

Construction and Application of the Task-Driven Teaching Method of "Induce, Analyze, Practice and Expand"

Zhaozhao Hu^{1, a}, Xiaowei Qian^{1, b}

¹Wenzhou Polytechnic, Wenzhou 325000, Zhejiang, China

^a815508014@qq.com, ^b762612666@qq.com

Abstract: With the introduction of "Article 20 of Vocational Education", vocational education has officially entered the fast lane and ushered in a golden development period. How to seize the opportunity to deepen the education and teaching reform and promote the high quality and rapid development of the university through "integration of courses and competitions" has become an important issue. The article combines the current situation of the reform of the teaching mode of "integration of courses and competitions" in higher vocational colleges and universities, analyzes the existing problems, and explores how to effectively promote the reform of the training mode of "integration of courses and competitions" by taking the product art design major as an example.

Keywords: Classroom integration, Multidimensional implementation pathways.

1. Introduction

The National Vocational Education Reform Implementation Plan clearly states that it is necessary to "develop policies for exempting winners of the China Skills Competition, the National Vocational College Skills Competition, and the World Skills Competition from entrance examinations, and to explore long schooling systems for training high-end technical and skilled personnel." It is required that "in accordance with the relevant national regulations to increase the recognition and reward of graduates with outstanding achievements in vocational colleges and universities to participate in relevant skills competitions." In the 2019 "double high plan" qualification selection, the national vocational colleges and universities to host the number of skills competitions and awards accounted for two of the nine major indicators. This shows that the state attaches great importance to the skills competitions of vocational colleges and universities, and the results of the skills competitions have become an important symbol of the running strength of vocational colleges and universities. In the context of VET reform, each higher vocational college is bound to take this opportunity to promote the reform of the teaching mode of integration of classes and competitions.

2. "The Current Situation and Problems of the Research of "Integration of Classroom and Competition"

2.1. The Coordination of Faculties and Departments is not in Place, and the Professional Teachers Do Not Form Teamwork

The reform of the teaching mode of "integration of courses and competitions" cannot be simply regarded as the reform of a certain course, but should be the reform and innovation of the whole professional curriculum system. At present, the

"integration of courses and competitions" in most institutions is more limited to a certain course, relying on the instructor of a certain competition, and making corresponding adjustments to the teaching content and teaching practice design of the course according to the competition regulations of a certain competition. This kind of teaching reform without the support of faculty leaders, major directors and other professional teachers has limited effect and impact.

2.2. The Reform of the Teaching Mode of "Integration of Courses and Competitions" is Small, and the Benefits are Small

An important aspect of the reform of the teaching mode of "integration of courses and competitions" is the participation of all staff, that is, all professional teachers participate in the curriculum reform and all students benefit from the teaching reform. At present, the reform of the teaching mode of "integration of courses and competitions" in most institutions of higher education has just started, and it is still in the pilot implementation stage. Students are very limited. At the same time, due to the school's supporting policies, funding and performance incentives, teachers and students are not very motivated to participate, and the pilot projects are carried out unevenly, far from achieving the expected results.

2.3. Imperfect Evaluation Mechanism and Insufficient Student Motivation

On the one hand, the course evaluation system and the competition are disconnected, and students' performance in professional competitions is not reflected in the course grades, which affects students' motivation to participate. On the other hand, the competition is often time-critical and task-heavy, which easily conflicts with in-class assignments and is difficult for students to balance. In addition, most of the students are easily intimidated by the comprehensive and difficult nature of the competitions, so instructors need to break down the analysis items and integrate them into different courses to guide them step by step.

3. Innovative Measures for the Training Mode of "Integration of Courses and Competitions" in Product Art Design

3.1. Introduce the Education Concept of "Results-Based" and Construct a Curriculum System of "Integration of Courses and Competitions"

Following the law of student learning, according to the development of ability, according to the expected "learning results", match the competition projects, and build the "integration of class and competition" curriculum system. Students' learning process starts from flat drawing and develops in the order of "2D - 3D". Therefore, in the product art and design professional intelligent technology class system can be structured along the following lines: in the visual design capabilities, students have the ability to image processing, layout production after the production of product effects display (digital design CorelDraw + Photoshop), with two-dimensional graphic design and advertising design capabilities and then use advanced performance techniques (C4D visual design) to design and perform 3D posters, packaging and branding. In terms of product design skills, students will have the ability to create 3D models of products (computer 3D modeling Rhino, advanced product modeling), product design methods (product development design), and then use advanced software techniques for innovative design and comprehensive performance of cultural, educational and lifestyle products.

