Construction of Project-Based and School-Based Teaching Material of Visual Identity in Higher Vocational College under the Background of Computer

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Abstract. The aim of this research is to construct a kind of project-based and school-based teaching material for visual identity in higher vocational college. This article analyses the main problems of the existing teaching materials of visual identity under the background of computer, and then a series of countermeasures for the construction of project school-based teaching material of visual identity have been proposed, including the construction of the contents of project-based and school-based teaching material, the construction of supporting multimedia resources for teaching material, the construction of "work-process-oriented" teaching material compilation mode and the construction of "circular" teaching material organization form. On this foundation, the research conclusion on the construction of teaching material of visual identity is done.

Keywords: Construction of Teaching Material, Higher Vocational Education, Visual Identity, Information Technology

1. Introduction
Visual identity is a very important compulsory course for art and design majors in higher vocational colleges, which is very professional and practical. This course connects the preceding and the following, and is directly related to the training quality of art and design majors in higher vocational colleges. As a line workers engaged in the design teaching in colleges and universities, from the teaching experience of visual identity course, it is clearly felt that the existing teaching material of visual identity is far from the training target of higher vocational talents, and it is difficult to carry out project teaching, which is not conducive to the training of professional people with both knowledge and skills and professional qualities. Therefore, it is urgent to develop and construct teaching material of visual identity and compile project-based and school-based teaching material matching project teaching, which is also the main purpose of the author to write this article.

Project-based teaching material abandoning pure theoretical explanation and pure practical operation, takes practical design projects as teaching materials. Teachers first decompose the project tasks and demonstrate the theoretical knowledge while operating specific tasks, then ask students to conduct group discussion and practical operation to finally complete the project cooperatively, and finally the teacher evaluates the project according to the completion situation. Project-based teaching...
material effectively combines theoretical knowledge learning with practical hands-on ability training, transforms knowledge into practical post ability, makes students feel the practicability of what they have learned, and realizes the zero distance between teaching environment and enterprise environment. The main characteristic of school-based teaching materials is "school-based", that is, it should be suitable for the circumstance. The construction of school-based teaching materials must be guided by the specific teaching objectives of the school, and the content must reflect the competitive advantage of school scholarship. Constructing the project-based and school-based teaching materials of visual identity is the prerequisite and guarantee for improving the teaching quality of art design education in higher vocational colleges.

2. Main Problems Existing in Teaching Materials of Visual Identity

2.1. Lacking of Practicality
Most of the existing teaching materials of visual identity in higher vocational colleges are not practical, and the proportion of theoretical knowledge in the teaching materials is relatively large. The systematization and academicity of knowledge are paid more attention and the content is deep and difficult to understand. The practical content is arranged too little, and the operability is not strong, and the practical design ability of students cannot be fully trained. It is difficult for students to establish a relationship between knowledge and career of visual identity, and at the same time, it also restricts students to transform knowledge into vocational ability. Through practical investigation and interview, it is found that practice teaching accounts for 90% in the course teaching of visual identity for art design majors in higher vocational education, while most of the existing visual identity teaching materials are mainly theoretical content with little content of practical learning, which is not suitable for the practical characteristics of higher vocational education. Such teaching material cannot let the student feel that the knowledge what they have learned is useful, which greatly clears up the enthusiasm of students’ learning. At the same time, in vocational colleges students majoring in art and design have relatively poor cultural foundation and insufficient knowledge reserve for such courses as visual identity. In the face of the contents of teaching material, they tend to generate psychologically difficulties and resistance emotions, which may kill their interest in learning this course from the very beginning [1].

2.2. Lacking of School-Based Nature and Personality
In the process of development, each higher vocational college will form its own characteristic culture, which has become its own school spirit. The school-based nature is the characteristic of the school itself. It is the cultural deposits accumulated by several generations of higher vocational colleges in the process of running the school. The loss of the school-based nature is the loss of the value of teaching materials [2]. The compilation of teaching materials of visual identity should also be integrated with the school's own characteristics. At present, most teaching materials of visual identity are not integrated with the editor's school's own characteristics, which is not conducive to the cultivation of characteristic talents.

2.3. Lacking of Systematization
Existing teaching materials of visual identity do not have a complete system. According to the standards of talent training mode, teaching materials for art design in higher vocational colleges should include course materials, teaching reference books, practical instruction books, multimedia courseware, etc. [3]. At present, teaching materials of visual identity are usually only course textbooks, and there are basically no other supporting resources. Only a few teaching materials of visual identity have multimedia courseware, but the courseware is mostly taken out of context, incomplete and unsystematic, which is difficult to be used for teaching.

