CSCanada
**Management Science and Engineering**
Vol. 7, No. 4, 2013, pp. 56-59
**DOI:**10.3968/j.mse.1913035X20130704.2857

ISSN 1913-0341 [Print]
ISSN 1913-035X [Online]
www.cscanada.net
www.cscanada.org

# Construction of Simulation Educational Digital Network Platform in Economics & Management Majors

ZHOU Xiaolin[a],*; ZHENG liwen[a]; ZHANG Su[a]

[a]School of Economics & Management, Changchun University of Science and Technology, Changchun, China.
*Corresponding author.

Received 6 September 2013; accepted 1 December 2013

## Abstract

Along with the informatization and the development of economic globalization, the competition among talent is increasingly intensified; the requirement of position includes both professional foundation theory and strong practical ability. The social integration of economics and management majors is very strong, with the important position in the enterprise and the social economic development. But the social position is determined by the characteristics of professional. Therefore, specialty practice teaching in economics and management majors is particularly important, especially the construction of simulation educational digital network platform in economics & management majors, which will improve the quality of cultivation and promote the strategy of practice teaching according to the characteristics of relative majors. We first analyze the problems in the construction of simulation educational digital network platform in economics & management majors and find what happened in the area. Second, we analyze the function of the platform which is suitable to the majors of economics and management. Third, we introduce the construction of the teaching platform. Finally, we put forward some of the suggestions and countermeasures which are suitable to the development based on the analysis of the problems.

**Key words:** Economics & management majors; Digital network platform; Informatization

ZHOU Xiaolin, ZHENG liwen, ZHANG Su (2013). Construction of Simulation Educational Digital Network Platform in Economics & Management Majors. *Management Science and Engineering*, *7*(4), 56-59. Available from: URL: http://www.cscanada.net/index.php/mse/article/view/j.mse.1913035X20130704.2857
DOI: http://dx.doi.org/10.3968/j.mse.1913035X20130704.2857

## 1. PROBLEMS OF SIMULATION TEACHING PLATFORM IN ECONOMICS AND MANAGEMENT MAJORS

At present, a considerable proportion of the curriculum practice teaching are included in the courses of different majors, especially in the economics and management majors which are related to practical teaching. The practice of curriculum and teaching practice are based on the simulation teaching software platform. Although most of the school in economics and management major has adopted the simulation teaching platform in teaching course, some problems still exist.

### 1.1 Low Combination Rate With Teaching Platform and Course

Most of the teaching platforms are programmed by software companies. The domestic software industry has created hundreds of software companies in the areas of simulation teaching software. Because of the differences between experiment teaching content and programmed plan in these different software companies, teaching effects of the teaching simulation software are also completely different. It will result in different effects in teaching process. For example, in the same course, if we use different simulation teaching software in the practice

teaching, students will prefer to understand and master the course of theoretical knowledge in different ways.

### 1.2 Lack of Integration of Curriculum Group in the Teaching Platform

Construction of economics and management courses of curriculum integration is a big progress in the revolution of education and simulation teaching platform should also be integrated with the curriculum group. At present, a lot of simulation teaching platforms in economics and management majors still belong to a single curriculum. Students have to combine the separate course with the curriculum to complete the network learning. We need to purchase or program one integrated simulation teaching platform which includes all courses in curriculum integration so that the students can cultivate the learning skill through the integration teaching curriculum.

### 1.3 Poor Learning Effect of Students in Participate Simulation Teaching Platform

In the aspect of arrangement of practice teaching, most teachers in school of economics and management major have not made a deep understanding the relationship between the software function and course content. It causes students' limitation of performance in the verification experiment subjects; even in some subject it cannot be comprehensive. The effect of simulation platform has not achieved its original aim and the practical process has not achieved the aim of teaching. At the same time, in the teaching task arrangement simulation, the teachers only arrange the work for individual students without any team work practice or even the whole practice, which result in the poor effect of simulated teaching.

