Analysis on the Construction of the Economic Virtual Laboratory

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Abstract. The construction of the economic virtual simulation experimental teaching center is of great significance to improve the students’ efficiency of learning economic expertise and promotes students’ innovative as well as practical ability. However, in the course of construction of the economic virtual simulation experimental teaching center, universities in China are still face many problems, so it is necessary for personnel concerned to pay much attention. This paper firstly made a brief analysis on the significance of the construction of the economic virtual simulation experiment teaching center and then had a specific discussion on the problems and solutions.

Introduction

Economics majors are in close link with the times, therefore it is required that colleges and universities emphasize the importance of improving students' practical ability and creative ability with the intention of promoting students' all-round development. The construction of the economic virtual simulation experimental teaching center is of great significance to the experimental teaching and raising the effectiveness of economic teaching as well as training practical and creative talents, therefore colleges and universities should pay greater attention to it [1]. This paper briefly discussed the related issues on the construction of the virtual simulation experimental teaching center.

The Significance of the Construction of the Economic Virtual Simulation Experimental Teaching Center

The construction of the economic virtual simulation experimental teaching center has important implications for training economic talents: first, it supports students to understand the abstract knowledge, and then learn the economic theory of knowledge better. On account of the more abstract economic expertise, the traditional teaching method, which drives students to understand and master the knowledge mainly relying on imagination and memory, makes it difficult to truly improve their learning efficiency and quality while the virtual simulation experimental teaching center can gather those benefits. [2]Secondly, it benefits the students' innovation and research ability. Experiment teaching adopts the measure of project research or experiment discussion, inspiring students to find and solve problems in the research. This process not only allows students to bring knowledge into practice and master the fundamental technical ability, but also aids to increase their thinking and integrated analysis capacity, which are helpful to their full development.

At last, it is capable of making up for the current deficiency of our experimental teaching teacher’s construction and promoting the development of economic professional teaching [3]. Experiment teaching is an important point of teaching of economic majors, but to achieve this, colleges and universities are required to invest a lot of money and talents. However, in real terms, the traditional experimental teaching has been putting enormous strains on learning funding and teachers. By teaching with virtual technology, this teaching center comforts the shortage of experiment teaching and even greatly reduces the costs of laboratory construction, ensuring the construction of curriculum in colleges and universities.
The Current Problems Existing in the Construction of Virtual Simulation Experimental Teaching Center

Judging from the present condition, there are a lot of challenges: first, the construction of virtual simulation experimental teaching center must base on and focus on the development of information technology. And only by reinforcing the innovation of traditional experiment teaching contents, method and means, can the fusion of information technology and experiment teaching be achieved, thus increasing sharing and utilization of the virtual simulation experimental teaching resources and improving the efficiency and quality of the virtual simulation experimental teaching. But it will take a long period of exploration and research to know how we can integrate them effectively. [4]

Secondly, the problems on how students learn. With the development of the times, student change their learning styles constantly. In order to play an effective role, the virtual simulation experimental teaching requires the related personnel to carry out the construction of virtual simulation experimental teaching center based on the students’ learning styles, and then make it possible to make a reasonable adjustment in an appropriate way. Different from the past, MOOCS, which is a kind of network course and under the core of information technology, enables students to take personalized courses more freely and communicate with teachers more equally? As a consequence, students can improve their efficiency and quality of learning. From this point, the question on how to do this work well should be given full consideration from a more comprehensive perspective. Finally, there is a limit because many teachers are incapable of using information technology. The construction of the virtual simulation experimental teaching center and the virtual simulation experiment teaching demand that teachers have this capability which is a prerequisite intended for fully extracting effective information and technology resources and helping students intensify the experimental training and increase their understanding. But for now, the experiment teachers in our country are not fully qualified as far as their professional quality is concerned. What’ more, most teacher’s are incapable in using laboratory information equipment and maintaining simple equipment which poses great challenge to the development of the virtual simulation experimental teaching. Therefore, universities should take these problems into consideration.

Countermeasures and Suggestions for the Construction of Virtual Simulation Experimental Teaching Center

Establish a Sound Construction System of the Virtual Simulation Experimental Teaching Center

A better construction system of the virtual simulation experiment teaching center should be established and improved from the three following aspects: firstly, attach importance to the orientation of construction. That is to say, universities should base on the actual situation and the relevant government policy to formulate their own rules and building regulations of the virtual simulation experimental teaching center.[5] Secondly, attach importance to systematic construction. The construction of virtual simulation experimental teaching center has abundant contents, such as operating mechanism, security mechanism, talents team-building, infrastructure construction and so on. Enough attention should be paid to ensure the successful operation of this work. Besides, measures should be made from at least four respects which refer to sustainable development, the improvement of efficiency, resources sharing and coordination operation for a far more perfect system; thirdly, put highlight on standardization. Standardization and normalization of the information, resources, platforms equipment testing and other aspects are of great importance to insure the quality of construction of virtual simulation experimental teaching center.

Realize the Sharing of the Virtual Simulation Experimental Teaching Resources

To make a great difference, the construction of the virtual simulation experiment teaching center needs universities to increase investment in laboratories and share the virtual simulation
experimental teaching resources, by which resources utilization can be improved. In the past virtual simulation experiments, we often found that teachers were lack of the awareness of resource sharing which lead to low integration of resources, severely waste, much unnecessary trouble and great financial pressure. Therefore, it is required that college teachers be equipped with a strong sense of resource sharing, pay much attention to this problem so as to realize the integration and sharing of resources as well as improve the utilization rate. To achieve this goal, colleges and universities are asked to establish a sound resource evaluation mechanism on internal economic simulation experimental teaching resources and strengthen the joint research and development of these resources in order to improve the sharing of virtual simulation experiment teaching and the utilization rate.

**Combine Teaching Management with the Construction of Experimental Teaching Center**

The construction of the virtual simulation experimental teaching center comprises rich and diverse contents, which should be studied by professional team. What's more, in the process of team collaboration, members are supposed to attach great importance to this combination to ensure that the construction will meet teaching requirements and make virtual simulation experiment teaching effective by dealing with virtual simulation experiment teaching center platform and technology construction [6]. During the construction of virtual simulation experimental teaching center in the past, colleges and universities as well as some areas used to make several teams study this subject at the same time, which led to the duplication of resources and serious waste of research resources as well as manpower and financial resources. So, if university can cooperate with governments, society or some other related organizations, they will promote the development of the construction of the virtual simulation experiment teaching center together.

**Summary**

To sum up, the Construction of economic virtual simulation experiment teaching center plays an important role in promoting the teaching of economic majors in colleges and universities and students' all-round development. Nevertheless, there still exist a number of problems and challenges in the process of construction which should be paid enough attention. Therefore, under the new times, colleges and universities are supposed to do more to improve the sharing and the utilization rate of resources and build the perfect system standing from the overall perspective, so as to bring virtual simulation experimental teaching center into full play and promote the teaching of the normal operation.

**References**