2.4. Lacking of Post Target
The curriculum of visual identity itself is highly applicable, which requires that the teaching materials of visual identity must be fully operable and instructive, able to practically guide practice, adapt to occupational needs and meet post demands. However, the current teaching materials for visual identity lack the pertinence of pointing to job demands and lay more emphasis on pure art in content [4]. The content of processing technology, material, drawing specification and other technical aspects involved in visual identity design is basically not covered, lacking of practical value, which could not guide the practice of visual identity design well. Apart from the actual development of the industry, lacking of vocational characteristics, and deviating post ability, it is not conducive to the development of students' vocational ability.

2.5. Lacking of Frontier and Practicality
Art design professionals shoulder the mission of creating the future and leading the development of The Times, which determines that the teaching materials for art design majors should be advanced and cutting-edge. Visual identity course as an important core course of art design major, the construction of its teaching material should keep pace with The Times. However, most of the present visual identity teaching materials are outdated, rarely involving many new materials and new techniques. The visual identity design works shown in the teaching materials are mostly old and outdated ones that do not conform to The Times, failing to reflect the characteristics of keeping pace with The Times.

In addition, the existing visual identity teaching materials are highly similar. Except for different publishers and different cover designs, the structure planning and content setting are all the same, and even some pictures and cases are the same and remain unchanged for a long time. The content is mostly conceptual text, listing a lot of conceptual knowledge that seems to be useful but actually has little significance for visual identity teaching, and there is no way to guide students to learn. The study of art design is like learning to ride a bicycle. The master of concepts is not of great use, but of practical application. As we all know, higher vocational education emphasizes the cultivation of students' practical ability rather than how many concepts they master. In particular, art and design majors emphasize creativity and have a lower demand for invariable conceptual terms than other majors [5]. For example, the concept of grid drawing in the visual identity teaching materials makes no sense for students to memorize the concept by rote. The key point is to see whether students really master the use of grid drawing. Years of teaching experience and students' reflection all show that memorizing the concept is useless for the teaching of art design major.

3. Countermeasures for the Construction of Project-Based and School-Based Teaching Material of Visual Identity In Higher Vocational College

3.1. Constructing the Contents of Project-Based and School-Based Teaching Material

3.1.1. Introducing project-driven teaching methods into teaching materials. Instead of pure theoretical elaboration and pure practical operation, it combines theories with applications to ensure that students can seamlessly connect with their future jobs after graduation, taking the actual design project as the teaching material, and setting the real design project from the industry in the teaching material. In addition, detailed introduction is made in the teaching material. When teaching in accordance to the teaching material, teachers are guided in the coherent vein to complete project introduction, conduct task analysis, explain theoretical knowledge, then conduct teacher demonstration, and finally carry out practical operation, as shown in Figure 1. And in this process, the theoretical knowledge required by vocational ability is organically integrated into each stage of teaching [6].

![Figure 1. Implementation of project-based integration of theory and practice](image-url)
(1) Project introduction. Theoretical knowledge related to the project is provided, so that teachers and students can clearly understand what the project is and how to do it on a macro level. After that, teachers are guided to explain theoretical knowledge around the project, clarify the project requirements and goals to be achieved, ensuring that students understand the relevant indicators of the project, and realize the breakthrough of teaching what is needed and without any surplus [7], in order to conform to the practical characteristics of higher vocational education.

(2) Task analysis. In this link, the task is analyzed, and the task is decomposed in the form of steps. Students are given a clear explanation that which elements in the visual identity system should be done, including which elements should be done in the basic design system, and which elements should be done in the application design system. It involves two main knowledge points of the basic design system and application design system, and the two main knowledge points contain multiple branches of knowledge, such as basic design system covers the logo, standard character, standard color, auxiliary color and auxiliary graphics, and the application design system covers many knowledge points such as office supplies system, public relations gift system, instruction system and advertising and publicity system. These knowledge points will be explained clearly to students in the next link "theoretical knowledge". By giving the task first and then explaining the knowledge, students can listen to the theoretical knowledge with the task, which can motivate students to listen actively and carefully, and understand it carefully. Because these knowledge points do not be understood, it could not complete the task.

(3) Theoretical knowledge. First, introduce the core knowledge points involved in "task analysis", then explain the first step of developing the task and the knowledge points involved in this step, then enter the next link "teacher demonstration", and then enter the next link "student operation". After this step is completed, repeat the process when proceeding to the next step.

(4) Teacher demonstration. The teaching material guides teachers to demonstrate the process and explain the involved knowledge points. For example, when demonstrating the drawing method, teachers should be guided to explain clearly the drawing method and precautions of square (grid) marking method, scale marking method and arc angle marking method, and draw them in practice. After that, a large number of drawing examples are given for students to refer to (as shown in Figure 2).

![Figure 2. Arc angle marking method](image)

(5) Student operation. Under the guidance of the teacher, students design and make the actual visual identity manual according to the task.

