Online Integration and Reconstruction Platform Interaction Research of Industrial Design Professional Guiding Model in Higher Vocational Colleges Based on Complex Information System

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Abstract:Based on the complex information system, this paper studies the education mode of the industrial design major in higher vocational colleges, and designs a background processing and online integration and reconstruction platform for the guidance network of the higher vocational industrial design major. Firstly, it analyzes the characteristics of the complex information system interface with Kernal as the frame, studies the application of the industrial design specialty in the complex information system interface design in higher vocational education, and implements the arrangement, topic selection, implementation principle, implementation process, Specific practice has been carried out in terms of assessment requirements and so on. The practice data is entered and processed based on MongleDB, and the online data is integrated and reconstructed using C++ modeling.

Keywords: Reconstruction Platform, Industrial Design, Professional Education, Complex Information System

1. INTRODUCTION

In recent years, with the transformation of the domestic economic growth mode and the improvement of people's living standards and requirements, art design has developed by leaps and bounds in my country [1]. However, due to the late start of art and design education in higher vocational colleges, and more reliance on the reference of relevant majors in undergraduate institutions of higher learning, the characteristics of higher [2] vocational art and design education are not clear, and the competitive advantage is low. The problems of higher vocational art and design education are mainly manifested in [3] the following aspects: the differentiated characteristics of talent training are not obvious; closed classroom teaching is still the main method, which is separated from the real environment [4] of the market and the industry. The complex information system consists of a large number of different types of information [5], its information and operation tasks are complex, and the operator's experience and cognitive level have high requirements.

With the continuous expansion of the application scope of complex information systems, such as nuclear power command and control, aerospace control [6], and battlefield command, people have higher requirements for the interface design of complex information systems. The traditional design process and concept are not enough to fully meet the needs of complex information system interface design [7]. How to design a complex information system interface with strong usability and good user experience has become a difficult problem for designers. At present [8], most of the higher vocational colleges in China are responding to the national policies and actively carrying out various forms of teaching reform [9]. The most important content of the reform revolves around the exploration and construction of the talent training model of "combination of work and learning, school-enterprise cooperation" [10]. However, in the implementation process of some majors in many schools, most of them just stay on the surface. First of all [11], the primary condition for talent training - professional settings to meet market demand. Higher vocational colleges need to closely strengthen the connection and cooperation [12] with enterprises, attract enterprises to participate in all aspects of school education and teaching, conduct sufficient professional research, and clarify the medium and long-term needs of talents needed in the process of industrial upgrading [13] and the need for high-end skilled professionals. and timely feedback this demand into the adjustment of professional structure [14], so as to make the adjustment of professional structure and the demand of industrial structure upgrade as dynamic as possible [15].

On February 26, 2014, the State Council officially issued the "Several Opinions on Promoting the Integrated Development of Cultural Creativity and Design Services and Related Industries" with Guo Fa [16] No. 10. The release of the State Council's "Opinions" shows that the strategic measure of developing design services to promote transformation and upgrading has officially risen to the national level, which will effectively [17] promote the integrated development of cultural and creative industries such as creative design and industrial manufacturing and other economic fields. The development of industrial [18] design will also usher in the spring. Project teaching originated in the 1980s and was first seen in the "Project Teaching Method" co-authored by American educator Katz and Canadian [19] educator Chad. It is a talent training model with the direct purpose of cultivating practical talents. The current definition of project teaching is teaching in the form of "projects". The source of "projects" is the real work task process or job content of the enterprise, so that students can come into contact with the complete work method or work in line with the market in the process of learning and practice.

2. THE PROPOSED METHODOLOGY

2.1 The Complex Information System

The healthy state means that the node has no security risk in the complex information system network; the infected state means that the node has a security risk in the complex information system network. In this paper, this model is named Risk-SIS model, or R-SIS model for short. Where u It is called the domain of discourse of the information system, and each element in u is called the object of the domain of discourse, that is, the sample space of the data set, A is called the conditional attribute set of the information system, that is, the conditional feature set, and D is called the decision-making of the information system. Attribute set, that is, the class tag attribute of the dataset.

The main content of the system security architecture of the complex information systems is taking risks and strategies as the basis and starting point to then formulate the security architecture of complex information systems of organizations.

In the life cycle of the information system, basic safeguard measures are implemented for the technology, management, engineering, and personnel to ensure integrity of information.

2.2 The Educational Model of Industrial Design Major in Higher Vocational Colleges

This cooperation model is the most common way of cooperation at present. The project is initiated by universities and colleges, and the content is mostly based on joint training of talents. Through some majors applicable to enterprises, the school carries out a cooperative education model of joint training with enterprises, and transfers the classroom to the production, practice, and operation of enterprises. Based on this core cooperation model, the school cultivates students' practical ability and also comprehensive quality based on professional theoretical knowledge.

For this reason, the Design and Art Branch of our school actively responds to the call of the country and the school and conducts research on how to carry out the teaching reform of the combination of work and learning mode for the art design major in higher vocational colleges. The three majors are industrial design and product packaging design, animation design and production entry point. The current definition of project teaching is teaching in the form of "projects". The source of "projects" is the real work task process or job content of the enterprise, so that students can meet the complete work method or work in line with the market in the process of learning and practice. Therefore, to realize the connection and integration of teaching research and project practice. In order to improve the implementation quality and effectiveness of project teaching, it is necessary to establish a set of effective project teaching management systems and methods, which will help to achieve scientific management and make project teaching work.

It can be standardized and scientifically carried out. Therefore, based on the theoretical analysis of the curriculum mode and system of higher vocational art design education, the teaching mode of industrial design projects.

2.3 The Online Integration and Reconstruction Platform Interaction Research

The school-enterprise cooperation in the art and design majors of higher vocational colleges often leads to insufficient cooperation. The main problems are as follows:

1. The cooperation between enterprises and schools only stays in the part-time courses of individual employees, and the proportion of part-time courses is not high.

2. The school's traditional calculation method of class hours emphasizes professional titles and less ability, and the enterprise is not suitable for the talent demand.

3. The school's full-time teachers go to the enterprise for temporary training and suffer from too many limitations. difficult to implement.

In order to improve the implementation quality and effectiveness of project teaching, a set of effective project teaching management systems and methods must be established, which will help to achieve scientific management and make project teaching work standardized and scientific.

3. CONCLUSION

Based on the research on the concept and methodology of design thinking, this paper studies the application strategies of design thinking in the interface design of complex information systems, aiming at the characteristics of interface information complexity, task complexity and system diversity of complex information systems. , requirement definition, idea generation, prototyping and actual testing are elaborated in order to improve usability and user experience of complex information system interface, and bring some references and new ideas for future complex information system interface design.

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