

Original Paper

Research on the Reform of the “Dual-Mode Dual-Track” Talent Cultivation Model for Architecture Majors in Higher Vocational Colleges under the Background of “Quality Improvement and Excellent Cultivation”

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Abstract

Under the background of “quality improvement and excellent cultivation”, the talent training mode of higher vocational colleges has aroused the attention of the society. As the key specialty of many higher vocational colleges, the construction specialty can explore a new professional and technical talent training mode through the implementation of “dual-mode dual-track” talent training mode, and promote the further development of the construction industry. By analyzing the reasons for the reform, this paper draws the reform strategy, hoping to promote the long-term development of higher vocational colleges.

Keywords

quality improvement and excellent cultivation, higher vocational colleges, architecture specialty, dual-mode dual-track, talent training model, reform

1. Introduction

In order to comply with the development of society, the construction industry of our country is changing constantly, and the corresponding construction engineering management, construction engineering cost and other professional and technical personnel are also transforming, its goal is for our country construction industry better development. Under the background of “quality improvement and excellent cultivation”, the “dual-mode dual-track” talent training mode of architecture specialty in

higher vocational colleges also needs to be reformed to conform to the development of society, if higher vocational colleges continue to choose the traditional training mode of architectural professionals to carry out teaching activities, which is not conducive to students' social work, therefore, higher vocational colleges should constantly innovate teaching methods and teaching contents, finally explore the high-quality personnel training model for the construction industry to transport more high-quality new professional and technical personnel.

2. The Reasons for the Reform of the “Dual-Mode Dual-Track” Talent Training Mode of Architecture Specialty in Higher Vocational Colleges

The scale and types of buildings are constantly expanding, and people's demand for buildings is also constantly increasing. In the process of economic development, China has also continuously increased investment in social infrastructure construction. At the same time, various enterprises in society are also continuously increasing investment in the construction industry. Therefore, the economic infrastructure investment guarantee of the construction industry will continue to expand the content of the buildings in the future. According to a survey, there are a large number of professionals in the construction industry in China. However, the number of professionals specializing in technology and management in the construction industry is relatively small, and a large portion of professionals in this sector have not received professional training. Due to the shortage of market talents, it is necessary to reform the “dual dual line” talent training mode for construction majors in vocational colleges. In addition, many vocational colleges offer architecture majors, but in the teaching process and the application of talent cultivation models, traditional teaching models, teaching content, and talent cultivation methods are still used, without corresponding teaching models and content tailored to the needs of society, resulting in a lack of targeted talent cultivation process. Society is developing, and people's demand for innovation in the construction industry is constantly increasing.

Traditional classroom teaching content cannot allow students to learn innovative knowledge about the construction industry. Therefore, the reform of talent cultivation models in vocational colleges requires students to learn targeted content knowledge. Various industries in society advocate the use of workers with strong practical skills, which are manifested as good professional literacy, fast adaptability, and strong learning ability. Traditional talent cultivation models do not better cultivate students' practical skills, and vocational colleges do not attach importance to the cultivation of practical skills, resulting in students being unable to combine corresponding theoretical knowledge in the process of practical application of relevant knowledge and skills, The performance is that students have poor technical application ability when entering social work, so the reform of talent cultivation mode is to cultivate higher quality applied professional and technical talents.

3. Reform Strategy of the “Dual-Mode Dual-Track” Talent Training Model for Architecture Majors in Higher Vocational Colleges

The above analysis of the reasons for talent mode reform, combined with the actual situation of society, can be carried out in various aspects on the “dual dual line” talent training mode of architecture majors under the background of “improving quality and training excellence”. Vocational colleges should make corresponding training goals and plans, and can deepen the “dual line” talent training mode reform from the following modes:

3.1 Employment Oriented Talent Cultivation Model

The education policy of vocational colleges is to better serve employment, with market driven as the main direction, transform traditional teaching thinking, and transform traditional thinking for further education into employment needs. Vocational colleges should conduct surveys on graduates of construction majors and the construction industry, analyze the current talent positions required by the construction industry, and adjust teaching content, teaching objectives, and professional content settings based on the analysis results.

