Research on teaching Reform and Practice of Building Construction Technology

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Abstract

in the course of building construction technology teaching, analysis some problems currently existing in the course, and connecting with the teaching reform practice, the course of building construction technology in teaching mode, teaching means and teaching method reform, the scene teaching and multimedia teaching methods through classroom teaching, enrich the teaching content, improve the quality of teaching.

Keywords

Construction technology; Project-based teaching.

1. The necessity of project teaching reform practice of Construction Technology course

The content of teaching materials lags behind. The construction technology has the characteristics of theoretical, comprehensive, practical strong, its main study the construction of major engineering construction technology, process principle and the development of the construction of new technology, new technology, to make students grasp the major project in the construction engineering construction method, technical standards, quality acceptance, and safety precautions, However, the contents reflecting the "four new achievements" (new technology, new technology, new materials, new equipment) are very few, and most of the textbooks are just a pure theoretical knowledge system without necessary practical cases, so that the course content can not keep up with the development level of construction technology [1-3].

Teaching mode, teaching means and teaching methods are single, teaching effect is poor, and out of line with practice. The course of Building Construction Technology has always adopted the teaching form of combining classroom teaching, course design and knowledge practice, but with the rapid development of construction technology, the teaching effect is not ideal. Classroom teaching often adopts blackboard writing or multimedia teaching. No matter blackboard writing or multimedia teaching, the static construction process is described, and students lack perceptual understanding of the theoretical content and have only a partial understanding [4-5]. Thus in the classroom, playing with mobile phones, sleeping reading books and other situations, resulting in the teaching effect is greatly reduced; However, only one or two on-site visits and internships cannot solve the problem. Due to time and space reasons, students can only see a certain process of construction, and it is difficult to see the whole process of construction. This arrangement leads to the disconnection between theoretical teaching and practical teaching.
2. 《Construction technology》 course teaching reform and practice combination

2.1. Optimize the teaching content and formulate the teaching design scheme.

In order to train compound talents with social needs to carry out the course project reform teaching, it is necessary to have a targeted teaching design scheme, according to the characteristics of vocational students’ poor foundation to choose representative teaching projects, the implementation process should be specific and meticulous, and the traditional construction course content should be appropriately increased or decreased. When making the teaching design plan, according to the technical process of the construction site and the requirements of the construction project department for the first-line technical personnel, let the students visit the site as much as possible in the learning process to see more, listen more, ask more, Think more and do more to solve practical problems. Teachers should choose practical, authentic and representative projects, such as concrete project, guide students to be familiar with each process: measuring and setting out line, steel bar binding, formwork support, concealed project acceptance, concrete pouring. And according to the construction technology of concrete engineering, step by step, hierarchical guidance. At the same time, with the help of multimedia, models, laboratory building materials and other ways to simulate the operation, so that students feel the real construction ring. Through collecting relevant project information, making project plans, dealing with the problems encountered in the project, completing the project tasks, and gradually mastering the project. To meet the requirements of construction technical project capability.

2.2. Reform teaching methods, realize the interaction between teaching and learning, and adopt project-based teaching.

When organizing classroom teaching, teachers should fully consider the characteristics of students’ learning and mobilize their enthusiasm for learning. According to the characteristics of project-based teaching, “project is the main line and students are the main body. ”Teacher-led”, transform the textbook knowledge into students' knowledge through project teaching, and make appropriate adjustments to the project according to the actual feedback of students’ learning in class; In addition, the classroom is combined with the practical training base and the construction site, and experienced on-site engineering and technical personnel and management personnel are invited to the school to give lectures. Because the technicians on site not only have rich professional knowledge, but also have rich practical work and management experience, they are invited to walk into the classroom to give lectures, the content of which is mostly specific problems encountered in engineering practice, which is very representative.

2.3. Selection and implementation of project-based teaching

The purpose of this course is to understand students’ mastery of construction process, process principle and engineering measures. The content of assessment should be combined with practice, and the comprehensive ability and innovation ability of students should be examined. Construction project site single project, unit project, division project, sub-project, inspection batch content is numerous, teachers should choose representative sub-project such as: foundation construction, formwork construction, steel binding construction, concrete pouring construction, scaffolding construction and other projects to meet the actual work tasks and ability needs; In the process of project implementation, students are divided into groups, divided into tasks, and follow up and guide. The process is based on the project that students master the actual operation of the construction site, so that students can enhance the study of theoretical knowledge and exercise their practical ability in the project implementation.
3. The conclusion

The teaching reform of building Construction Technology is a systematic project, which involves all aspects. It is a long-term and arduous task. Combined with the reform theory of the college, it needs the unremitting persistence of teachers of specialized courses. Only by stopping the deepening of educational reform and research from time to time and establishing a perfect management and operation mechanism can good reform results be achieved and the virtuous cycle of talent cultivation be completed.

References


