Reform and Practice of Talent Training of Architectural Interior Design Professionals in Higher Vocational Skills Competition: Taking Chongqing Energy Vocational College as an Example

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Abstract: For higher vocational colleges, skills competition is an important indicator of professional personnel training quality. In this paper, the architectural interior design professional skills competition in Chongqing Energy Vocational College is taken as an example, the many years of teaching and competition experience are taken into account, the problems existing in the cultivation of architectural interior design professionals in higher vocational colleges are analyzed, and corresponding solutions are proposed.

Keywords: Vocational skills competition; Architectural interior design; Teaching reform

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1. Introduction

In the 19th National Congress of the Communist Party of China, two proposals were made. The first was to speed up the transformation from “Made in China” to “Created in China,” from “Chinese speed” to “Chinese quality,” and from “Chinese products” to “Chinese brands,” while the second was to improve the quality of workers, promote the spirit of model workers and craftsmen, and create the social ethos of honoring labor and the professionalism of striving for perfection. According to the National Vocational Education Reform Implementation Plan, issued by the Ministry of Education, higher vocational colleges should take building morality and cultivating people as their fundamental task, as well as carry out ideological and political education throughout the entire process of talent training. Skills competition is an important means to test a school’s education quality, social service capability, and education level. Guided by skills competition, the reform and practice of professional personnel training can nurture high-quality skilled and technical personnel who are able to meet the market demand. The architectural interior design major of Chongqing Energy Vocational College is the mainstay major in Chongqing. Since its establishment, it has relied on industry enterprises, integrated resources, and school-enterprise cooperation. Moreover, a “3+2” talent training model with industry characteristics has been established for architectural interior design majors. After learning theoretical knowledge and professional skills in school, students enter the workforce for internship, realizing the training goal of “school education + enterprise training + vocational qualification certificate.” On this basis, it is necessary to carry out talent training reform and
practice with vocational skills competition as the starting point; enhance students’ learning enthusiasm, initiative, and creativity through skills competition; and strengthen the talent training model that emphasizes on school-enterprise cooperation, production-education integration, and school-enterprise win-win development. Vocational skills competition should be taken as an opportunity to strengthen professional construction and carry out curriculum system and teaching reform [1-4].

2. Existing problems in the cultivation of architectural interior design talents in Chongqing Energy Vocational College

2.1. Inability of the curricula to meet the needs for applied talents in vocational skills competitions and enterprises

The “Bayu Craftsman Cup” architectural interior design competition organized by Chongqing Municipality is divided into four categories: architectural design construction drawing, architectural design bill of quantities compilation, architectural design construction organization and management, and detailed design. At present, there are insufficient courses related to the preparation of the bill of quantities for architectural design in the talent training program. At the same time, architectural design construction organization and management is offered in the first semester of junior year. The professional curriculum system mainly includes three modules: basic skills, construction drawing, and interior design. In “Bayu Craftsman Cup,” construction drawing is mainly made according to the provided interior renderings, which mainly assesses the students’ understanding of the functional layout of the interior space and materials, as well as the mastery of construction techniques [5]. The detailed design module mainly assesses students’ mastery of materials and construction techniques. Therefore, materials and construction techniques need to be highlighted in training. In addition, attention should be paid to the preparation of the bill of quantities for architectural design and architectural design construction organization and management. The proportion of courses should also be increased. Since the competition items are out of touch with the professional talent training program, students cannot master relevant theoretical knowledge during the competition or improve their skills. As a result, students are unable to adapt to the requirements of the professional talent training program and thus unable to meet the practical skill requirements of employers.

