Universe Scientific Publishing

ORIGINAL ARTICLE

Discussion on the Teaching of Practice and Application of Construction Cost Specialty Students in Higher Vocational Colleges

Jing Zhang

Enshi Polytechnic, Enshi 445000, Hubei, China.

Abstract: In recent years, with the rapid development of social economy, the construction industry is advancing by leaps and bounds, and the gap of construction cost professionals is growing. Vocational education, as the main force of cultivating professional and technical talents, undertakes the mission of cultivating applied construction talents. Practice is an important teaching link of construction engineering cost major. This paper focuses on how to improve the practice and application ability of construction engineering cost major students through practice teaching, in order to cultivate a group of high-quality construction engineering cost professionals to meet the development needs of the construction industry.

Keywords: Higher Vocational Colleges; Major in Construction Cost; Practice; Application; Teaching

The major of construction engineering cost is a key and popular major in higher vocational colleges. The teaching of this major aims at cultivate technical talents with engineering cost ability for the construction industry. In recent years, the demand for urban planning is growing, and the development of China's construction industry is urgent, so the society needs a large number of high-quality engineering cost technical personnel, and higher vocational colleges are duty bound to become the backbone of such personnel training. However, how to cultivate excellent technology application talents with high efficiency and high quality is an important issue for higher vocational colleges. In the teaching of construction engineering cost specialty, theoretical teaching as the basis cannot be ignored, and practical teaching is becoming more and more important. Combined with practical training, students' practical and application ability can be better cultivated, and their professional comprehensive quality can be improved. It can be said that the development of practical teaching, to a large extent, measures the students' attitude towards future work, personal professional quality and ability to be competent for work, and it is a qualification for students to finish their major and graduate smoothly. At the same time, practical teaching is also a real feedback on the teaching quality of the major, reflecting the actual teaching level of higher vocational colleges. Therefore, improving students' practice and application ability in construction engineering through practical teaching is an important task of professional teaching reform in higher vocational colleges.

1. Building the practice base in the school and creating a good training environment

Because the internship is not at any time, higher vocational colleges can only arrange internship opportunities when students are near graduation, which makes it difficult for students to connect the theoretical knowledge they have learned with the practical application in time. This intermediate gap of the combination of theory and practice will not be conducive to students' internalization of knowledge for practical application, which restricts the effectiveness of teaching to a large extent. Based on this, it is necessary to build professional teaching practice base in higher vocational colleges, so as to ensure

doi: 10.18686/ahe.v5i4.3577

that students can timely realize engineering practice after learning the theory, and deepen their mastery and application of professional knowledge. Through the construction of construction engineering practice base in the school, we should let students "learn now and use now", so that they can timely understand the construction engineering process, construction equipment, etc., accurately infiltrate the theoretical teaching knowledge, and consolidate the basic knowledge for students, to strengthen the practical application and consolidate the foundation. The construction of construction engineering practice base in higher vocational colleges should ensure the advanced and perfect training room and equipment. The whole practice base can be divided into decoration training room, main structure training room, housing foundation training room, roof design training room, construction equipment training room and other modules, and the process entities required for construction engineering construction should be set up respectively. In this way, students can truly feel and come into contact with the actual scene of construction engineering.

