

Task Teaching Unit Design of Practical Courses of Economic Management Based on Virtual Reality Technology

Dejun Zou*

Guangdong Polytechnic of Industry and Commerce, Guangzhou, China

*Corresponding author

Keywords: Virtual Reality Technology, Task teaching, Technical courses, Teaching process, Cognitive unit

Abstract: The corresponding work of practical courses of economic management usually involves trade secrets and management process, and it is difficult to build an appropriate environment. The implementation of practical courses of economic management based on virtual reality technology is the way to solve the practical teaching of economic management specialty in vocational colleges. Through the task teaching unit, the complex technical work is divided into several work tasks, and the teaching process from initial contact to mature control is considered, so as to effectively improve the teaching quality of economic management practical courses based on virtual reality technology

1. Introduction

The task teaching unit of economic management practical course based on virtual reality technology has become the basic teaching unit of practical course teaching activities of economic management specialty in vocational colleges. How to improve the teaching quality of task-based teaching unit is a hot spot for researchers of task-based teaching unit. The teaching quality of task-based teaching unit depends not only on the resources that task-based teaching unit may obtain, but also on the interaction process that students carry out to complete the task of task-based teaching unit [1]. When constructing the teaching quality model of task-based teaching units, teachers majoring in economic management need to establish the system framework of "task-based teaching unit input - task-based teaching unit process - task-based teaching unit teaching quality". Therefore, it is necessary to analyze the specific connotation of the teaching quality of task-based teaching units. Starting from the basic functions of task-based teaching units, any task-based teaching of economic management majors needs to stimulate students' sense of efficacy, potential, cohesion and situational awareness. This reflects the changes of students' attitudes, values, cognitive characteristics and motivation in the process of task-based teaching unit, and represents the teaching quality of task-based teaching unit. The teaching process of task-based teaching unit is an interdependent action between teachers and students [2]. These actions transform input into teaching task units through cognitive, linguistic and behavioral means. The task-based teaching unit process of economic management courses consists of three dimensions based on time frame, namely, transformation process, action process and task control process.

To investigate the activity process of task-based teaching unit, we need to pay attention to the development stage of task-based teaching unit. If the post based technical course teaching activities are divided into several different stages, from students entering the task teaching unit to completing all teaching tasks, the demands of each stage on the post based technical course teaching activities are different [3]. Generally speaking, at the initial experimental stage of task-based teaching units, task-based teaching units pay more attention to students' acquisition ability and work task environment, convert the needs of task-based teaching into designable parameters, stimulate students' desire for knowledge [4], determine teaching objectives and standards, and formulate the plan and process of task-based teaching units; In the mature period of teaching, the task teaching unit pays more attention to the value-added of students' desire for knowledge [5], makes full use of the resources of vocational colleges to develop new products and bring them to the market. Therefore, it

is necessary to focus on the implementation of students' desire for knowledge and plans, regularly follow up the teaching progress, immediately feed-back and solve various problems that may occur in the implementation process, and ensure the implementation of teaching standards, plans and processes.

This study examines the relationship between teaching process and teaching quality from the early and mature stages of task-based teaching unit experiment: First, this study intends to select task-based teaching unit reflection, task-based teaching unit monitoring and task-based teaching unit effort, which represent task-based teaching unit transformation process, action process and task control process respectively, and then test the impact of phased task-based teaching unit process on task-based teaching unit teaching quality. Effective post based technical course teaching activities depend on efficient teaching process management. Understanding different types of collaborative work processes of teaching students by stages [6] will help guide managers to train and motivate students according to the stage of task-based teaching units, so as to guide the process of task-based teaching units to develop in an effective direction, and finally provide help to improve the effect and benefit of the teaching process in vocational colleges.

2. Design Idea of Task Teaching Unit of Economic Management Practical Courses Based on Virtual Reality Technology

The design idea is to explore the characteristics of the task teaching unit of economic management practical courses based on virtual reality technology → construct the task teaching unit of economic management practical courses based on virtual reality technology → analyze the efficiency of the task teaching unit of economic management practical courses based on Virtual Reality Technology:

First, explore the specific characteristics of the task-based teaching unit of practical courses of economic management based on virtual reality technology and its impact on the teaching of vocational education of economic management. With the wide application of intelligent financial technology, the quality demand of intelligent financial technology enterprises for talents will gradually increase. As well as the optimal allocation of global talents of large and super large intelligent financial technology enterprise groups across regions and industries, the contradiction between talent supply and demand between China's vocational education and the development of intelligent financial technology, and even between the supply and demand of intelligent financial technology and the labor market will become more intense. The phenomenon that the course teaching is divorced from the application of intelligent financial technology is more prominent. Therefore, the research on the specific characteristics of the task teaching unit of economic management practical courses based on virtual reality technology should be the starting point of the whole scheme.