## 2. FUNCTION OF DIGITAL NETWORK SIMULATION TEACHING PLATFORM IN ECONOMICS AND MANAGEMENT MAJORS

### 2.1 A Better Combination Rate With Teaching Platform and Course

Intelligent tutoring systems that use virtual teachers to interact with students could play a crucial role in the expanding field of online education. To improve the quality of network instructional interaction and effect of network learning, we should analyze the interaction in network environment deeply and design it properly. With the development of network education, network teaching plays a more and more important role in modern teaching. In view of economics and management majors in the practice course and practice teaching problems, we need to construct a digital network with majors of economics and management characteristics of the simulated teaching platform. It is online teaching platform and network, an intelligent information platform applied in the teaching of economics and management; it can promote the integration of teaching network of information technology and reform the traditional teaching style, learning style and the interaction between teachers and students. It relies on the advantages of modern information technology network and provides high quality service for teachers' teaching and students' learning. The construction of the simulation platform can be created in web-based courses, which will both stimulate and sustain students' interest and motivation, and develop innovation spirits through bringing up problem consciousness.

### 2.2 Strengthen the Students' Autonomous Learning Ability and Offer Rich Courses Information

Network education has become a new and effective teaching method following the traditional teaching. Through the network platform construction which covers many courses of economics and management majors, students can access through the network teaching resources. It can realize the teachers and students interact online, open the teachers answering, student forum, and chat room for communication between teachers and students. It can increase students' self-learning ability, so that students are no longer the individual participants, but the overall participants completed the task of teaching and simulation. With the content update of teaching, it can encourage students' ability in network learning. It can also offer a rich source of information online: all kinds of specialized subject database, online exercises, self-testing and examination, as well as establish online homework and examination system. Teachers can arrange teaching in online experiment content and exams, and students can submit the completed paper to the server on the Internet where the teachers can also correct, and the record the results through database as students' assessment results.

## 3. CONSTRUCTION OF SIMULATION EDUCATIONAL DIGITAL NETWORK PLATFORM IN ECONOMICS & MANAGEMENT MAJORS

The Economics and management of digital network simulation platform is implemented in Internet environment, using the typical B/S (Browser/Server) mode. The server uses Ajax technology network operating system platform and SQL database based on SERVER. The client access system services are provided by the browser. The simulation teaching platform includes three sub-systems as follows: Information management system, simulation experiment teaching system and network evaluation system.

### 3.1 Network Information System and Information Management System

Aimed at students' autonomous learning, we make the construction of information system for learning network. Students can login in the network information system by the personal login account; through the network server, students can download teaching video, teaching plan and implementation of multimedia courseware so that they can learn the course by themselves and arrange the learning time freely. In addition, students can mark it in the learning process if necessary. If they find the problems or some of the content difficult to understand, they can mark it. The teacher can adjust his teaching plan to the marks and change some of the important content in the class. At the same time, the teacher can manage the course information and perfect the network teaching by login personal account. He can also rich the content, upload the courseware, change teaching cases timely according to the curriculum dynamics. In the new style of course learning online, we can give students more chance to cooperate with each other. We encourage students to carry on the data searching, they can update some teaching content by data searching and the new data can be uploaded to the resource sharing columns. In this way, we let students to be the real learner in the course and they also make a big contribution to the construction of the network through data collection.

### 3.2 Simulation Experiment Teaching System

This sub-system focuses on the simulation teaching system in economics and management curriculum, especially experiment and practice teaching. It includes financial simulation platform, ERP simulation platform of enterprise management, international trade simulation platform, human resource management simulation sub platform information platform, which covers main courses in economics and management majors. We distribute different roles to the students; they are responsible to one step in the simulation process. Maybe they are exporter or human resource manager or financial manager in curriculum integration simulation platform. We encourage the students to play a variety of roles in the whole process and they can cooperate with each other and change the role with other students. At the end of the simulation processing, students should send the experiment report to the teacher in the simulation platform. The teacher will give marks to each student according to their performance in their role and the experiment report they have sent.

