Practice on the Teaching Reform of Accounting Specialty Courses Based on Virtual Reality Technology

Yueming Qin[1], Shu Chen[2,*]

[1]Accounting College, Zhanjiang University of Science and Technology, Zhanjiang, 524000, China
[2]Accounting College, Zhanjiang University of Science and Technology, Zhanjiang
Zhanjiang University of Science and Technology, Yuexi Shuzhi Accounting Development
Research Center, Zhanjiang 524000, China

[1]yuemingqin@zjkju.edu.cn
[2*]chenshu@zjkju.edu.cn

Abstract. At present, the social economy is increasingly entering the information age represented by computer technology, communication information technology and Internet information technology. The further development of modern information technology is bound to affect the teaching methods, content and methods of traditional accounting majors. Accounting informatization has formed an unstoppable development trend, and informatization accounting talents will become more and more favored and pursued by the society. This article aims to study the teaching reform of accounting professional courses based on virtual reality technology. Based on the analysis of the characteristics of virtual reality technology in the teaching application and the necessity of the teaching reform of accounting professional courses, in order to understand the current teaching status of accounting professional courses. This article conducted a questionnaire survey on accounting students from two universities in a certain city, and found problems with their curriculum settings, and finally put forward relevant suggestions for the problems that appeared. The survey results show that the current curriculum of accounting majors in higher vocational colleges does not meet the requirements of students. The curriculum of accounting majors is relatively traditional and single, which does not reflect the characteristics of higher vocational colleges.

Keywords: virtual reality technology, accounting major, course teaching, teaching reform

1 INTRODUCTION

With the development of modern education technology, computer network technology and multimedia technology have penetrated more into school education [1-2]. Established a proofreading school engineering and educational resource information database, and created a good software and hardware database for the integration of information technology and disciplines. The development of distance learning also urgently

needs new learning and teaching models, and new courses and skills are constantly emerging [3-4].

The application of virtual reality technology in foreign countries is relatively fast, and the application in military education is more obvious. The concept of virtual reality used in medicine, sports, and secondary education originated from the United States. The United States has always been a world leader in technology research and development in this area, and the United States also bears the brunt of the use of virtual reality technology in education. A university in the United States has also established a virtual reality technology research and teaching laboratory. The laboratory will focus on evaluating virtual reality hardware and software, and in-depth research on the impact of virtual reality technology on teaching and its application in the real world. By comparing the effects of virtual reality technology and other teaching media, it is determined that virtual reality technology is teaching in schools The aspect is most suitable for application [5-6]. Some universities have set up "virtual physics laboratories" where various experiments can be conducted, including the law of universal gravitation, and various phenomena that occur can be controlled and observed by changing the size and direction of the laboratory, not only gravity, but also with the influence of acceleration, students have a deeper understanding of the concepts and laws of physics [7-8]. Some researchers use natural immersion, constructive learning methods, and multiple sensory learning methods to allow students to explore different virtual worlds and finally learn scientific knowledge [9-10]. The UK is the main leader in the development of virtual and reality technology in Europe, and some schools also use virtual reality technology to carry out teaching and education. The school uses virtual reality technology to conduct language training method research and industrial safety experiments, and also conducts virtual reality technology research and research in the education system and academia [11-12]. At present, there are still very few practical examples of virtual reality technology in accounting teaching in China, and most of them focus on the experimental teaching work in some national key universities and vocational schools.

This article first consults the domestic and foreign literature on virtual reality technology and teaching reform, and on this basis, combines the characteristics of virtual reality technology in teaching application and the necessity of accounting professional curriculum teaching reform to conduct a questionnaire survey on the students of two colleges and universities. Understand the teaching status of accounting majors and make relevant suggestions based on the survey results.

2   RESEARCH AND PRACTICE ON THE TEACHING REFORM OF ACCOUNTING SPECIALTY COURSES BASED ON VIRTUAL REALITY TECHNOLOGY

2.1   The Characteristics of Virtual Reality Technology in Teaching Applications

Teaching Virtualization. Virtual education is a new type of education that traditional education adapts to information technology and modern talent education. It is a teaching method that allows teachers and students to enter the virtual space and conduct education. Virtual learning is a virtual learning environment created by using virtual reality technology. It can analyze, comb, simulate and restore abstract educational points in multiple dimensions, enabling students to receive and understand information through various senses such as vision, hearing, and touch. Teaching virtualization can fully alleviate the lack of educational resources and the problems of old laboratory equipment, and help teachers and students get as close as possible to objective events through simulation. Enriching teaching methods can help students become faster and more efficient. Acquire the essence of things and the basic points of knowledge, stimulate students' interest in learning, improve and strengthen educational results, and significantly expand the field of educational practice.

Teaching Simulation. With the emergence of visual simulation technology, the traditional pure digital interaction technology has been improved, and the natural and harmonious human-computer interaction technology has been realized. In the education process, make full use of virtual reality technology to allow students to repeatedly simulate and adapt to the environment, and to have a clearer, deeper, and clearer understanding of book knowledge.