3.2. Setting Up Course Teaching Content Oriented to Learning Outcomes

Course content development based on "job target results + competition results. For "graphic design software", "C4D visual design", "3D design software", "advanced product modeling" and other performance-based courses, the content is divided into four modules: software single skills training, simple and interesting product drawing, comprehensive project drawing, copying of various competition works. So that students in the mastery of software skills on the basis of complex cases by copying competition works, not only to enhance the ability to operate advanced software techniques, but also the initial contact with professional competition, expand the horizons, enhance the aesthetic level, and lay a good foundation for participation in the competition.

For the basic design courses such as "Graphic Design Fundamentals" and "Product Design Fundamentals", the content is divided into three modules: simple project training, competition project decomposition training, and classic competition project exercises. It enables students to master the methods of font, layout and simple product design, and to design competition sub-tasks with aesthetic sense based on the requirements of competition propositions.

And for the comprehensive course of performance such as "Product Advertisement Design" and "Product Packaging Design", after having the basic skills, they will directly carry out the competition proposition practical exercises. And the students are trained at different levels, the students with relatively weak ability to carry out comprehensive practice of real projects in enterprises; the students with strong ability to combine with the competition and carry out practical

exercises of competition propositions.

3.3. Develop Teaching Resources for the Course Corresponding to the Skills Competition in the Past Years, Taking the Results of the Competition as the Standard

The teaching resources are developed for the National Student Advertising Art Competition (Poster Design), Zhejiang Student Multimedia Work Design Competition (Poster Design), Zhejiang Student Industrial Design Competition and Italy A' Design Award. It includes the competition information resource database, the database of previous first prize works, the database of previous entries of our university, the interpretation of the theme of each year's competition and the related database, etc. Focusing on the analysis of the first prize works of previous competitions, according to their characteristics, they are divided into the library of creative winning cases and the library of performance techniques winning cases, and are applied in different courses respectively.

For example, for Zhejiang University Multimedia Design Competition (Poster Design), we develop a competition information resource library, providing resources such as documents of previous years' competitions, interpretation of competition themes, notes on works, and videos of on-site defense for students' preliminary understanding of the competition; we develop a resource library of excellent works, collecting previous years' first-prize works, analyzing them, and producing videos of works interpretation to assist students in analyzing excellent works in depth. We will also develop a database of previous entries to enhance students' self-confidence and motivation to participate in the competition.

3.4. Constructing an Education Evaluation System that Adapts to the "Integration of Courses and Competitions"

To build a "three-whole" education evaluation system based on the principle of "promoting learning and competition", that is, all-round, all-process and all-staff assessment, integrating education evaluation objectives with education evaluation methods, and implementing the "three-whole education" concept. "The concept of education. We should introduce assessment standards for skill competitions, focus on process assessment, combine students' performance in skill competitions in course teaching for comprehensive assessment, and consider the assessment mechanism of "competition instead of examination" to exempt students who have won good results in vocational skill competitions at provincial level or above.

All-round: The evaluation content covers all aspects, including: 30% Civic and political literacy, 30% course knowledge, 40% project skills, which corresponds to the specific objectives of the course teaching and promotes students' growth in all aspects.

The whole process: the formative evaluation runs through the whole teaching process of "before, during and after class" and corresponds to the learning links and milestones. Before class, we evaluate knowledge through "video study and test questions", skills through "pre-class project exploration tasks", and "conscientious self-discipline and collaborative work" through the completion of pre-class tasks. The evaluation of ideological literacy is conducted through

"knowledge quiz and key points record", skill evaluation through "in-class practice", and overall performance evaluation through "craftsmanship and innovation". After the class, the comprehensive application of knowledge and skills is evaluated through "competition projects".

The whole team: the teaching team, enterprise masters and the whole class participate in the evaluation of the course, so that the demands of the "stakeholders" can be matched and the students' learning motivation and innovation and creativity can be better stimulated.

4. Conclusion

The "integration of courses and competitions" course system structure of product art design majors, by benchmarking the expected course learning results, skills competition results and excellent competition works for resource construction; with learning results as the guide, information-based teaching as the support, skills competitions as the grasp, the implementation of the core elements of talent training to the curriculum, multi-dimensional to improve the

effectiveness of teaching.

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