and standard answers cannot be designed. The corresponding experimental results are not unique.

### **2.2 Software, hardware, experimental content and experimental teaching**

For experimental teaching, computer room, computer and experimental software are the basic conditions of experimental teaching. In the construction of experimental teaching, the idea of emphasizing hardware and neglecting software often appears. It should be said that hardware and software are equally important in the construction of experimental teaching, and even more attention should be paid to the construction of software. Different types of software reflect the differences and diversity of experimental teaching. In addition to software and hardware, the design of experimental projects is also very important, which is also a part of the experimental teaching process that is often ignored. However, experimental projects are the soul of experimental teaching, which is the thinking and method of experimental teaching.

### **2.3 Technology and experimental teaching**

Experimental teaching should keep pace with the development of society, and some new technologies are also applied to experimental teaching. However, the combination of new technology and experimental teaching should match the purpose of experimental teaching. It is not necessary to use technology for the sake of technology. Instead, more attention should be paid to the user's experience effect, and the necessary technology should be selected so that the experimental construction funds can bring greater benefits.

## **3 Problems to be solved in the integration of industry and finance**

The change of the society's demand for qualified professionals inevitably promote the reform of the teaching content of colleges and universities. Facing such a change, the financial and accounting experiment should let students become familiar with the business of enterprises and use their financial and accounting professional knowledge to interpret the business data, which is the realistic driving force for carrying out the industrial and financial integration experiment. Then, how should the training of accounting major be constructed under the business integration mode? The core concept of industry finance integration is the integration of business flow, capital flow and information flow. The practical training of accounting major should enable students to understand the basic business model of enterprises under the information technology environment and think about the relationship between business, finance and information. The specific business

models and business processes of enterprises vary greatly. How to introduce business scenarios into the enterprise environment requires the following problems to be considered and solved.

### **3.1 Teaching scene design**

Industry finance integration teaching is a popular research project in the theoretical and practical circles at present. The teaching concept of introducing the enterprise scene of business integration to carry out experimental teaching has also been recognized in colleges and universities. However, how to introduce the business scenarios of enterprises into the experimental teaching of colleges and universities, how to realize the integration of business and finance, and how to transform, summarize, condense and combine the business practice scenarios, which involves the design of teaching scenarios.

### **3.2 Teaching scene selection**

There are many business scene involved in industrial enterprises. What scene should be selected as the teaching case scene. It is the place that needs to be constantly improved and adjusted during the implementation of the project. The business scene is too complex, and students have difficulty in learning, which will hurt students' interest in learning, and teaching will be difficult during the implementation of practical teaching. However, if the teaching scene is too simple, the application value of students' actual work in the enterprise may be reduced, and the application value of teaching may be weakened. How to control the difficulty of scene selection is a problem that needs careful consideration in the experimental teaching of industry finance integration.

### **3.3 Interesting questions of teaching scenes**

In the process of experimental teaching, the corresponding training operation manual is often given, and the students operate step by step according to the training steps. The experiment is equivalent to the training. The experimental content is boring, the students repeat mechanically, and the students lack the motivation for active learning.

### **3.4 Teaching method design**

With the content of the teaching scene, we need to think about what kind of teaching methods to carry out. That is, the organizational form of teaching content, and how to use appropriate ways to mobilize students' enthusiasm for learning. In addition, it is also necessary to combine the characteristics of experimental teaching, design appropriate assessment methods, and realize the diversification and process of assessment methods.

## **4 Thoughts on the solution of the problems in the industry finance integration experiment**

When designing practical training cases for accounting majors, the purpose is to let students understand the real application scene of enterprises. Only when students really understand the business of the enterprise can they analyse the data generated by the business, interpret the business behavior from the data, analyse the problems existing in the business, and propose practical solutions.

#### **4.1 How to design teaching scenes**

The purpose of industry finance integration experiment teaching is to let students understand how modern enterprises operate under the condition of information technology, and how information flow, capital flow and business flow interact. The design of teaching scene should pay attention to the combination of theory and practice. Analyse specific business scene, pay attention to the theoretical value behind them, and establish the relationship between practice and theory. Such as economic purchase batch, purchase lead time and instalment payment in purchase business; Batch number management in inventory management; Production scheduling in production management. The combination of theory and business needs to think about how to carry out teaching design.

#### **4.2 Business scenario selection**

Based on the problems mentioned above, the following principles can be adhered to in the selection of scenarios for the integration of industry and finance. Firstly, the principle of importance. Select typical industries and basic businesses of typical industries, such as machinery, electronics, electrical appliances, plastics, auto parts and other industries. The basic business includes purchase, sales, production, warehouse, accounts, general ledger, etc. Secondly, typical business in the industry. Different industries will show certain industry characteristics in the corresponding business processing process, such as assembly parts in the furniture industry and virtual parts in the auto parts industry. Such business scene selection can enable students to be familiar with the basic business processes of general enterprises and understand the typical business models of special industries.

#### **4.3 Storytelling of scenes**

Experimental learning should not be boring. Every scene of an enterprise is a story. In the experimental teaching of the integration of industry and finance, the typical application scene of enterprises should be designed in the form of questions and integrated into the specific enterprise case background. On the basis of mastering the basic business processing methods, the experimental cases of business integration can be designed into exploratory and research cases. For the answers to questions, reference answers can be designed, but not standard answers. Students can also design case data, further analyse data, present data and interpret data. The process of experimental teaching requires students to explore and research, so as to fully mobilize the enthusiasm and initiative of students.

#### **4.4 Teaching method design**

The design of teaching methods is to enhance the interaction with students and arouse the enthusiasm of students through the design of teaching methods when the teaching contents have been determined. In terms of teaching methods, we can evaluate the learning effect of students by means of group experiments, project defense, group mutual evaluation and other forms. In terms of teaching assessment, improve the number and rate of assessment in the ordinary process, timely feedback the students' ordinary test results, and timely communicate with the students' current learning situation.

The technological changes represented by big data, artificial intelligence, mobile Internet and cloud computing have promoted the transformation of enterprise business model. The enterprise's operation mode and management have shown intelligent characteristics, and the combination of Finance and business has become closer. Much financial work has been pre-positioned and embedded in the business. Under the new mode,

the traditional accounting posts will be impacted, but new posts will be created accordingly. These posts further strengthen the ability in data analysis and process control. Accounting personnel should be familiar with enterprise business on the basis of basic accounting theory knowledge system, so as to analyse data and find problems. The experimental teaching of industry finance integration needs to be based on such an idea. In the teaching, students majoring in finance and accounting should be guided to familiarize themselves with business processes, understand the data relationship between business and finance, and cultivate their data thinking.

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## **References**

1. Kokina, J., S. Blanchette, 2019. Early Evidence of Digital Labor in Accounting: Innovation with Robotic Process Automation. *International Journal of Accounting Information Systems*, 35 (C): 100431~ 100431
2. Rikhardsson, P., O. Yigitbasioglu, 2018. Business Intelligence & Analytics in Management Accounting Research: Status and Future Focus. *International Journal of Accounting Information Systems*, 29: 37~58