

## Construction of Gamification Teaching Mode for Art Design Major in Secondary Vocational Schools Based on OBE Concept

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**Abstract:** At present, art design education in secondary vocational schools faces many challenges, including the limitations of traditional teaching mode, the lack of students' interest and motivation, and the mismatch between industry demand and educational output. In this context, this study puts forward an innovative model combining OBE (Outcome-Based Education) concept with gamification teaching, with a view to improving teaching quality, stimulating students' interest in learning and cultivating their innovative and practical abilities. The main part of the article introduces the construction and implementation of gamification teaching mode based on OBE concept in detail. In terms of pattern design principles and goal setting, this paper emphasizes goal-oriented, interesting and interactive, practical and innovative, and personalized and differentiated. Teaching content and activity design revolve around project-driven and gamification strategies, which can improve students' practical ability and teamwork spirit by simulating the task challenges of real work scenes. In terms of implementation strategy and technical support, an interdisciplinary teaching team was built, and modern information technology was used to create an immersive learning environment, and the digital management of the teaching process was realized. This research is helpful to improve students' learning achievement, change their learning attitude, and enhance their innovative ability and professional quality.

### 1. Introduction

In today's fast-developing social environment, vocational education, as an important bridge connecting education and industry, its teaching quality and teaching mode directly affect students' professional competitiveness and the innovative development of the industry [1]. In the secondary vocational art design major, this field not only requires students to master a solid artistic theoretical foundation, but also emphasizes the cultivation of innovative thinking and practical ability [2]. The traditional teaching mode often focuses on instilling theoretical knowledge, ignoring students' learning and exploration in practice, which leads to the disconnection between teaching content and industry demand and the lack of students' learning motivation [3].

With the continuous progress of educational concept, OBE has gradually become an important direction of vocational education reform because of its emphasis on learning achievement as the center and the matching of students' ability training with industry needs [4]. This research is carried out under this background, aiming at bringing a teaching innovation to art design major in secondary vocational schools by introducing gamification teaching mode and combining OBE concept [5]. It not only enhances students' learning interest and participation, but also fundamentally changes the teaching methods, and cultivates artistic design talents with solid skills and innovative thinking, thus meeting the industry's demand for high-quality talents and promoting the sustainable development of vocational education [6]. Through this study, I hope to provide new teaching ideas and methods for art design education in secondary vocational schools and promote the overall improvement of education quality.

## 2. Theoretical basis

### 2.1. OBE concept analysis

OBE is an educational concept centered on students' learning achievements, which emphasizes that education should focus on the learning achievements that students should finally achieve clearly and measurably [7]. This concept breaks the traditional teaching mode centered on teaching content or teaching activities, and instead organizes teaching around the core goal of "students should know and know". Under the framework of OBE, the setting of teaching objectives should closely meet the needs of the industry and professional standards to ensure that the educational output is highly compatible with social expectations. OBE advocates continuous evaluation and feedback. Through regular evaluation of students' learning achievements, teaching strategies are adjusted in time to form a closed-loop teaching quality improvement mechanism. For art design majors in secondary vocational schools, the application of OBE concept means that teaching should not only impart the basic knowledge and skills of art and design, but also pay attention to the cultivation of students' comprehensive abilities such as innovative thinking, practical operation and teamwork [8]. In order to ensure that students can adapt to the rapidly changing art and design industry and become professionals with market competitiveness.

### 2.2. Overview of gamification teaching mode

Gamification teaching mode refers to an innovative teaching strategy that integrates game design thinking and elements into the teaching process to improve students' learning interest, participation and learning effect [9]. Gamification does not simply use games as teaching tools, but draws on the core elements of games, such as incentive mechanism, feedback mechanism, role-playing and task challenge, to create a challenging and interesting learning environment. In gamification teaching, by completing a series of well-designed tasks or challenges, students can not only master knowledge and skills in practice, but also stimulate their intrinsic learning motivation and cultivate their problem-solving ability and teamwork spirit. For the students majoring in art design in secondary vocational schools, the gamification teaching mode can break the monotony of the traditional classroom and make the learning process more lively and interesting. It helps to stimulate students' creativity and imagination, so as to achieve teaching objectives in a relaxed and happy atmosphere.