Second, construct the task teaching unit of economic management practical courses based on virtual reality technology. First, define the knowledge points and skill points of the task teaching unit of economic management practical courses based on Virtual Reality Technology: The process of students' acquisition of intelligent financial technology is to design relevant knowledge points and skill points, infiltrate various working methods and means into the teaching process of vocational education, and realize the arrangement of a series of operations, observations and habitual behaviors for the acquisition of talents' technical skills. Secondly, starting from the students' main body, the task teaching unit of economic management practical courses based on virtual reality technology is divided into specific teaching activity level, teaching operation level and teaching control level. Finally, two systems of implementation and evaluation of task-based teaching units of economic management practical courses based on virtual reality technology are constructed to form a systematic, complete and developed teaching system.

Thirdly, it analyzes the efficiency of task teaching unit of economic management practical courses based on virtual reality technology. Firstly, based on the input-output efficiency and talent supply efficiency, this paper analyzes the teaching activity efficiency of the task teaching unit of economic management practical courses based on virtual reality technology, and highlights the utilization efficiency of teaching resources. Secondly, it studies the teaching operation effect of the task teaching unit of economic management practical courses based on virtual reality technology. Then, it analyzes

the teaching control model of the task teaching unit of economic management practical courses based on virtual reality technology, and explores the effective ways to improve and improve the task teaching unit of economic management practical courses based on virtual reality technology.

3. Phased Task Teaching Unit Process of Economic Management Practical Courses Based on Virtual Reality Technology

The process of task teaching unit consists of three dimensions based on time frame: (1) The stage of evaluating objectives and making plans, including task analysis, objective description, strategy formation and planning; (2) Action process is the activity process of task teaching unit to achieve goals or tasks, including process monitoring, system monitoring, task teaching unit monitoring and task teaching unit coordination; (3) The task control process may occur in both the transition phase and the action phase, mainly reflecting the management of the task control relationship [7], including specific processes such as conflict management, motivation and confidence building, emotion management, etc. Different task teaching unit processes play different roles in different task teaching unit stages. Task teaching unit reflection, monitoring and effort represent the above three task teaching unit processes respectively. Task teaching unit participation, division of labor and action integration are three different teaching qualities of task teaching unit. Task teaching unit, participation and division of labor occur in the early stage of task teaching unit operation, and action integration occurs after them, but the impact on teaching quality is more direct; The mediating mechanism of transformation process, action process and task control process between trust and quality of task teaching unit is analyzed.

4. The Main Effect of Task Teaching Unit Reflection, Monitoring and Efforts on Teaching Quality of Economic Management Practical Courses Based on Virtual Reality Technology

In the selection of task-based teaching unit process, this paper examines whether the impact of three different stages of task-based teaching unit process on the teaching quality of task-based teaching unit will change with the development of task-based teaching unit. The three processes of selecting task teaching unit reflection, monitoring and effort represent the transformation process, action process and task control process of task teaching unit. In addition, the teaching quality of task-based teaching units is mainly reflected in two aspects: The quality of innovative task-based teaching and the degree of compliance with the plan. Then, the teaching quality of task-based teaching units is defined as the teaching quality of phased task-based teaching units [8], not the final actual teaching quality of task-based teaching units. First of all, task-based teaching unit reflection is a process in which students openly reflect on the objectives, strategies (such as decision-making) and procedures (such as communication) of task-based teaching units to make them adapt to the current or expected environmental changes. It is a typical task-based teaching unit conversion process. In the task teaching unit with high reflection, students tend to make detailed plans, pay attention to long-term results, and make positive responses to environmental factors; However, task teaching units with low reflection pay less attention to task teaching unit objectives, task teaching unit strategies and their external environment. Students tend to adapt passively rather than actively, and can only make defensive responses according to environmental changes. Therefore, the higher the reflective level of task teaching unit, the stronger the students' overall adaptability and creative ability will be. Secondly, task-based teaching unit monitoring refers to the real-time supervision and inspection between students during the implementation of task-based teaching unit tasks. It is a typical task-based teaching unit action process. Previous studies have found that there is a significant positive relationship between task-based teaching unit supervision and task-based teaching unit teaching quality. The high monitoring level of the task teaching unit indicates that the task teaching unit pays close attention to the goal completion of each member and closely tracks whether each student performs the task as expected, so as to help the teaching task of the task teaching unit conform to the plan and be completed in time. Finally, task-based teaching unit effort refers to students' input in energy, attention and time when they perform task-based teaching unit tasks. It is a dynamic process

in which students can continue to strive to achieve the goal of task teaching unit even when they encounter setbacks. It is a typical task control process of task teaching unit. The process of control runs through the whole process of the development of task-based teaching units. It occurs not only in the transition phase of task-based teaching unit operation, but also in the action phase of task-based teaching unit operation. Hard working students will continue to pay attention to the objectives of task-based teaching units, so as to improve the possibility of achieving the teaching quality of high task-based teaching units.

