

# Research on Project-based Teaching of Building Decoration Construction Technology

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**Abstract.** Building decoration construction technology is the professional core course of construction engineering technology major in higher vocational colleges. The focus of this course is to cultivate students' ability to prepare construction scheme, organize on-site construction, project quality inspection and on-site operation management and control. Starting from the characteristics of architectural decoration construction technology course, this paper carries out Project-based teaching design, establishes the Project-based teaching mode of "combination of work and study", and determines the specific teaching contents and assessment methods, to effectively promote the teaching reform of the course.

**Keywords:** "Building Decoration Construction Technology"; Project-based Teaching; Teaching Methods; Assessment and Evaluation Methods.

## 1. Problems Existing in the Teaching of "Building Decoration Construction Technology" at Present

"Building decoration construction technology" is a highly comprehensive professional course. The teaching content is complex and abstract, the construction process involved is complex and the process is strong. It is difficult to achieve the teaching goal and effect only by using the traditional teaching method of teachers "speaking" and students "listening" and teachers "Teaching" and students "learning". Moreover, there are practical problems in practical teaching, such as "three high and three difficult" with high investment, high consumables, high risk, difficult implementation, difficult observation and difficult reproduction, traditional teaching methods, single teaching methods, low students' learning interest, low participation, poor teaching effect and so on.

## 2. This Course Adopts the Implementation of Project-based Teaching

Project-based teaching is to integrate and optimize the course content into several operational projects according to the teaching objectives. Students' learning process is the process of completing projects or work tasks, and obtain the improvement of knowledge and skills in completing projects or tasks.

### 2.1 Division of Project-based Content of this Course

This course is guided by the working process, draws lessons from the German dual system education theory, takes the typical architectural decoration technology as the carrier, constructs a curriculum system with "superstar learning pass" vocational education cloud and other platforms, takes the cultivation of four professional abilities of "map reading, material selection, construction and inspection" as the main line, and takes different architectural decoration parts as specific construction projects, Supporting the corresponding project construction video, animation and other curriculum resources, build a curriculum system to meet the systematic ability training of school students.

According to the project, the content of this course is divided into six modules: ceiling engineering construction technology, wall and column engineering construction technology, ground engineering construction technology, light partition engineering construction technology, door and window engineering construction technology and curtain wall engineering construction technology. The whole

teaching is organized around these six modules to realize the "0" connection between the Project-based teaching and the actual working process of the post.

## **2.2 Use a Variety of Teaching Methods and Teaching Means. Reform the Teaching Methods of the Course, Change Teachers' Focus on "Teaching" to Students' Focus on "Learning": Flexibly Use the Teaching Methods Such as Drawing Reading Project Driven, Task Driven, Role-playing and Combination of Work and Study to Guide Students and Improve the Teaching Effect**

Project driven teaching of decoration drawing recognition. Teachers distribute construction drawings and students preview in advance. Teachers organize discussion in combination with teaching contents, drawings, model room, etc., and select important and difficult points to explain, to achieve the integration of "teaching and doing". Typical case teaching. Select the decorated teaching building or model room, organize students to conduct group acceptance, and send representatives to speak in class. Finally, teachers comment and analyze the advantages and disadvantages of its construction quality. This deepens students' understanding and application of what they have learned, and improves students' ability to analyze and solve problems.

Picture teaching. Use physical photos. It shortens the distance between theory and practical engineering. The physical picture of the project has the advantages of vivid image and large amount of information, which can fully show the construction process and key points of construction.

Role play. Divide the class into groups. There are five to eight people in each group, with a team leader. Team members play different roles: materialman, draftsman, constructor, quality inspector, etc. Team members play their key roles: draftsman.

The construction drawings shall be prepared, and the project changes shall be modified accordingly. Finally, the drawings shall be archived: the constructor is mainly responsible for grasping the construction technology. Students cooperate and help each other. Learning ability improved rapidly.

Situational teaching. Through the practical training of multiple top targets. Students can personally experience the real face of the decoration site: they can better understand the decoration process and find skills. Clarify the relationship between decoration style and material matching. The on-the-spot effect + points are obvious.

Sharing of teaching resources. Students should make good use of online resources and cultivate their self-study ability. Students learn independently through courseware, video, homework test and other platforms such as vocational education cloud, Mu class and super star learning link, to realize resource sharing.

Application of modern teaching technology. In the teaching process, we paid attention to the development and application of modern teaching technology, and completed the production of PPT multimedia courseware of architectural decoration construction technology. Teachers also collected a large number of first-hand materials on the construction site in engineering practice.

Some practical new materials, new technologies, new processes and new methods are taken and made into pictures and videos. Call at any time in teaching.

## **3. Assessment Method of Project-based Teaching of "Building Decoration Construction Technology"**

This course adopts the combination of process assessment and result assessment. Different assessment schemes and assessment weights are set for different types of students.

### *A. Diversified assessment methods to evaluate learning effect*

Diversified assessment elements: student assessment includes process assessment (60%) and result assessment (40%). Process assessment elements mainly include learning duration of vocational education cloud platform, chapter test, online interaction, attendance, classroom performance, in class training, etc.; If the result assessment element is an examination, Diversified assessment subjects are

adopted: mainly including teacher evaluation, learner self-evaluation, mutual evaluation between groups, mutual evaluation within groups, etc.

*B. Comprehensive evaluation criteria to test the effectiveness of Education*

Check the mastery of learners' knowledge and skills through chapter test and final examination; Track learners' learning behavior through classroom attendance, online learning duration and times, and test learners' mastery of vocational skills through practical training projects. Through comprehensive evaluation, promote learners' good learning behavior and professional ethics, to achieve the purpose of "three complete education".

*C. Complete assessment results to promote teaching reform*

According to the assessment results, adjust the teaching focus and assessment scheme, and supplement the curriculum resources in time. Establish an assessment and evaluation reform system, and record the assessment results of students into the vocational education cloud platform database, improve learners' learning interest and the efficiency of college performance management, and promote the reform of "teachers, teaching materials and teaching methods".

#### 4. Conclusion

In the course construction of "building decoration construction technology", focusing on the cultivation of professional ability and professional quality of building decoration constructors, supervisors and quality inspectors, establish the overall reform concept of curriculum construction of "taking the work process as the guidance, taking the work content as the basis and taking the students as the center". With teachers as the leading role and students as the main body, actively mobilize students' enthusiasm and initiative in learning, adopt the combination of theoretical teaching and practical teaching, and select three-dimensional teaching resources including engineering video, construction site pictures, construction animation and virtual simulation software for specific projects to provide students with the experience of future jobs, so as to promote the improvement of teaching quality, So as to effectively promote the curriculum teaching reform.

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