



# On the School-Enterprise Cooperative Construction Strategy of the Textbook “Decorative Materials and Construction Technology” Under the Network Environment

Jian Li<sup>(✉)</sup>

Shandong Vocational and Technical College of Commerce, Jinan 250000, Shandong, China  
yjyj11189@163.com

**Abstract.** The school-enterprise cooperation courses of environmental design major are significantly different from other courses of this major in terms of teaching content, teaching links and teaching methods. Taking the course “Decorative Materials and Construction Technology” as an example and combining with the characteristics of environmental design major, this paper explores the assessment reform strategy of school-enterprise cooperation course for environmental design major by analyzing the characteristics of the course and the current assessment status of the course, so as to solve the drawbacks of traditional curriculum assessment, “promote teaching and learning by improving”, and promote the integrated development of production and education. To cultivate high-quality talents that meet the needs of society [1].

**Keywords:** environmental design · School-enterprise cooperation courses · Assessment · reform

## 1 Introduce

The school-enterprise cooperation course between schools and enterprises is developed according to the needs of social industries and enterprises [2]. It aims to strengthen the connection between schools and enterprises and strengthen the practical work between schools and enterprises, so as to achieve the goal of local and regional economic development and set up a practical teaching project. At present, environmental design majors of Chinese colleges and universities have carried out teaching reform of school-enterprise cooperation [3]. However, the contents, methods and methods of assessment are still assessed by conventional methods, which are not adjusted in time. Aiming at the particularity of environmental design subject and the cooperative relationship between schools and enterprises, this paper discusses how to carry out teaching evaluation method, in order to overcome the singleness of examination and emphasize the role of process evaluation in teaching [4].

## 2 Characteristics of University-Enterprise Collaboration in Environmental Design Discipline

The school-enterprise joint teaching plan follows closely the quality requirements of the industry and enterprises for talents [5], and is taught jointly by teachers of both schools and enterprises for collaborative development. There are obvious differences in teaching content, teaching links, teaching forms, teaching methods, teaching assessment and other links. The characteristics of this discipline are summarized in the following aspects [6]:

### 2.1 Intricate Educational Process

The scope of implementation of school-enterprise joint projects extends from inside and outside the school, from the classroom to the construction site, material market or related enterprise design field. The course includes a mix of classroom work and internships outside of school, on site and with companies. Compared with the joint teaching of other enterprises [7], it has many teaching sites, complex teaching links, difficult teaching management, strong teaching management ability, strong learning ability and adaptability of students. As shown in Fig. 1, 2:

### 2.2 Diversified Educational Methods

School-enterprise joint teaching has rich teaching content, complex teaching links and teaching characteristics of both schools and enterprises, which makes its teaching mode diversified, instead of the previous “blackboard teaching + PPT teaching in class” or schoolwork “. It also includes market research analysis, on-site explanation of construction process and technology, and project guidance of enterprise teachers. Its teaching forms are diverse, the content is rich, more flexible and interesting, which requires the actual teaching level of two teachers.As shown in Fig. 3, 4, 5, 6:

