Research and Practice of Visual Teaching in Art Design Specialty Based on the Cultivation of Innovative Talents

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Abstract: *Visual teaching transmits and innovates knowledge with a clear thinking mode, and provides the training of innovative talents with the design of learning environment and teaching activities in line with students' cognitive thinking. This paper analyzes and summarizes the educational mode of the integration of visualization and art design curriculum, the design of visual teaching of art design curriculum, the cultivation of students' innovative thinking ability and the practice of visual teaching of art design, and puts forward that the use of visual teaching is an effective way to cultivate innovative talents of art design.*

Keywords: Visual teaching, Art design, Innovative talents, Cultivation, Practice

At present, more and more domestic educators begin to study visual teaching, and its main research directions are divided into the visual design of teaching content and the application of visual technology. However, there is relatively little practical research on visual teaching, and there is a lack of in-depth exploration in specific disciplines and classroom teaching. Traditional teaching methods and educational methods can no longer meet today's needs. Students majoring in art design have weak text reading ability, but strong imagination and practical ability. Visual teaching, as a new teaching method in the new era, transforms complex and difficult knowledge content into graphics and images that can easily stimulate students' interest, which is more suitable for the characteristics of current education and teaching. Combining the cultivation of innovative talents, a hot issue in higher education, with visual teaching is not only a new attempt in the teaching field of art design specialty, but also a teaching method that should be vigorously advocated at present. However, the author found that although visual teaching has become a hot spot in today's educational circles, it is rarely applied in the stage of higher education, especially in the discipline of art and design. Therefore, the introduction of visual teaching in art design course is a topic worthy of research.

1. Educational model that integrates visualization and art design courses

1.1. Definition and meaning of visualization and its teaching

Visualization is translated from the English word (Visualization), which refers to the conversion of data into images through the graphics and image processing techniques of computers. [1] Simply put, it is the use of computer image processing techniques to transform lengthy, abstract data into plain, easy-to-understand images. This can lower the cognitive threshold, attract the public through the unique beauty and fun of images, make the content easy to understand through the best presentation, and increase the audience's cognition and communication with a richer communication method. Visual teaching is a way of teaching that can effectively improve students' interest and learning ability, i.e., using graphic and pictorial forms to stimulate students' vision, which in turn stimulates the brain and stimulates students' interest in learning. Using visualization teaching to strengthen art and design classroom teaching activities is an effective way to cultivate art and design students' ability to innovate on their own, enhance their art appreciation and exercise their thinking skills.

1.2. Visualization of art and design teaching

With the vigorous development of Internet plus education, the traditional education mode is being impacted. The current curriculum reform has entered the new normal stage. Under the advancement of modern educational philosophy, teaching contents, teaching modes and teaching methods are changing

slowly. For example, in order to further implement the innovative talent training mode, highlight students' practical ability and innovation ability, and improve the quality of talent training, Anhui University of Finance and economics puts forward the strategic development objectives and ideas of the "new economy and management" talent training mode, with the intention of building a multi-disciplinary coordinated development and prominent characteristics, so as to achieve the development goal of building a well-known high-level comprehensive university in China. Since its establishment, the visual communication design major of the Academy of Arts has been highly concerned in Anhui Province Based on the brand advantages of Anhui University of Finance and economics. Relying on the advantages of economics and management discipline of Anhui University of Finance and economics, this major gives full play to the achievements and teaching experience of the major in advertising design for more than ten years, and has obvious advertising design professional characteristics and popularity in the province and even in the country. In the future, we will continue our efforts to transport a large number of excellent and high-level design talents for the national economy and financial industry. More in-depth exploration and Research on financial data visualization, company brand image packaging and so on. This is fully in line with the ten-year development plan for educational informatization (2011-2020). In the teaching process, take students' own situation as the foothold, and formulate teaching plans that meet the actual needs for students. According to the teaching content and teaching objectives, flexibly carry out teaching work and promote the rationality of teaching methods.

The Art College of Anhui University of Finance and economics realizes the talent training program through seven platforms: general education platform, characteristic platform, basic course platform, professional course platform, innovation and entrepreneurship platform, practical education platform and personalized learning platform. The training program reflects the trinity teaching reform goal of deepening practice, innovation and entrepreneurship and social responsibility education. In the course of many years of practical teaching, the art college has made many positive attempts in cultivating talents through reform and innovation. On this basis, we will combine various parties and strive to achieve "all-round and diversified" industry university research cooperation. Take cooperative enterprises as an interactive platform for exchanges, extend industry university cooperation and school enterprise cooperation to the broad space of the market and society, and highlight the characteristics and advantages of education. Nowadays, art design education should develop simultaneously with science and technology, and use the new achievements of science and technology to serve art design teaching. The combination of visualization and art design course can further innovate and improve the art design teaching system in the traditional teaching mode, and cultivate the innovative talents of art design needed by social development.