### 2.3. Theoretical integration and framework construction

The effective integration of OBE concept and gamification teaching mode aims to build a new teaching mode that can not only meet the needs of the industry, but also stimulate students' potential. Under this integrated framework, it is first necessary to clarify the learning achievement goals of art design major in secondary vocational schools, which should cover multiple dimensions, as shown in Figure 1.

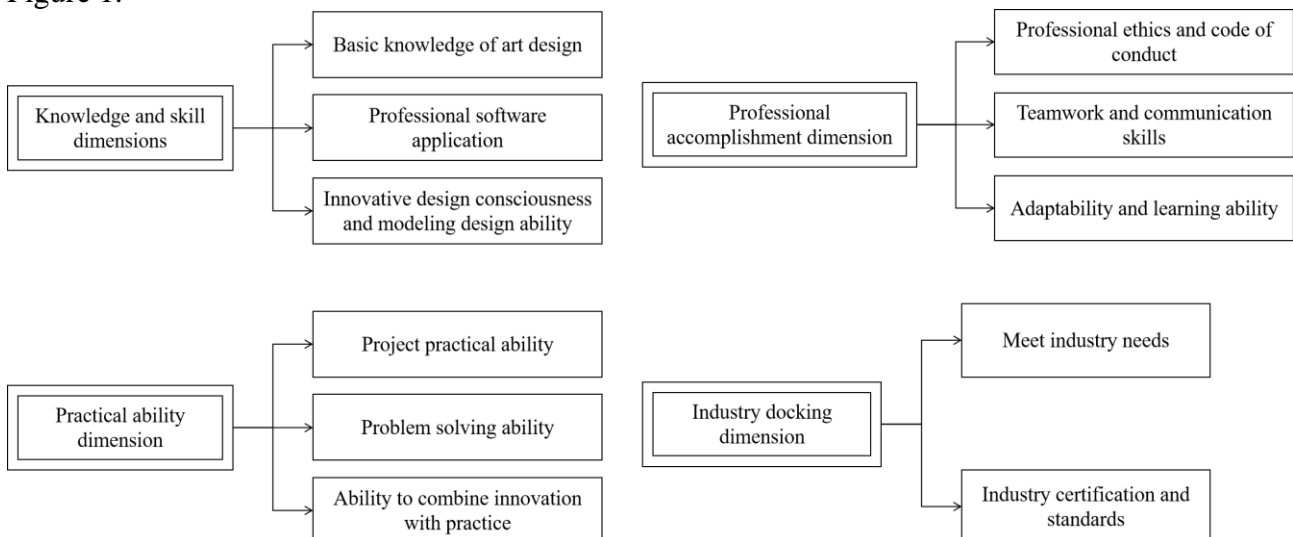


Figure 1 Target dimension

Based on these goals, gamification teaching activities and tasks are designed, so that students can not only learn professional knowledge and skills, but also exercise their comprehensive ability through practical links such as teamwork and problem solving. At the same time, this paper establishes a continuous evaluation and feedback mechanism, and adjusts teaching strategies in time through regular evaluation of students' learning achievements to ensure that teaching activities are always carried out around the established goals. The framework also emphasizes the joint participation of teachers and students, and encourages teachers to become guides and partners in students' learning process, and jointly explore new paths of art design education under the gamification teaching mode.