Remote Control. Virtual reality technology can be widely used depending on network platforms and mobile devices, reducing time and space constraints. Teachers and students can experience or experience the virtual reality world or virtual reality world by using a specific platform of multimedia equipment, even if the professionals are elsewhere. In addition, the virtual reality world is a 3D or multi-dimensional virtual environment created by a computer. In some cases, such as remote presentation or remote functions, it is necessary to handle the remote real environment. The virtual reality environment is a 3D or multi-dimensional virtual reality environment that simulates the real world. In order to be able to collaborate and support remote control.

2.2   The Necessity of Teaching Reform of Accounting Professional Courses

The New Accounting Standards Put Forward New Requirements for Accounting Teaching. The new core standards and 38 specific standards reflect the renewal of accounting concepts and the fundamental changes in the accounting conceptual framework. The increase in fair value measurement and the emphasis on characteristics: the review and measurement of accounting performance shifted from the perspective of income and expense to assets and liabilities, and introduced the concept of profit and loss. These changes put forward new requirements for teaching methods and tools, the organization of educational content, and the placement of financial accounting course materials.

Socio-economic Development Puts High Demands on Accounting Talents. With the vigorous development of the socialist market economy, the society is in urgent need of application accountants with increasingly advanced skills. Students must not only have a high degree of comprehensive scientific literacy, but also have strong professional judgment and professional skills. University education is an employment-oriented education. In the process of cultivating talents, efforts should be made to strengthen students' professional ability and quality training.

3   EXPERIMENT

3.1   Questionnaire Design

In order to understand the teaching status quo of accounting majors, find out the views of accounting majors on their courses, and provide a reference for the teaching reform of accounting courses, this paper conducts scientific research on students from two colleges and universities in a certain city by means of questionnaire surveys. A total of 250 questionnaires were issued in this survey. The questionnaire was designed in an open format and basically involved all aspects of accounting teaching. It strived to scientifically and objectively reflect the current situation of accounting teaching in the two universities and the satisfaction of students with the courses.

3.2   Reliability Test of the Questionnaire

Test-retest Reliability. Also known as stability coefficient, is a continuous secondary survey conducted on the same research object using a survey question, and the test formula is as follows:

$$r = \frac{\sigma_{x1x2}}{\sigma_{x1}\sigma_{x2}} \tag{1}$$

Among them, σ_{x1x2} is the covariance of the two survey results, σ_{x1} is the co-variance of the first survey results, and σ_{x2} is the covariance of the second survey results.

Half-fold Reliability. The half-reliability is also called the intrinsic consistency coefficient. The survey items are divided into two parts according to the positive and negative aspects and the number of untitled ones. Reliability is measured by calculating the correlation coefficient between the two parts of the survey results. If the scores of the two parts of the survey are considered equal, the test is expressed by the Spearman-Brown formula:

$$r = \frac{2r_{half}}{1+r_{half}} \tag{2}$$

Where r_{half} represents the half-fold reliability.

4   DISCUSSION

4.1   Survey Results

When students majoring in accounting in colleges and universities accept accounting courses, they have different understandings of the purpose of learning related courses. Exploring this content will help to better understand the purpose and motivation of students to study vocational courses, and better help the school to set educational goals. And training plans to guide students to learn correctly.

Table 1. Investigation of students' perception of curriculum

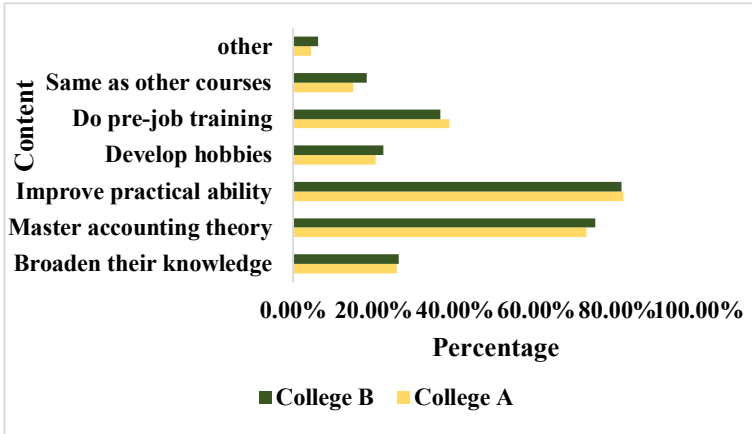| Content	College A	College B
Broaden their knowledge	25.61%	26.11%
Master accounting theory	72.33%	74.58%
Improve practical ability	81.4%	80.91%
Develop hobbies	20.54%	22.34%
Do pre-job training	38.58%	36.42%
Same as other courses	14.97%	18.23%
other	4.63%	6.22%

Fig. 1. Investigation of students' perception of curriculum

According to the survey of students' understanding of accounting courses in Table 1 and Figure 1, students from the two universities generally believe that accounting courses are designed to improve their accounting skills. 81.2% of students believe that they have improved their practical skills, and those who have mastered accounting theory account for 73.5%, which is consistent with the school's desire to cultivate applied talents, and also consistent with students' emphasis on practical skills.