### 3.3 Network Evaluation System

The network evaluation system is an important part in teaching effect evaluation. It is an important step to check the effect of students' learning. The students can give their judgments to the teachers and make the evaluation; the supervisor will judge the result and make the evaluation to the teacher. Meanwhile, the exam system online is also another evaluation of teaching process. Teachers can make up the paper and correct answer online and update it periodically according to the classification of difficulty level. The teacher can arrange the examination according to the teaching process. The students take part in the exam online. At the end of the exam, the system will give the score to each student according to the correct answer. We can download score mark distribution report in the form of MS-excel which can help teachers arrange exam according to the test results.

## 4. SUGGESTIONS TO IMPROVEMENT IN THE APPLICATION OF SIMULATION EDUCATIONAL DIGITAL NETWORK PLATFORM IN ECONOMICS & MANAGEMENT MAJORS

We should strengthen in the following aspects in the network teaching platform simulation. in order to improve the effect in construction of the majors of economics and management.

### 4.1 Network Security of Information Platform Should Be Focused on

The safety of information platform is a problem which can not be ignored, the safety of database and website are the basic two guarantees for normal operation. Therefore, to enhance the security of platform in the design of security system, we should select procedure programmed language and database with high safety level. The security of functional page should be focused on, especially the upload file permissions page and upload the files page. We should make sure that the server page file and database security. The construction of a safe and reliable system is the basement to ensure the normal operation of a network information system. It is also the basement to the construction of a digitalized public information platform and all the application systems should be concerned. In the construction of simulation network environment, we should take some measures to release pressure of laboratory. We should put forward new teaching methods to enhance the teaching effect and train creative ability of the students.

### 4.2 Combination With Government Finance Support and Self Development

There are many software companies to cooperate for the construction of information management teaching platform, but the price of the platform is really expensive. The purchase cost is an issue which cannot be ignored. If we bought it from the software companies, it will certainly be a large expenditure. Meanwhile, differences exist between software and curriculum teaching. It doesn't keep in pace with the application in simulation teaching. Therefore, we should cooperate with teachers in school of

computer science technology for technology support and we should build a team for procedure program. We should encourage the teachers apply to the fund supported by the government for educational research, so that we can save the cost of construction simulation teaching platform.

### 4.3 To Increase the Interactive Community, Forum or Sharing Module in Network Teaching

On a conditional basis for the construction of the platform, we should offer interactive community, forum and resource sharing module. It can increase the interactive simulation teaching platform and enable students to learn from each other, by uploading a valuable document and download other users of the valuable document within one interactive teaching and interactive community.

## CONCLUSION

The construction of economics and management of digital network simulation teaching platform can promote the students' interest in learning. It helps students deepen their understanding of the course and major. The students can arrange their freedom to choose learning content and learning time, learning progress, enhance the initiative and flexibility learning. The combination of information system includes not only in the economics and management majors, but also in the practice teaching. It greatly improves the teaching quality and teaching effect. At the same time, during the discussions in the construction of economics and management professional digital network simulation teaching platform, we must continue to practice and make innovation, explore new ideas and find new ways to reform.

## REFERENCES

Huang, S. (2010). Discussion on the construction of experimental teaching of network information platform. *Science Technology and Industry*, (03). (In Chinese).

Li, S. L. (2012). The analysis of Teaching platform selection and application strategy. *Journal of Hubei Institute of Technology*, (08). (In Chinese).

Liu, X. O. (2009). The analysis of university laboratory teaching information platform and management platform construction. *Experimental Technology and Management*, (06). (In Chinese).

Yang, H. L. (2009). The application of model platform in the network education resources construction. *Software Guide Journal*, (11). (In Chinese).

Yang, X. L. (2010). The selection and application strategy of network teaching platform. *Application of Energy Technology*, (07). (In Chinese).