2.2. Lack of connection between daily teaching and vocational skills competition

With the Ministry of Education’s emphasis on vocational education, the country is increasing its investment in vocational education, and both teachers and teaching tools are constantly improving. However, in actual operation, many higher vocational colleges often face problems due to the lack of professional teachers. First of all, there is a lack of integration between the competition venue and the teaching venue. At present, most of the competition venues are off-campus training bases or enterprise training bases. However, due to the influence of factors such as business environment, school teaching conditions, and student quality, several competition items are out of sync with the teaching content. Secondly, as far as the current architectural interior design competition is concerned, the software that is used in the competition, ZWCAD, is inconsistent with the software used in daily teaching, and students have to re-learn software operations to prepare for the competition. The seriously out-of-touch project results in a paucity of students’ analytical skills, knowledge application, practical operation skills, and understanding of construction technology. Thirdly, there is a lack of integration of competition resources and teaching resources. At present, teachers of interior design majors in higher vocational colleges are relatively weak, and there is a lack of professional teachers to guide students in competition activities and training. Therefore, teachers should integrate competition items into daily teaching content, so as to truly improve students’ level of competition.
2.3. Low skill level of double-position teachers
Double-position teachers have gained certain achievements; however, due to various constraints, the current skill level of double-position teachers is still far behind the requirements of vocational skills competitions. Most double-position teachers do not have the time to participate in projects undertaken by enterprises, and their practical operation skills and construction experience do not meet the necessary standard for guiding students in vocational skills competitions. Teaching evaluation refers to the use of various methods by teachers to observe, record, and analyze students’ learning situation according to certain teaching objectives and the comparison of obtained data with standards, so as to gauge students’ level of learning and make reasonable teaching evaluations. Skills competition often focuses on the operation skills of the participating student in the process of completing the project. However, a gap exists between competition evaluation and teaching evaluation. Competition evaluation focuses on results, while teaching evaluation focuses on the process. Therefore, it is necessary to organically combine competition evaluation with teaching evaluation.

2.4. Lack of in-depth and effective school-enterprise cooperation
School-enterprise cooperation serves as a bridge connecting the needs of enterprises and the supply of talents by schools. Only when enterprises, universities, and talents form a cooperation in the process of talent training can the quality of talent training be improved. At present, school-enterprise cooperation remains at a relatively low level, and no effective school-enterprise cooperation mechanism has been formed.

3. Strategies for talent training of architectural interior design major in Chongqing Energy Vocational College
3.1. Reform the teaching mode
Under the guidance of vocational skills competition, the teaching mode of the architectural interior design major is reformed based on the reform of the curriculum system. In traditional classroom teaching, teachers are the center of education, and students are passive learners. It is difficult for students to exert their subjective initiative and creativity under the traditional teaching mode. Under the concept of “promoting learning through competition,” in-class and extracurricular learning and practical training are carried out by introducing typical cases and project tasks in vocational skill competitions. Through “Internet +” and other advanced information technology means, subject knowledge and vocational skills are integrated, and there is comprehensive improvement in knowledge, skills, and quality through in-class learning, extracurricular learning, and practical training.

(1) In-class learning is carried out by promoting teaching and learning through competition. By encouraging students to participate in the National Vocational College Skills Competition Interior Design Professional Selection Competition, significant outcomes have been achieved; at the same time, classroom teaching has been reformed by taking skills competition as an opportunity, and the “online + offline” hybrid teaching mode has been used for teaching.

(2) Extracurricular learning adopts the “online + offline” hybrid teaching mode. Through the establishment of an electronic resource library for architectural interior design major and the establishment of a training base for school-enterprise cooperation, co-construction, and sharing, the existing teaching resources have been integrated, optimized, rebuilt, and updated. In addition, actual project tasks and typical work tasks of enterprises have been included into the course content, with the establishment of the hybrid teaching mode. By introducing actual project tasks and typical work tasks of enterprises as the course content, the traditional “theory + practice” teaching mode is reformed. The “online + offline” hybrid teaching mode can be used to carry out practical training, and the organic combination of course content with vocational skills competition should be realized \[^{6-8}\].
3.2. Reform the teaching content and methods