Table 2. Student satisfaction survey on the course

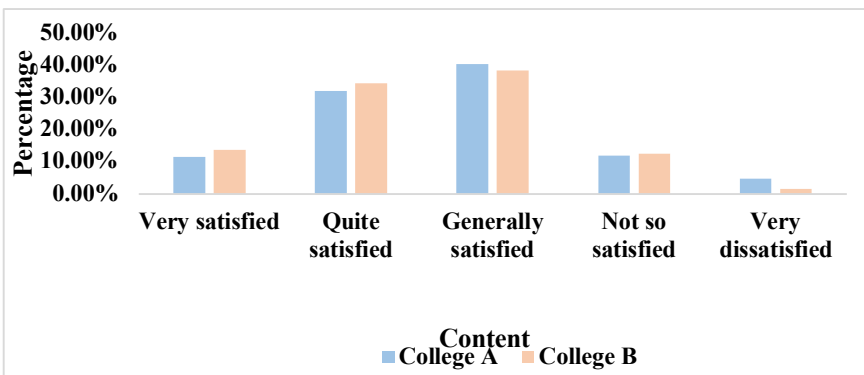| Content	College A	College B
Very satisfied	11.42%	13.58%
Quite satisfied	31.95%	34.21%
Generally satisfied	40.20%	38.23%
Not so satisfied	11.88%	12.46%
Very dissatisfied	4.65%	1.52%

Fig. 2. Student satisfaction survey on the course

It can be seen from Table 2 and Figure 2 that the students are not very satisfied with the accounting professional courses. Only 12.5% of the students are very satisfied with the current courses. They are average, not satisfied or even dissatisfied, reaching 51.39%. It can be seen that the current accounting major courses in higher vocational colleges do not meet the requirements of students. The accounting professional curriculum is relatively traditional and single, which does not reflect the characteristics of higher vocational colleges.

4.2   Targeted Suggestions

Teaching Content should be Highly Practical and Representative. Realize the intuitive experience of things, and establish the requirements for the real-time experience of virtual reality. Because of the extremely high standardization of accounting operations, there are very strict specifications and constraints on operating procedures, processing methods, and even accounting vouchers. This can be "accounting" simulation done by virtual reality technology. These requirements must be based on the specific corporate history, but they must not be outdated and fabricated.

The Teaching System must be Open. The beginning of virtual reality accounting education means that students will be placed in an open environment similar to reality. Different from traditional closed classroom education, it integrates production control, financial control, accounting, internal control and risk prevention in a virtual environment. Apply this kind of education to a modern enterprise management system that integrates capital functions, and open classrooms to society and infiltration of society into schools through the "going out" approach. The virtual reality education accounting system can virtualize various characters such as entrepreneurs, teachers, and students. For example, in the classroom virtual learning environment, students can communicate and talk with virtual teachers and students, discuss various learning issues, and collaborate.

Teaching Methods must be Advanced. Virtual reality education accounting system requires more efficient hardware and more advanced software. To sum up, the accounting system of virtual reality education still needs more advanced teaching methods. Creating management practice opportunities for learners, using artificial intelligence workshops, more advanced information systems, office automation, electronic networks and other technologies and more advanced management education methods, and participating in enterprise management from different perspectives all need innovative consciousness and conditions. The modern development of teaching mode not only creates the strongest information ability inside and outside the classroom for students, but also provides students with advanced teaching methods and educational ideas, and provides students with the most free ideological space. Under the influence of modern teaching system and society, it quickly adapted to the modernization of accounting management in the real world.

The Teaching Staff should be High-quality. Most accounting teachers use traditional chalk and blackboard teaching methods without modern training, and their ability to use advanced teaching methods is very limited. Many educators have not fully realized the importance of virtual reality education, nor have they realized the impact of modern information technology on education. Moreover, in the eyes of ordinary teachers, computers are always high-tech and impossible, and they are truly considered "fear" of computers. It also affects the enthusiasm of teachers to learn and use this modern educational medium. Therefore, it is particularly important to provide teachers with the training needed to improve the level of educational research and educational concepts.

5   CONCLUSIONS

With the development of modern educational technology, as a teacher, we must keep pace with the times, break the barriers of traditional teaching models, be brave to explore, and constantly practice new teaching methods and models to provide the best educational services, and strive to improve the quality and quality of classroom teaching. Virtual reality technology is a product of the times, and it has brought new opportunities, demands and challenges to the modernization of university education. Its existence has a problem of its own continuous construction and deepening, and its application in accounting education also has the problem of gradual formation and logical development. But there is no doubt that virtual reality technology with unparalleled advantages will have an immeasurable impact on future accounting education.

ACKNOWLEDGEMENTS

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