Research on the Optimization of Teacher Studio Model Based on Studio System

Qi Da, Shen Lanting
Xijing University, Xian, Shaanxi, 710123, China

Keywords: Art Design; Talent Training; Studio Model

Abstract: China's art design education and art design industry have experienced an "explosive" development phenomenon in recent years. Colleges and universities are facing new changes and challenges in the training mode of art design talents. The traditional talent training mode has caused the professional construction of higher vocational art design to be seriously out of line with the development of the industry, and the students' practical ability is weak. In the studio teaching, the overall design of the professional curriculum is to break the traditional science curriculum model with knowledge transfer as the main feature. It provides the greatest possibility for training compound design talents with innovative ability, comprehensive accomplishment and professional skills. It plays an active role in promoting the teaching reform of art design curriculum, teaching methods and personnel training objectives in colleges and universities. It provides new ideas and concepts for the exploration of art design education in colleges and universities. Its establishment conforms to the needs of the development of the times and is a new mode for the cultivation of art and design professionals.

1. Introduction

In recent years, China's art design education and art design industry have witnessed an "explosive" development phenomenon. Colleges and universities are facing new changes and challenges in the training mode of art design talents [1]. In the teaching of "studio system" in design art colleges, we attach great importance to the combination of practical projects with reality. In the process of teaching, special technicians are responsible for the teaching of students' technology, and students have relatively independent studios [2]. Studio system is a kind of student-centered, professional teacher-led, real work scene-based, practical project-led, post vocational ability training as the core [3]. The function of the studio is to undertake the design project by carrying out project training and vocational skill appraisal while undertaking the teaching task. Promote school-enterprise cooperation, industry-university interaction, and promote the talent training model of teaching, employment, and entrepreneurship [4]. The traditional talent training mode has caused the professional construction of higher vocational art design to be seriously out of line with the development of the industry, and the students' practical ability is weak. Therefore, it is difficult to adapt to the requirements of high-skilled talents in art design enterprises [5]. Therefore, it is very necessary to carry out the research and practice of the "studio-based" talent training mode in the art design majors of higher vocational schools.

At present, in the teaching process of college art design education in China, there are problems such as "unclear orientation of talent training", "disjointed content of professional courses and social practice", and "the traditional teaching mode cannot adapt to modern teaching" [6]. Due to various reasons such as limitations of hardware conditions or backwardness of teaching concepts, it is not uncommon to adopt this talent training model in higher vocational art design. In the studio teaching, the overall design of the professional curriculum is to break the traditional science curriculum model with knowledge transfer as the main feature [7]. Guided by "work tasks and professional competence", we set the goal of vocational competence training, and change the teaching of book knowledge to the training of practical competence. According to professional requirements and application orientation, studio directors employ "double-qualified" teachers with high teaching level and strong practical ability, as well as designers and masters of Arts and crafts of cooperative enterprises as studio instructors. Through project practice and social integration,
industry, University and research are in one [8]. Guiding students to form independent thinking design thinking, using the knowledge learned to analyze and solve problems, improve their practical ability and comprehensive quality. This is an effective mode for colleges and universities to cultivate innovative and composite art and design talents suitable for the development of the times.

2. Materials and Methods

The theoretical basis of the project-based teaching method mainly includes constructivist learning theory, Dewey's pragmatic education theory and situational learning theory. Project-based teaching is mainly composed of four elements: content, activities, situations and results. The teaching content is based on work tasks, the teaching activities are mainly students, and the learning results are characterized by diversity. An important prerequisite for production is to look at the needs of the talent market [9]. As a practical and innovative talent base for cultivating the needs of enterprises and social development, it is necessary to train students to understand the market and develop the market's thinking mode in order to improve students' ability to adapt to the market and their ability to work. The studio-based teaching model is divided into several studios according to the profession or direction, in order to practice the school-enterprise cooperation philosophy. Each studio must cooperate with more than one industry enterprise to achieve school-enterprise integration and industry-university integration. In the practical teaching process of the studio system, students face the needs of real customers, collect all kinds of information, and coordinate the relationship between all parties. After the design creation, all kinds of complex and subtle factors can greatly enhance students' ability to cope with society and the market.

In the operation process of project teaching, teaching, learning and doing are integrated. The "studio system" teaching mode of art design specialty in higher vocational colleges is a positive attempt. It not only improves the students' practice conditions, guarantees the quality of personnel training, and improves the employment rate of students, but also makes the training objectives of schools more consistent with the needs of enterprises. In software teaching, if students can't practice well in class and can't solve problems well, then the learning effect will not be ideal. The efficiency of the improved art design is compared with that before the improvement. The contrast effect is shown in Figure 1.

![Fig.1. Comparison before and after improvement](image)

Due to various reasons such as limitations of hardware conditions or backwardness of teaching concepts, it is not uncommon to adopt this talent training model in higher vocational art design. The classroom teaching mode should adopt the action-oriented teaching method based on "project guidance" and "task drive". After graduation, students can quickly adapt to the requirements of the job, eliminating the trouble of getting on the job after training [10]. It provides an excellent way for students to successfully work, greatly reducing the burden for the society. Project-based teaching, from the collection of information, the design and implementation of programs, to the evaluation
after completion, is the specific responsibility of students. Students need to understand and grasp the basic requirements for each link of the project and the key and difficult points of the whole process. Teachers only play the role of consulting, guiding and answering difficult questions in the teaching process. After such a learning process, students' professional quality and skills have been greatly improved.