2. Design of visual teaching for art design courses

For the visual teaching of art design course, in the process of consulting materials, the author found that although the current visual teaching is more common in the teaching process, the research on the visual teaching of art design course is very few, especially in the stage of higher education. Due to its particularity, compared with students majoring in culture, students majoring in art and design have relatively weak logical thinking ability and reading ability, high imagination and image sensitivity, and relatively strong practical ability. At present, the teaching methods of art design courses in most colleges and universities still use ordinary teaching methods, and there is no set of teaching methods suitable for students majoring in art design according to their own characteristics. Under this teaching method, students only stay in the shallow memory stage of knowledge, but can not go deep into the interior of knowledge to understand its core, so as to bypass by analogy, and there is no way to talk about the training of innovative thinking. However, students majoring in art design urgently need innovative thinking. Therefore, visual teaching design for art design course is very important.

Visual teaching visualizes art design knowledge by means of visual representation, which provides learning environment design and teaching activity design for the cultivation of innovative talents. Combined with students' psychological characteristics and cognitive structure, the well-organized thinking mode is transmitted and innovated knowledge, which cultivates students' high-order thinking ability, independent innovation ability and practical operation ability, and greatly improves students' interest. In order to promote the unity of art design teaching and learning and the development of the discipline, the design of this course needs to formulate a systematic scheme, which is mainly divided into the following five stages:

2.1. Preparation stage

As the first stage of art design course, preparation stage is the basis of the whole course. Firstly, teachers are required to formulate a syllabus that meets the teaching needs, select appropriate teaching methods according to the characteristics of art design students, and prepare sufficient teaching resources, including visualization tools and art design teaching materials, and then discuss teaching methods with each teacher and analyze the key and difficult points of the course. At the same time, art and design students should have a certain understanding of what they have learned before class (such as a preliminary understanding of the designers and works of the course teaching). Secondly, be familiar with the visualization tools used in the course - that is, the use methods and characteristics of the tools. Finally, the communication and interaction between students is also essential to exchange their views on the content to be learned and learning methods.

2.2. Design stage

After sufficient preparation in the early stage, it is necessary to integrate teachers' and students' ideas on the teaching content in the course design stage. Teachers should determine the teaching mode, design the teaching process, and choose the appropriate visual teaching tools. While using visual tools in the classroom, the text description is also essential to achieve the co-occurrence of graphics and text. At this stage, teachers should take the lead, determine the type of knowledge, and predict the possible problems in the teaching process, so as to carry out the visual teaching of art design smoothly.

2.3. Teaching stage

After the previous two preparation stages, it officially entered the student-centered visual teaching stage. Art design teaching should focus on interaction, including the interaction between students and teachers, the interaction between students, and the interaction between students and visualization tools. The interaction between teachers and students aims to guide students into the knowledge scene, make contact between teachers and students, and better convey the teaching content and teaching objectives; The interaction between students can cultivate team spirit and promote the exchange of ideas; The interaction between students and visualization tools can make students familiar with the operation of tools and mobilize their learning enthusiasm.

2.4. Evaluation stage

As the overall evaluation of the first three stages, teaching evaluation is a comprehensive summary of the overall teaching effect. The whole teaching evaluation can be divided into three parts, including teachers' self-evaluation, that is, teachers analyze the preparation and teaching of the whole course, summarize problems, accumulate experience, and put forward corresponding countermeasures for the problems; Student evaluation, that is, students' feelings about the course, can be sorted out by means of questionnaire survey; Performance analysis is to analyze and summarize students' curriculum performance and curriculum feelings and judge the performance trend. Finally, the overall summary of these three aspects, get the final results, and provide reference for the adjustment of teachers' teaching methods and teaching contents.

2.5. Feedback Stage

The feedback stage is the last stage of visual teaching, in which teachers adjust teaching methods according to students' evaluation. Feedback includes positive feedback and negative feedback. Positive feedback means that the teaching has achieved good results, the selection of teaching methods is appropriate, and the students are more adapted to the teaching methods, the students actively participate and the feedback shows a good positive direction; Negative feedback means that the teaching effect is poor, the students' performance is poor, the feedback after class is poor, and the overall academic performance has not changed much or shows a downward trend. This situation needs to quickly adjust the teaching methods.

In general, analyze the curriculum standards of art design, put forward the teaching standards according to the standards, form five teaching design stages, carry out the visual teaching of art design on these five bases, and apply these five standards in the teaching links, so as to finally realize the goal of visual teaching of art design.

3. Using visual teaching to cultivate students' innovative thinking ability

Visual teaching shows the obscure and difficult knowledge in an intuitive form through a concise, visual and three-dimensional way, and shows the learning content in a more systematic and complete way through the process of visualizing the abstract knowledge, so as to enable students to master knowledge in the shortest time, so as to realize and master knowledge, broaden students' horizons and form critical Divergent and innovative thinking. The process of visual teaching is the process of changing students from "doing" questions to "drawing" questions. The process of "drawing" is not only the process of sorting, analyzing and Innovating Students' knowledge, but also the process of strengthening their thinking. In this process, students can identify and effectively solve problems in time, and learn to use new ways of thinking and innovative methods to correct problems. Cultivate students' innovative thinking ability by means of visualization, and use diagrams to express students' thinking process in the whole teaching process, which is more in line with the learning content, easier to stimulate students' interest, and truly give consideration to knowledge and methods, process and results. In the process of visual teaching, the visualization of knowledge can make students acquire and accumulate knowledge in a more relaxed way, make full use of the knowledge learned in the process of practice, promote students to develop divergent and innovative thinking, help students pay attention to the core of knowledge, explore the essence of knowledge, and reduce the energy consumption brought by traditional teaching methods, Effectively improve cognitive negative hand.