3.1.1 Clarify Talent Development Goals

Vocational colleges should conduct detailed analysis, continuous revision and verification of various architectural majors based on employment orientation in the teaching process, and clarify talent cultivation goals. To enable students to effectively adapt to job positions in the construction industry after graduation, the teaching courses and objectives set should enable them to understand and master the theoretical foundation of the construction industry during the teaching process, as well as possess practical skills in the construction industry. It is also very important for students to cultivate their professional literacy. Good professional literacy helps students become more professional in their work in the future. In the process of social development, the innovation ability possessed by technical talents is also an important part of society’s demand. Therefore, in the context of “improving quality and training excellence”, the reform of the “dual line” talent cultivation model should clarify talent cultivation goals, focusing on targeted cultivation of students’ theoretical knowledge, practical ability, professional literacy, and innovation ability.

3.1.2 Targeted Teaching Content

In order to effectively cultivate high-quality skilled talents in the field of architecture in vocational colleges, it is necessary to cultivate students’ professional skills and literacy. In response to this situation, vocational colleges should conduct effective analysis of positions in the architecture industry, explore the necessary professional abilities for relevant positions, and set corresponding teaching content. Build a targeted teaching content knowledge system, especially for the core courses of the major, which should be continuously improved. For other public basic courses and elective courses, the teaching content should also have a clear teaching purpose. By making each course targeted, vocational colleges can integrate the corresponding course content to form a targeted teaching model. Each course provides

effective training for students in each section, thereby enhancing their professional skills and literacy, and making them the talents needed by society.

3.2 A Talent Cultivation Model Combining Enterprises and Campuses

The talent cultivation model that combines enterprise and campus is conducive to better cultivating the talents needed by enterprises. Vocational colleges should strengthen the connection with enterprises, establish cooperation with enterprises, set up more practical internship links for students, reform the traditional talent training model mainly based on school training, and set corresponding internship and training content and time according to the actual situation of students in vocational colleges of architecture majors.

3.2.1 Implement 2+1 Talent Cultivation

The teaching model of combining work and learning to cultivate talents has been implemented in many schools for many years and has achieved certain results. In the process of reforming the “dual dual line” talent training model for architectural majors under the background of “physical fitness training”, vocational colleges can implement 2+1 talent training, with 2 years of studying in school and 1 year of practical learning in enterprises. In the process of implementing the 2+1 talent cultivation model, teachers should fully combine the actual situation of the enterprise, analyze the learning situation of students, reasonably arrange and allocate students to practical learning in the enterprise, and during the practical learning period of the enterprise, the school should arrange teachers to guide teaching on site in the enterprise, helping students apply the theoretical knowledge learned in the previous two years in school to practice. This approach can effectively help students better adapt to the work environment after graduation, and they are also working while studying. Learning is a part of work, so that students can understand that they also need to constantly learn during the work process to improve themselves.

3.2.2 Campus Enterprise Education Commonality

To better achieve the “dual dual line” model, school enterprise education communication is a good way to involve professional and technical talents and management talents in the campus teaching process. Based on the teaching progress and content, reasonable teaching plans are formulated to combine the relevant technology and talent needs of the enterprise with the school’s teaching content. In order for enterprise talents to give lectures on campus, teachers in vocational colleges should provide appropriate assistance to make the content taught by enterprise talents more tailored to the needs of students. At the same time, teachers from vocational colleges go to enterprises to give lectures, focusing on theoretical knowledge, professional literacy, and other areas, to teach course content to enterprise employees, helping students learn better in the practical process. Vocational colleges can formulate corresponding plans to hire talents in the field of architecture to enter the school, teach students relevant professional knowledge, or carry out relevant professional sharing activities. In the process of talent cultivation, vocational colleges should also fully consider the suggestions of talents in the field of architecture. In addition, teachers in vocational colleges should also use their spare time to learn relevant professional

knowledge in enterprises, improve their own professional abilities, and better integrate their professional and educational abilities, thereby helping students learn better.

3.3 Simulation Teaching Mode for Work Scenarios

3.3.1 Teaching Process Simulation Work Scenario

School enterprise cooperation is an important part of implementing talent cultivation, and the development of teaching activities in architectural majors in vocational colleges is also highly valued. Simulating work scenarios during the teaching process allows students to directly feel the purpose of theoretical knowledge teaching. In the classroom teaching process, the main focus is on teaching students' theoretical knowledge of architecture majors, and teachers are also required to implant some practical knowledge content. So vocational colleges can establish simulation work scenario testing sites for architecture majors, which should be matched with actual construction projects. The construction processes, facilities and equipment, and construction scenarios involved in construction projects should all be included. Teachers should be involved in corresponding content during the teaching process, and can go to the corresponding sites for on-site explanations during teaching, as well as guide students to carry out some operations. At the same time, teachers should make full use of modern information technology in the teaching process to directly present the working scene of construction engineering to students, so that students can have an understanding of the corresponding content. Information technology can help teachers combine practical and theoretical knowledge, and effectively achieve teaching goals, allowing students to complete learning tasks while also laying a good foundation for future work.