Teachers should change the traditional teaching methods, reform the teaching content and methods, take students as the main body, and cultivate professionalism among students on the basis of imparting knowledge. When teaching, teachers should expose students to the actual situation of the industry and enterprises, adopt flexible and diverse teaching methods, and pass on knowledge and skills to students. Teachers should also strengthen the cultivation of students’ professional quality, guide students to establish a proper career outlook, help students understand the employment situation and prospects, as well as improve students’ social competitiveness. For example, teachers can select excellent works from industry enterprises for case analysis when teaching, so that students can understand the design process in actual work, as well as invite industry experts and outstanding designers to hold lectures or write up reports at school. Based on the “Bayu Craftsman Cup” organized by Chongqing in recent years, the talent training plan should be adjusted accordingly, and related courses should be added. At the same time, the interior design construction organization and management module be offered in advance during the first semester of sophomore year. Through case teaching, open laboratories, etc., students’ professional skills can be improved \[^9\]. Practice has proven that this teaching method not only cultivates students’ professional qualities, but also improves students’ professional skills. Positive results have been achieved through this method, playing a significant role in promoting students’ future employment.

3.3. Reform of the course evaluation method

Course evaluation refers to the comprehensive evaluation of students’ learning process and results. It includes learning attitude, learning outcome, and learning process. The traditional evaluation method is a form of summative evaluation, which uses test scores as the only standard. This leads to the undesirable phenomenon that students pay more attention to knowledge than skills, focus on test-taking instead of innovation, and pay more attention to results than the process. For this reason, the course evaluation should be reformed in such a way that it focuses on both process evaluation and summative evaluation. In the course evaluation, the project-based teaching mode has been adopted, and a course evaluation system based on vocational skills competition, consisting of “in-class credit evaluation + project-based evaluation,” has been formed. Through the organization and implementation of skills competition, the initiative and enthusiasm of students in learning have improved, and the teaching reform and development have been further promoted. Taking the course Interior Space Design as an example, the skills competition assessment content can be divided into three parts: task-oriented determination of course assessment objectives; task-oriented design of assessment content; task-oriented assessment. On this basis, the project-based teaching method is adopted to carry out course teaching. In practice, a course assessment system based on vocational skills competition has been constructed, and the course assessment objectives are determined based on “tasks”; the course content is designed by means of “project-based teaching”; and the course assessment content is driven by “job tasks” \[^9\]. The course assessment is conducted in various forms, such as “on-site display of enterprises + display of works in skills competition + on-site debate.”

3.4. Reform the double-position teaching team

In terms of the cultivation of double-position teachers, the school promotes teaching through competitions and strengthens the construction of double-position teachers, as well as actively carry out the reform and practice of the “1+X” certificate system for professional teachers. According to the requirements of the documents by the Provincial Department of Education, the “1+X” pilot work has been carried out in all majors of the school since 2017. Relevant training, assessment, and evaluation will be carried out for teachers participating in the “1+X” pilot work. In terms of developing a team of professional course teachers, the school regularly arranges professional course teachers to participate in various trainings, vocational
skills competitions, teacher forums, and other activities organized by industry enterprises to improve their theoretical knowledge and practical skills. At the same time, professional backbone teachers are encouraged to take on part-time jobs in enterprises, and enterprises’ first-line production technology backbones and skilled craftsmen are invited to participate in the formulation of student training programs and the design of curriculum systems [10].

Considering the situation of double-position teachers in Chongqing Energy Vocational College and the demand for professional and technical personnel in the professional curriculum construction of architectural interior design, personnel from design institutes or interior design companies with excellent professional operation skills and rich construction experience are hired. When experienced designers are invited as part-time lecturers, they are trained in such a way to improve their professional theoretical understanding and teaching skills. In that way, their role as off-campus part-time teachers would be more stable. At the same time, encouraging professional course teachers to participate in specific design projects and cooperate with enterprises would help them grasp the entire process of interior design more systematically and meticulously, as well as realize the cooperation and integration of professional course teachers and professional enterprise personnel. This is a key step in forming double-position teaching teams.

4. Conclusion
Taking skills competition as an opportunity, integrating the project of skills competition into the professional talent training plan is conducive to promoting teaching reform and improving teaching quality, deepening the integration of production and education as well as school-enterprise cooperation, improving students’ professional qualities, promoting the spirit of model workers and craftsmanship, improving teachers’ professional understanding and skills in guiding students, and giving full play to the role of industry associations and providing technical services to enterprises.

Disclosure statement
The author declares no conflict of interest.

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