### 3. Construction of gamification teaching mode based on OBE concept

#### 3.1. Pattern design principles and goal setting

When constructing the game-based teaching mode based on OBE concept, this paper follows several core design principles: (1) Goal-oriented, and all teaching activities and game design are closely around the preset learning achievement goals, so as to ensure that each activity can directly or indirectly promote students to move towards the goals. (2) Interesting and interactive, through the integration of game elements, such as role-playing, task challenge, instant feedback, etc., enhance the interest of learning and students' participation, and make the learning process lively and interesting. (3) Practicality and innovation, emphasizing "learning by doing", encouraging students to apply what they have learned to cultivate innovative thinking and practical ability in the process of solving practical problems. (4) Individualization and differentiation, considering the individual differences among students, design multi-level and multi-path learning tasks to meet the learning needs of different students.

In terms of goal setting, according to the industry standards and market demand, combined with the characteristics of art design major in secondary vocational schools, this paper defines the multi-dimensional learning achievement goals covering professional knowledge mastery, skill application, innovative thinking, teamwork and professionalism. These goals focus not only on students' short-term learning results, but also on their long-term career development potential, aiming at cultivating compound talents with solid skills and innovative spirit.

#### 3.2. Teaching content and activity design

Table 1 "Green Vibe" Brand Visual Identity Design Project

Project Name	Learning Objectives	Skill Requirements	Game-Based Learning Activity	Task Description
"Green Vibe" Brand Visual Identity Design	1. Deeply understand the importance of brand visual identity in shaping a brand. 2. Master the fundamental elements and design principles of brand visual identification. 3. Learn how to integrate brand philosophy into visual design	1. Proficient in brand logo design techniques. 2. Skilled in brand color selection and application. 3. Understand and apply brand image communication strategies and media selection	Design Challenge: "Green Vibe" Brand Rebranding Contest	1. Group discussion to determine the core philosophy and target audience of the "Green Vibe" brand. 2. Design and produce a brand logo that reflects the brand's uniqueness and philosophy. 3. Select and match an appropriate color scheme for the brand, creating a unique visual atmosphere. 4. Design a series of promotional posters and advertisements showcasing the brand image and product features. 5. Team presentation and review, simulating real client feedback and evaluation process

In the teaching content and activity design, this paper adopts the strategy of

"project-driven+gamification". First of all, this paper selects a series of projects closely related to the art design industry as teaching carriers, and each project contains clear learning objectives and skill requirements. Then, around these projects, a series of gamification learning activities are designed, such as "Design Challenge", so that students can complete the whole process from concept conception to finished product display through teamwork in the task of simulating real work scenes. Specific examples of teaching content and activity design-brand visual image design projects are shown in Table 1.

This paper also set up a "creative workshop" to encourage students to explore freely and try different design styles and materials to stimulate their innovative inspiration. Through these activities, students can not only consolidate their theoretical knowledge in practice, but also improve their communication and problem-solving skills in teamwork.

### **3.3. Implementation strategy and technical support**

In order to ensure the smooth implementation of the gamification teaching mode, this paper adopts the following strategies: (1) An interdisciplinary teaching team composed of professional teachers, industry experts and game designers is established to jointly take charge of the design and implementation of the teaching mode to ensure the professionalism of the teaching content and the attractiveness of game design. (2) Using modern information technology, create an immersive game-based learning environment for students, so that they can practice in a real design environment and improve their learning experience.

In terms of technical support, this paper uses cloud computing, big data and other technologies to collect and analyze students' learning data, provide accurate teaching feedback for teachers, help them adjust teaching strategies in time, and ensure that teaching activities always focus on learning achievement goals. In addition, artificial intelligence can also be introduced to assist teaching, and individualized learning resources and tasks can be recommended for students according to their learning situation and interests, so as to promote the individualized development of each student.

## **4. Teaching effect evaluation**

In order to comprehensively and objectively evaluate the implementation effect of the game-based teaching mode based on OBE concept in art design major of secondary vocational schools, this paper constructs a multi-dimensional and multi-level evaluation system. This system not only pays attention to students' academic achievements, but also attaches importance to the improvement of their comprehensive ability and the experience of the learning process.