According to Arnheim, "all perception contains thinking, all reasoning contains intuition, and all observation contains creation." visual thinking is an innate cognitive mode of human beings, [2] which is closely related to other cognitive modes of human beings. In the art design course, through the visual teaching method, take vision as the first basic point to carry out thinking Association, and through further thinking divergence, find the logical relationship between various images, break the thinking boundary and formal norms in the traditional teaching method, so that students can directly feel the visual stimulation brought by the visual image and feel the fresh visual image. In the teaching process, we can spread the thinking path through visual media to achieve the goal of thinking innovation. The core of the development of art design education lies in the innovation of design thinking and technical expression. On this basis, the application of visual teaching methods with the value of innovative teaching ideas, improving teaching quality and improving teaching efficiency coincides with the core of the development of art design education. In the process of visual teaching, we can make full use of visual interaction methods such as thinking map and animation to cultivate students' spatial imagination, thinking ability and innovation ability, and promote students' all-round development. [3] Through the analysis of students' thinking map and concept map, this paper combines their innovative thinking mode with teaching practice, and explores and develops an innovative teaching scheme suitable for college students. This will help to promote the reform and innovation of the talent training mode of art and design specialty, and explore a path for the cultivation of art innovative talents.

4. Constructing Visual Teaching Practice of Art Design Major

Art design is a highly practical specialty. With the development of science and technology, there are new requirements for professionals to have scientific development thinking and artistic and scientific skills. We highlight the comprehensive intersection in the setting of knowledge system, emphasize the development of students' potential and personalized training, and take the development of students' comprehensive ability in both innovation and practicality in visual communication as the training goal. In teaching, we always adhere to the teaching concept of "integrating subject competition into the classroom and promoting learning through competition". Over the years, our major has made achievements in national college student advertising art competition and other subject competitions, which is far ahead of colleges and universities in Anhui Province, and has played a good teaching and talent training effect. Taking the professional course of creative thinking training as an example of visual teaching, we first elaborate and analyze the teaching content and formulate the teaching process according to the characteristics and principles of visual teaching design. Through the arrangement of students' classroom performance and after-school homework, we can get students' attitude towards visual teaching and the results of visual teaching. Finally, we will This paper summarizes the visual teaching of innovative thinking training.

In the course preparation stage, teachers of this major discuss the teaching content of the learned chapter in combination with their own experience. This chapter mainly practices students' divergent thinking. The course practice is carried out by "hand", so that students can draw a visual expression with

"hand" as the design element through the way of mind map. In class, we guide students to fully divergent thinking, discuss in groups and use "hand" Starting from the word, give full play to their imagination, design a series of schemes related to the "hand", speak and discuss respectively to form the initial ideas. Finally, let the students choose one of all schemes, combine the design in the computer, and show and discuss their creative ideas and thinking directions in class. According to the feedback of homework, we can find the students' understanding of the "hand" There are many unexpected displays in visual design, such as personification of "hand", association with different traditional elements through "hand", and use of plant "hand" Through this training, students can establish the connection between images and fonts, divergent thinking, bypass by analogy, fully reflect the advantages of visualization in innovative thinking training, and help to explore students' innovative potential.

The visualization of creativity is the process of expressing the way of thinking through images. The traditional art design courses often stay in the single thinking mode of appreciation and memory, lack the process of transforming logical language into visual language, and lack divergent practice and innovative training for thinking. To solve this problem, we pass the training of innovative thinking This course is reformed. In the teaching process, we follow the principles of overall planning, cooperation and exchange and orderly promotion, scientifically plan and control the effect of the course of innovative thinking training, so that students can deeply understand the design process through the way of divergent thinking, stimulate design inspiration and apply it to design practice. Visual teaching is combined with professional courses to improve It improves students' innovative thinking and logical thinking ability, and effectively promotes the reform of art design courses.

5. Conclusion

The visual teaching mode and corresponding teaching strategies can better apply the visual concept to teaching, [4] relatively reduce the teaching burden of teachers, improve teachers' professional quality, provide guidance and ideas for art design education, and promote the improvement of teaching efficiency and quality. At present, visual teaching needs diversified presentation methods, especially art design specialty. Due to its specialty particularity, visual teaching design needs to keep pace with the times. Based on the existing visual teaching content, art and design colleges need to further think and explore new teaching modes and teaching ideas, so as to cultivate talents needed by art and design education.

Acknowledgement

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