5. The Moderating Effect of the Relationship between Teaching Process and Teaching Quality in the Mature Stage of Task-based Teaching Unit

Task-based teaching unit is a complex and adaptive dynamic system. It is necessary to pay attention to the specific background of task-based teaching unit in its mature stage. In the early stage of the development of task-based teaching units (that is, from the initial stage of the creation of task-based teaching units to the intermediate stage of the development of task-based teaching units), the teaching process is devoted to generating ideas and strategies; In the mature stage of the development of task-based teaching units (that is, from the intermediate stage of the development of task-based teaching units to the project completion stage), the teaching process is committed to the implementation of tasks and strategies. The importance of teaching process will change with the development of task teaching unit, that is to say, the impact of the same teaching task execution on teaching quality is different in different stages. Because sometimes task teaching units need to focus on making plans or collective reflection, sometimes task teaching units need to focus on task implementation and mutual supervision, and sometimes they need to focus on solving conflicts or eliminating laziness. In the early stage of the development of task-based teaching units, the focus of task-based teaching units is to generate ideas with students' desire for knowledge, improve the methods to achieve goals, and formulate plans to complete tasks; In the mature stage of the development of task-based teaching units, task-based teaching units need to focus on students' desire for knowledge and the implementation of plans.

The effect of task teaching unit reflection is more significant in the early stage of the experiment, while the effect of task teaching unit monitoring is more significant in the mature stage. First of all, in the early stage of the development of task-based teaching units, students can invest enough energy and time to discuss, explore and integrate new ideas and methods in task-based teaching units, which can help to improve the innovative teaching quality of task-based teaching units. Secondly, if students can examine the feasibility of task teaching unit objectives at the early stage of task teaching unit and adjust task teaching unit objectives according to environmental changes, it will make task teaching unit objectives and plans more reasonable, and the consistency of students' acceptance of objectives and plans will also be improved. Finally, through discussing the working methods and how to cooperate effectively, students can find the most appropriate method to complete the task teaching unit goals.

On the contrary, in the early stage of the task-based teaching unit experiment, if the discussion on the objectives and methods of the task-based teaching unit is too hasty, or the students' behavior is monitored and restrained too early, it may have a very negative impact on the creativity of the task-based teaching unit. At the mature stage of the development of task-based teaching units, task-based teaching units need to focus on the implementation of teaching tasks and plans. There is not much energy and time to integrate new ideas generated at this stage, and task-based teaching units are unlikely to effectively sort out different opinions in task-based teaching units. Therefore, in the mature period of task-based teaching units, the impact of students' reflection activities is often ignored. At the mature stage of the development of task-based teaching units, if we often check whether each student has completed the task of task-based teaching units, and closely track the work progress of students, it will improve the executive power of task-based teaching units and help to complete the objectives or tasks of task-based teaching units.

6. Conclusion

The path of the output benefit of the task teaching unit design of the practical course of economic management of virtual reality technology is mainly realized through the imitation of virtual system and the adjustment of learning action. Virtual system imitation can promote the development of learners' knowledge level by improving task unit training and innovation, and improving operation technology. Through virtual system adjustment, learners can learn from each other's experience, to improve the teaching efficiency of practical courses. Therefore, based on virtual reality technology, learners' mutual communication and learning can indirectly promote the spread of science and technology, and have a positive spill over effect on other learning groups. Knowledge spill overs are carried out by means of cross regional and cross time communication and interaction through virtual reality systems, mainly through demonstration, imitation, competition, and incentive effects, to improve the quality of classroom teaching.

References

- [1] Pang B. B., Hew K F. Students' critical thinking level: examining Wimba Voice Board and text online discussions. *Journal of Computers in Education*, 2014, 1(1): 35-47.
- [2] Ibrahim S., Abas N., Hashim N., et al. The Infusion Speech Skeleton Application (App) As A Teaching Medium for Students of Office Management & Technology (Omt): A Conceptual Paper. *Humanities & Social Sciences Reviews*, 2020, 8(2):923-930.
- [3] Mingyue Luo. A Probe into the Teaching of Preschool Education from the Perspective of "Course for Ideological and Political Education". *Vocational Education*, 2021, 10(1): 40-43.
- [4] Miroshin D. G., Shterenzon V A., Bliznik M G., et al. Organization of online courses of technological design in the conditions of tripartite social partnership. *Педагогика и просвещение*, 2020(4): 132-148.
- [5] Sobral S. R. Bloom's Taxonomy to Improve Teaching-Learning in Introduction to Programming. *International Journal of Information and Education Technology*, 2021, 11(3): 148-153.
- [6] Gotti M. Recent developments concerning the use of English for teaching and research purposes. *Language Learning in Higher Education*, 2020, 10(2): 287-300.
- [7] Saifudin A., Setiawan S., Anam S. The Implementation of Task Based Learning in Teaching Writing Descriptive Text to The Junior High School. *Linguistic English Education and Art (LEEA) Journal*, 2020, 4(1): 109-125.
- [8] Nashiki S. Case Examples of Unit Exercise for Nwcessary for Teaching Profession. *Taisei Gakuin University Bulletin*, 2012, 14: 267-278.