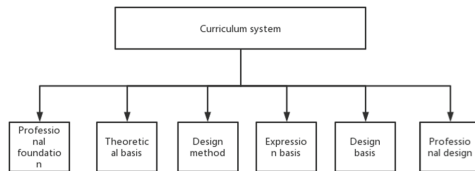


Fig. 1. Curriculum system

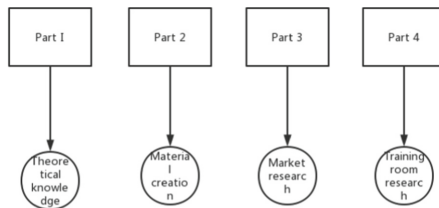


Fig. 2. Course content



**Fig. 3.** Practice field outside school



**Fig. 4.** Practice training outside school



**Fig. 5.** Practical training materials



**Fig. 6.** Practical training materials

### 3 Research on Discipline Evaluation of University-Enterprise Joint Engineering Environmental Design

Nowadays, there has been a cooperative teaching mode for environmental design majors in Chinese colleges and universities. However, due to the short teaching time, new teaching content, lack of experience in teaching management, complex teaching process, and lack of cohesive lecturing, the “peacetime training and design work” mode is still used in the course assessment content and the single assessment content. Basically only check the course theory knowledge and the final design result [8].

```

from django.db import models.
# Create your models here. # Create your models here.
class Project(models.Model):
    id = models.AutoField(primary_key = True) # This field may not be written; it will
be completed automatically.
    Project _name = models.CharField(max_length = 50) # Set name.
    Project _role = models.CharField(max_length = 50) # Set the role.
    Project _fund = models.FloatField() # Setup expense.
    Project _con = models.CharField(max_length = 50,default = ‘ general ‘).
    Project _key = models.FloatField() # keyword.
    Project _com = models.FloatField() # unit.
    def __str__(self): # Overrides methods that output the class directly.
    return “ < Meishi: {id = %s, Project _name = %s, Project _role = %s, Project _fund
= %s, Project _con = %s, Project _key = %s, Project _com = %s} > “\
    %(self.id,self.Project_name,self.Project_role,self.Project_fund,self. Project _con,
self.Project_key, self.Project_com).

```

### 4 Application of School-Enterprise Collaborative Teaching Evaluation in Environmental Design Discipline

From the perspectives of course nature, course characteristics, content, methods, links and so on, this paper organizes industry and enterprise experts to discuss and discuss, summarizes the content and methods of course assessment, sorts out the course assessment indicators, develops specific reform strategies, and strives to solve the drawbacks of course assessment, “promote teaching by changing, promote learning”, promotes the integration of production and education, and improves the quality of education and teaching. Through the comprehensive calculation of the above evaluation and weighted index, the following formula (1) can be obtained: As shown in Formula 1[9]:

$$P_5 = \begin{cases} P_{11} & P_{12} & P_{13} \\ P_{21} & P_{22} & P_{23} \\ P_{J1} & P_{J2} & P_{J3} \end{cases} \quad (1)$$

Therefore, school-enterprise collaborative teaching is characterized by many contents, new contents, large amount of information, extensive involvement and fast update. Teachers from both schools and enterprises should formulate corresponding assessment

contents according to different teaching contents and students' abilities, not only for class attendance and final project design results. It is also necessary to conduct classified assessment on theoretical knowledge, construction site teaching knowledge and enterprise project design results, so as to solve the problem that the assessment content is too simple, to achieve the goal of systematization of the assessment content and differentiation of the assessment object, so as to make an objective evaluation of students' achievements fairly.

## 5 Course Assessment Reform Practice of Decorative Materials and Construction Technology

The main content of "Decorative Materials and Construction technology" teaching includes decorative materials theory, decorative materials market survey, decorative construction technology field teaching, enterprise project design four sections. Therefore, in the teaching process, the relationship between the four disciplines should be integrated, and the four disciplines are divided into four sections, respectively corresponding evaluation indicators and evaluation indicators. Following the analysis by analogy, it can be concluded that for  $j$ , when it is 1, 2, 3, 4...  $k$ , then the following formula (2) can be supported:

$$\frac{U_{ij}}{\sum_{i=1}^4 U_{ji}} \quad (2)$$

1. The assessment of daily performance includes the results of daily attendance and classes as well as the training of each chapter.
2. Market survey and evaluation of decorative materials, including market survey and investigation of decorative materials.
3. On-site investigation and evaluation, mainly including field trip, field trip and investigation research.
4. The evaluation of design results of interior design companies is mainly to comprehensively evaluate the design atlas and design report of the design scheme.

## 6 Conclusion

This paper argues that the school-enterprise cooperation course of environmental design major is a comprehensive practical training course developed along with the requirements of society and enterprises for the quality of talents. The development of university-enterprise cooperation in colleges and universities must be based on the specific requirements between schools and regions, build a curriculum evaluation system suitable for schools and enterprises, pay attention to the process evaluation, promote learning by reform, promote learning by reform, promote teaching by reform, realize the integrated development of education and education, realize the coordination between the supply side of talent training and the demand side of social talent, and promote professional development. Train qualified high - quality personnel to serve for local and regional economic development [10].

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