3.3.2 Teaching Based on Work Process

The construction industry is different from other industries in that all construction projects are carried out according to strict procedures. Therefore, in the teaching process of construction majors, it is necessary for teachers to carry out corresponding teaching activities based on the work process. A project has a complete work system from infrastructure construction to completion. In the context of "improving quality and excellence", teachers can integrate teaching courses and teach according to the process of construction engineering. This method can make the teaching content of teachers and students' learning content have a certain degree of logic and coherence, which helps students remember relevant knowledge points. The corresponding curriculum outline is the construction engineering process, it can help students better understand the necessary links in the work process, and the changes in processes in construction engineering also mean that the difficulty of work is increasing. Choosing this method also deepens the learning difficulty of students, from simple to complex, from easy to difficult, to help students learn better.

3.3.3 Integrated Teaching for Teaching Purposes

The integrated teaching mode can enable teachers to transform traditional teaching thinking and subjectively consider the knowledge points of architecture majors as equally important as "teaching", "learning", and "using", thus adjusting the corresponding teaching methods and methods of architecture

professional knowledge content. The integrated teaching approach can make classroom teaching more free and encourage teachers to guide students to constantly create and think during the teaching process. Students can fully utilize their learning characteristics in the classroom, actively follow the teacher's teaching rhythm to learn classroom knowledge under the guidance of the teacher. The teacher and students complete teaching tasks together, and the theoretical knowledge content taught by the teacher can be effectively absorbed and applied by students. During the teaching process, teachers can use theoretical courses to learn and then carry out simple practical operations, allowing students to better apply theoretical knowledge for practice. For example, in the process of learning architectural software, teachers should explain relevant knowledge points to enable students to effectively learn, and assign corresponding assignments to enable students to effectively apply the knowledge they have learned. In the process of integrated teaching, teachers should combine the actual situation of students and set tasks reasonably and scientifically, allowing students to think and explore the knowledge content learned during the task completion process. The degree of task completion is also a way for teachers to check students' learning and application situation.

3.4 Optimize the Assessment Mode by Combining the "Dual Element and Dual Line" talent cultivation

In the context of "improving quality and excellence", both the teaching quality of teachers and the learning quality of students need to be constantly tested. In the process of reforming the "dual dual line" talent training mode for architecture majors in vocational colleges, corresponding assessment models should also be optimized. The corresponding assessment models should fully combine students' theoretical knowledge learning situation and professional technical skills application ability for assessment. Combining the traditional single theoretical knowledge assessment model, vocational colleges can add professional technical skills application ability, daily learning situation assessment, and effectively supervise students' daily learning during the process of testing their learning quality. The assessment of technical skills application ability can be based on the teaching content of architecture majors at the end of the semester, and corresponding practical links can be set up to assess students' performance in practical links. The assessment results should fully integrate every operational step of students in practical links. For students during their internship in enterprises, vocational colleges can collaborate with enterprises to jointly assess, formulate corresponding assessment regulations, and set reasonable assessment scores.

For students' daily learning situation, a comprehensive assessment can be conducted based on their daily attendance, class attitude, and completion of homework. For the assessment of theoretical knowledge, the traditional paper writing mode can still be used to understand students' mastery of theoretical knowledge. The assessment focus of the "dual dual line" talent cultivation model should also pay attention to students' professional literacy, but the limitations on professional literacy are relatively broad. Vocational colleges should fully combine the special attributes of architectural majors, and cover the corresponding content through the assessment section of students' daily life learning performance and skills and technology application. This method can improve students' comprehensive literacy and

professional abilities, promote vocational colleges to better provide high-quality technical talents for the construction industry, and promote the sustainable development of the construction industry.

4. Discussion

The reform of the “dual dual dual line” talent training mode for architectural majors in vocational colleges under the background of “improving quality and excellence” is a long-term and arduous systematic task for vocational colleges. More teaching and research personnel need to be invested to conduct in-depth investigations and research on the needs of architectural professionals, and at the same time, reasonable and scientific strategies should be adopted to better achieve the “dual dual line” talent training mode for schools and enterprises, Teachers carry out professional teaching activities guided by employment, and carry out teaching and research work guided by the transportation of high-quality professional and technical talents. They reform and innovate the talent cultivation mode by combining enterprise and campus training, simulating teaching in work scenarios, and optimizing the assessment mode by combining the “dual line” talent cultivation.

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