The evaluation system includes the following key dimensions: (1) Achievement of learning achievement, which evaluates students' mastery and application ability of professional knowledge through project assignments, design works and skill tests. (2) Learning attitude and participation, using questionnaires, classroom observation, online learning platform data and other means to understand students' learning interest, initiative and participation. (3) Innovative ability and teamwork, which evaluates students' innovative thinking, problem-solving ability and teamwork spirit through creative design challenges and team project cooperation. (4) Professional accomplishment and self-development, which examines students' professional ethics, communication skills, self-management ability and clarity of future career planning.

## **5. Conclusions**

Through in-depth exploration and practice, this study reveals the positive influence of the gamification teaching mode based on OBE concept on art design education in secondary vocational schools, and the remarkable effect of this mode in improving teaching quality, stimulating students' potential and promoting their all-round development. It is found that this model can not only effectively improve students' professional knowledge and skills, but also show unique advantages in cultivating soft power such as innovative thinking, teamwork ability and professionalism. The introduction of gamification teaching activities has greatly improved students' learning interest and

participation, and made the learning process lively and interesting, thus effectively solving the problems of passive learning and lack of practical opportunities in traditional teaching mode.

It is highly feasible and necessary to popularize the gamification teaching mode based on OBE concept. On the one hand, this model closely meets the needs of the industry and professional standards, and ensures a high degree of consistency between educational output and social expectations through clear learning achievement goal orientation, thus laying a solid foundation for students' future career development. On the other hand, the popularization of gamification teaching helps to break the limitations of traditional education, promote educational innovation and inject new vitality into art design education in secondary vocational schools. Therefore, this model is not only suitable for art design majors in secondary vocational schools, but also provides a model for other vocational education fields.

To sum up, the game-based teaching mode based on OBE concept has brought significant positive impact on art design education in secondary vocational schools, and its promotion and deepening are of great significance. In the future, we expect more educators and researchers to join the exploration and practice in this field and jointly promote the innovation and development of art design education in secondary vocational schools.

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### **References**

- [1] Yin Ming. Research on formative evaluation of higher vocational courses under the results-oriented teaching mode [J]. Vocational Education Forum, 2023, 39(4):52-59.
- [2] Zhou Sen. Research on the reform of experimental teaching of art design under the background of new media era [J]. Educational Theory and Practice, 2020,40(06):59-61.
- [3] Liu Hongyu. Game-based teaching mode of music courses for preschool education majors in higher vocational colleges [J]. Journal of Shanxi University of Finance and Economics, 2023,45(S1):247-249.
- [4] Pan Xinmin, Wu Guanbin. On the implementation strategy of teacher education curriculum based on the concept of results-oriented education [J]. Educational Theory and Practice, 2022, 42(24):41-45.
- [5] Xu Chao, Tong Ruiping, Zhu Hongqing, et al. Training mode and practice of safety engineering talents in achievement-oriented education [J]. china safety science journal, 2021,31(05):113-119.
- [6] Tang Yixuan, Gan Peng. Research on practical curriculum construction of preschool education major in higher vocational colleges based on results-oriented education [J]. Educational Theory and Practice, 2022, 42(21):33-37.
- [7] Shen Tianen, Zhang Siwei. Expression and evaluation of students' learning achievements in the concept of results-oriented education [J]. Heilongjiang Higher Education Research, 2021, 39(08):31-37.
- [8] Li Xiaoyan, Bi Bing, Xu Zhiru, et al. Construction of multi-dimensional teaching reform system of biochemistry based on the idea of results-oriented education [J]. Journal of Bioengineering, 2020, 36(10):2226-2233.
- [9] Zhou Xianpeng, Yu Jiajun, Huang Cuiping. Theoretical origin, development and application of results-oriented education [J]. higher education development and evaluation, 2021, 037(003):83-90.