The student operation could best reflect the contents of project-based teaching material. In the process of designing and making, the design of the basic design system and the applied design system of visual identity requires students to study and analyze theoretical knowledge while making specific production. "Learning in doing and learning in doing" runs through the whole process, reflecting the characteristics of project-driven and guided teaching materials.
3.1.2. *Introducing the content of teaching materials suitable for the school reality.* It should introduce the content of teaching materials suitable for the school reality, so as to reflect the competitive advantages of school administration and satisfy the requirements of individualized and localized sustainable development of vocational education. In the process of development, each higher vocational college will form its own distinctive culture, which will converge into its own school spirit, thus forming its own characteristics, namely its school-based nature. School-based teaching materials should reflect this characteristic, otherwise it will lose its own value.

In teaching material construction, in addition to letting the school nature of the school more reflect in the teaching material, but also letting the content of the teaching material reflect the new technology and new knowledge adapting to the knowledge age and the information age. In addition, the new changes and new standards in the industry should be effectively reflected in the teaching materials.

3.2. *Constructing Multimedia Resources for Teaching Materials*

In the construction of teaching materials, supporting multimedia resources such as "micro-lessons" and "micro-videos" should be developed, so that students can learn whenever they want and learn repeatedly until they master them. In this way, learning is no longer limited to the classroom, which suits students' fragmented learning habits in the information age [8]. In addition, with the help of the Internet platform, teaching interaction and information feedback can be realized, and the rationality of content can be adjusted through teaching practice verification in time, so as to achieve dynamic adjustment and real-time update of teaching materials and teaching resources [9].

3.3. *Constructing the Teaching Material Compilation Mode of "Working Process Orientation"*

In the compilation of teaching materials, it takes the working process as the guide, that is, according to the work procedure or working process sequence in actual production, teaching materials are compiled in a "procedural" way, so as to realize the integration of teaching process and working process.

Taking the project as the writing unit, each project is divided into several tasks, interspersed with knowledge points in each task, and introduced in detail in the "relevant knowledge".

With the actual work process as the main line, each project should be practical.

Each project introduces a back story to stimulate students' interest in learning.

The design of each project fully considers the characteristics of vocational students, positioned on the basis of fun, easy to learn, easy to do.

3.4. *Constructing "Circular" Teaching Material Organization Form*

According to the characteristics of the subject, the ability level and cognitive characteristics of higher vocational students, the circular form is constructed in the teaching material organization. First the most basic core knowledge of visual identity is shown, and then the breadth of teaching materials is gradually expanded around the core knowledge. In this way the knowledge is gradually expanded and students are not easily bored.

4. *Conclusion*

The project-based and school-based teaching material of visual identity is the lifeline for the survival and development of the art design major in higher vocational colleges, and adapting to occupation and school-running characteristics is the basis of developing the teaching material. It should fully understand the application of visual identity course itself, and put the practical application of visual identity in the first place through the development of project-based and school-based teaching materials, letting students see the usefulness of visual identity, so as to stimulate students' enthusiasm for learning. The development of project-based and school-based teaching material of visual identity is a gradual process, which should be summarized, modified, enriched and improved through teaching practice.

In short, the development of the teaching materials is a process of continuous research, exploration and innovation under the background of computer. In the construction, it is necessary to combine the
actual project of the enterprise and the actual situation of the school, combine the needs of students themselves, and cooperate with the development of art design related industries, so as to develop excellent teaching materials conducive to improving the teaching quality.

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References
[1] Y. Liao. Research on the Construction of "Chinese Design History" Teaching Material for Higher Vocational Art Design Major. Hunan Normal University, Changsha, 2013.
[2] J. Wang. Suggestions on the Construction of School-based Teaching Material in Higher Vocational Colleges. Journal of Liaoning Higher Vocational Colleges, 2015, 17(9):66-68.
[3] X. Chen. The Construction of Teaching Material of Higher Vocational Art Design Major. Great View of Fine Arts, 2007(8):154-155.
[4] L. Chang and X. Zheng. Thoughts on the Construction of School-based Textbooks for Art Design Majors in Higher Vocational Colleges. Industrial Technology and Vocational Education, 2012,10(2): 25-26.
[5] X. Qin. The Construction of Art Textbooks in Higher Vocational Colleges from the Perspective of the Audience Psychology of Art Design Students. Great View of Fine Arts, 2010(8):174-175.
[6] J. Li. Application Research of Project-Based Integrative Teaching Method -- Taking Computer Network Basic Course in Higher Vocational Colleges as an Example. Journal of Liaoning Higher Vocational Education, 2016, 18(1):39-41.
[7] L. Tang. Research on the Construction of Higher Mathematics Textbook in Higher Vocational Colleges. Hunan Normal University, Changsha, 2005.
[8] J. Zhu. Research on the Development, Construction and Practice of School-based Textbooks in Higher Vocational Colleges under the Background of Project-based Teaching. Professional, 2018 (2): 77-78.
[9] C. Li. Research on the Construction and Synchronous Updating of Teaching Materials of Art Design under the Background of "Internet +" -- Taking Product Design Methods and Case Analysis as an Example. Chinese Art, 2020(2):100-105.