2. Building training base outside school and deepening the cooperative teaching mode of school and enterprise

Employment oriented is the aim of training talents in higher vocational colleges. However, it is necessary for all vocational colleges to pay attention to the training of technical application talents without a large number of practical teaching links. In order to further strengthen practical teaching, many vocational colleges will actively establish a good working and learning cooperation relationship with professional enterprises with the help of the cooperation between the school and enterprise, arrange students to participate in the post skills operation training, and understand the post facilities and application technology in advance, so that the students can improve their practical operation ability and meet the needs of the enterprise as soon as possible. Therefore, compared with the practice base in school, the construction of the training base of enterprises outside the school is also very important. Different procedures and construction links should be set up for the construction of the training base outside the school in combination with the needs of the construction engineering specialty. Not only should we be able to carry out the training but also participate in the training, but also include brick concrete structure, frame structure, shear wall structure, frame shear wall structure, steel structure and other structural types. Because the construction engineering training base involves many processes, but a single construction project is often only applied to the same construction process in a long period of time, so it is necessary for vocational colleges to establish an off campus training base in combination with multiple construction units to ensure that the students of the major can master the relevant knowledge of engineering construction in all aspects. It helps them to develop comprehensively in the practical application of construction engineering. Therefore, higher vocational colleges should actively establish cooperative running relationship with many small and medium-sized construction enterprises, build many training teaching bases, and deepen communication and cooperation and timely interaction, which will be more conducive to the training of practical engineering cost technical personnel. In addition, in order to ensure students can participate in practical teaching systematically and comprehensively, enough time should be reserved in the design of professional practice. Therefore, it is suggested that higher vocational colleges adopt the "2 + 1" teaching mode, reasonably arrange the time and opportunity of practical training, and in the first two years of students' study, the theory teaching should be combined with the in school training, and the cold summer vacation should be used as the auxiliary. In the last year, students are arranged to participate in the practice of off campus training base, and the technical tutor of construction unit shall give relevant practical guidance to help students improve the practical application ability of engineering comprehensively.

3. Strengthening the teaching staff and building a team of double qualified teachers

The specialty of construction engineering cost in higher vocational colleges requires the combination of theory and practice teaching, which requires teachers to have corresponding teaching qualifications. They should not only have a solid theoretical teaching foundation, but also have certain practical teaching experience, which is often called double qualified teachers. In order to build a double qualified teaching team of architectural engineering specialty, higher vocational colleges should implement the employment mechanism of external introduction and internal training. Firstly, some enterprise professionals with solid professional knowledge and rich technical experience should be invited to the school to carry out seminars and practical teaching. Secondly, teachers with insufficient practical teaching experience should be arranged to enterprises, and participate in the front-line construction site to carry out practical training and learning, so that they can accumulate corresponding practical

experience and improve the ability of practical teaching. In general, in order to build a team of double qualified teachers, higher vocational colleges must increase the proportion of enterprise teachers among full-time teachers, and timely cultivate their own teachers' practical teaching ability, so as to better optimize the teaching staff of construction engineering cost specialty and provide strong guarantee for students to carry out practical learning. In addition, due to the rapid update of engineering process, technology and methods in the construction industry, in order to ensure the advanced and cutting-edge teaching knowledge and promote teaching to keep up with the development needs of modern construction technology, higher vocational colleges also need to regularly organize teachers to carry out reeducation and training, arrange them to work in enterprises, and constantly innovate their existing professional knowledge and skills, in order to improve the level of practical technology, increase new knowledge and new skills, and further improve their practical teaching level.

4. Establishing a perfect evaluation system, strengthening the enthusiasm of students to participate in practice

Scientific and objective assessment is one of the most effective means to test teaching results. It can not only help teachers optimize teaching mode, improve teaching methods and adjust teaching content, but also encourage students to improve learning deficiencies and improve learning initiative. A set of comprehensive, scientific and reasonable evaluation system not only needs to assess students' mastery of theoretical knowledge, but also needs to assess students' performance in practice, which involves the process of practice inside and outside the school, so as to comprehensively assess students' comprehensive practical application ability. Therefore, combined with the needs of practical teaching and assessment, higher vocational colleges also need to establish corresponding scientific research reward system, practice fund use system, innovation reward system, and credit system, so that students can actively carry out practical training and study under the interaction of motivation and pressure, and actively participate in all kinds of practical teaching activities, in order to urge them to improve their practical operation ability.

5. Conclusion

In a word, the practical link of construction engineering cost teaching in higher vocational colleges is particularly important, which has a positive role in promoting students' engineering practice ability and professional comprehensive quality. At the same time, with the help of practical teaching, students can experience good professional ethics and character in the process of practical training, help them improve their engineering practical application skills, and meet the actual employment needs of construction enterprises, so as to promote the stable and sustainable development of China's construction industry.

References

1. Wu J. Exploration on the construction of practical teaching system of engineering cost specialty. Construction Engineering Technology and Design 2016; l (23): 2824.
2. Shu L. Analysis on the talent training mode of engineering cost specialty in higher vocational colleges —— Based on the integration of production and education. Economist 2018; (12): 208-209.