3. Result Analysis and Discussion

Accurate and effective management of studios is the key to the success of the "studio system" talent training model. At the time of construction, organizations such as "Leading Group for Studio Construction Reform" and "Working Group for Studio Construction" should be established. Draft a series of rules and regulations for the studio and make overall planning. On the basis of fully listening to the opinions of enterprises and brotherly institutions, expert groups are invited to carry out certification. The studio system constantly summarizes the design experience while practicing the project. Strengthen the cultivation and guidance of students' innovative thinking and put an end to plagiarism and imitation. A sustainable development of the studio, in addition to a complete echelon of teachers, a strong learning atmosphere, but also a normative cycle mechanism and competition mechanism. Students have practical theoretical knowledge, design technology has been greatly improved, and innovation ability has been greatly developed. The results are assessed by the teacher's assessment of the results, combined with the group's self-assessment, inter-group mutual evaluation and exhibition of works. Also consider the performance of the project team's performance in the defense session.

Through regular academic discussions with experts, based on the characteristics of national culture, improve the creative ability of student culture. Through such practice, the subjective initiative of students has been greatly exerted. The scores of the art design subjects of the experimental and control classes were obtained. The relevant data is statistically analyzed by statistical software, and the statistical data is summarized as a Table. After the experiment, the test scores of the two classes were compared again, as shown in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Experimental class</th>
<th>Control class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Pre-test Average Achievement</td>
<td>75.2</td>
<td>76.9</td>
</tr>
<tr>
<td>Posttest Average Achievement</td>
<td>76.1</td>
<td>85.3</td>
</tr>
</tbody>
</table>

In order to ensure the smooth implementation of project-based teaching and skill training, it is necessary to clarify the facility standards and equipment configuration requirements of the studio. Introduce the funds and equipment of enterprises, society and industries into the studio teaching system. The practice of studio-based talent training mode for art design specialty in Higher Vocational Colleges provides the greatest possibility for training compound design talents with innovative ability, comprehensive quality and professional skills. Traditionally, students sit in class to listen to the teacher and finish the teacher's homework after class. Now as a designer to participate in the whole teaching activities, teachers can always get guidance. In addition to the project practice teaching, we also need to learn the excellent traditional cultural knowledge of the nation. Based on excellent national culture, we should form a more innovative and competitive design concept. The performance evaluation of the studio-based teaching model project course adheres to the principle of combining “process evaluation” and “result evaluation”, and focuses on the student's learning process. In the course of teaching activities, the content, organization and teaching location of the course have undergone fundamental changes. This means that the teacher and student roles must be converted.

The layout of studio facilities should also be suitable for the development of project-based teaching. Such as multimedia teaching equipment, practical work stations, group discussion areas, data query areas, results display areas, etc. In the art design network model, a linear regression
The curve is calculated according to the combined model algorithm, as shown in Figure 2.

![Graph showing relationship between actual values and stepwise linear regression calculated values.](image)

**Fig.2.** Relationship between actual values and stepwise linear regression calculated values

Project-based teaching puts new demands on teachers. Teachers are required to be familiar with professional practice, requiring teachers to have interdisciplinary and teamwork skills, requiring teachers to have the ability to create learning situations, and requiring teachers to reposition their roles in the teaching process. The talent training model highlights the cultivation of professional ability and provides an open and developing educational and teaching environment for teachers and students. Promote the natural connection between higher vocational teaching and employment, so that students' employability and professional level have been greatly improved. For school teachers, not only solid theoretical knowledge, but also practical professional design skills are required. Students in "studio" is no longer just a "student" in the simple sense, but more often a designer or company employee. Through studio teaching, teachers' sense of responsibility, research ability and individual comprehensive design ability have been improved to varying degrees.

4. **Conclusion**

Based on the studio system, the training mode of art and design talents in Colleges and universities can help students learn in practice. Teachers provide an open platform for teaching practice in practice. Practice of Studio-based Talents Training Model for Art Design Major in Higher Vocational Colleges. It provides the greatest possibility for training compound design talents with innovative ability, comprehensive accomplishment and professional skills. It is a powerful means to achieve the goal of training. It can effectively improve students' innovative consciousness, creative ability, adaptability, collaborative ability and entrepreneurial employment ability. It can also improve the quality of running colleges and universities and cultivate talents to meet the needs of the times. Effectively solve students' professional ability, social adaptability and employment problems. The studio teaching model combines teachers, students and enterprises. Build a bridge between teaching and practice, and between schools and businesses. It has a positive role in promoting the teaching reform of college art design curriculum, teaching methods and talent training goals. Provide new ideas and new ideas for the exploration of art design education in colleges and universities. Its establishment conforms to the needs of the development of the times and is a new mode of training professional talents in art design.

**Acknowledgements**

This paper is the research result of the teaching reform research project "research and practice of studio system teaching mode for environmental design specialty" of xijing university. Project number: JGYB1716

**References**

[1] Budge, Kylie. Learning to Be: The Modelling of Art and Design Practice in University Art and


