Teaching Analysis of Computer Aided Design Software Course for Visual Communication Design Major

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Abstract

The subject of visual communication computer-aided instructional design is a subject that emphasizes practicality. However, the current educational effect of my country's art department in high school education practice textbook is not obvious and there is no scientific system of practical teaching system. The existing The value set in the teaching subjects is not fully reflected. In this evolutionary situation, how to deal with the "quality" of teaching and the "quantity" of students in the relationship between the teaching of art design courses and how to establish the unity of higher art design teaching ideas and guidelines, How to improve the educational goals and teaching mode of art design. The research on the sustainable development of the design discipline requires us to have a deeper understanding and understanding of contemporary art design teaching and to combine scientific theories with countermeasures to make correct judgments and specific implementations.

Keywords: Visual Communication, Design, Teaching;

1. Introduction

Nowadays, art education in various countries all over the world advocates a practical teaching mode with studio teaching as the main body. This flexible and efficient teaching mode has gradually become the main development trend of art design education. At present, many art professional colleges and vocational colleges have established different teaching studios according to the characteristics of each major. The teaching mode of professional studios breaks the constraints of conventional teaching in terms of time and space. Compared with the traditional In the teaching model, the participation of enterprises and industries has been greatly increased.

The relationship between teacher teaching and student learning is close and the atmosphere is harmonious, achieving a great integration of teaching and learning. The talent training model of studio teaching is bound to be a new attempt in teaching reform.

2. The teaching concept of visual communication

2.1. Cultivate talents with innovative teaching concepts

The teaching of visual communication design follows the traditional teaching model and teaching philosophy and needs to start with the change of teaching concepts. For the adjustment of traditional teaching methods,we can try to introduce digital technologies such as multimedia and three-dimensionalization into teaching and update teaching content to meet the development requirements of the times. First of all, teachers should lead by example, update their concepts in teaching content and teaching methods and keep up with the trend of the times.

For example, teachers can be organized to carry out related digital teaching training and visit advanced visual communication design teaching modes;

secondly, students need to establish innovative concepts and combine the characteristics of their own learning and development to carry out related practical activities. In practice Stimulate the enthusiasm and sense of participation in learning visual communication design and be interested in visual communication design courses, so as to learn better to meet innovative requirements. Finally, the relevant equipment of school education and teaching needs to play its guarantee work, such as updating teaching materials and advanced multimedia equipment used in teaching to provide effective guarantee work for visual communication design teaching[1]. The computer aided design system is in the figure below.
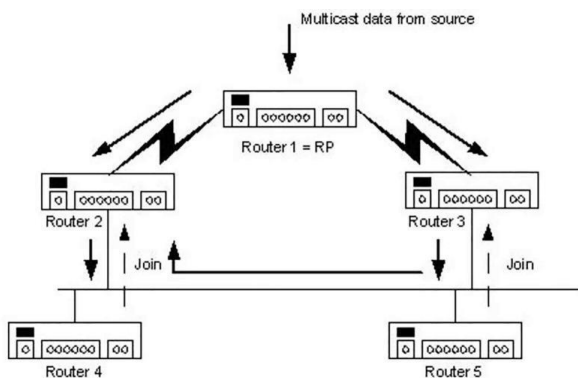

Figure1. Computer aided design system.

2.2. *Update the teaching mode of visual communication design*

First of all, the teaching of visual communication is carried out in the classroom. Therefore, the teaching classroom needs to be combined with the characteristics of digitization and innovation. At the same time, it must adapt to the characteristics of the visual communication design profession. The purpose is to activate the classroom teaching environment and in a certain classroom environment.

In the atmosphere, provide students with more opportunities for inspiration and design innovation, thereby improving the quality of visual communication design teaching. At the same time, it is necessary to transform the traditional classroom

model based on teacher narration to the student-based classroom model, so that students have more opportunities to create independently, so that the created works are more innovative[2]. The computer aided management system is in the figure below.
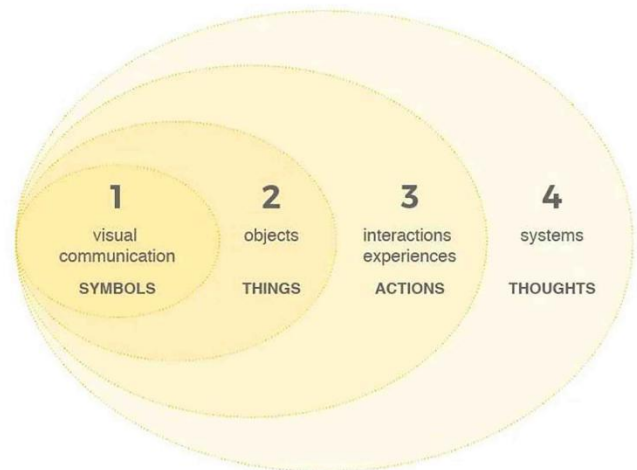

Figure2. Computer aided management system.

2.3. *Diversified teaching methods of visual communication design*

Diversification of teaching methods is one of the requirements of education and teaching reform. The purpose is to obtain better teaching quality and cultivate talents who serve the society. Therefore, the diversification of visual communication design teaching also cultivates more talents to serve the society. At the same time, combined with the background of the digital age, digital technology and diversified teaching methods can be effectively combined.

In the process of visual communication design teaching, multimedia and other methods can be used to guide students from design exploration, innovation transition and case analysis teaching, Teaching methods such as experimental teaching. Organize students to participate in practical activities in design, so that students can experience the practical value of learning design in the real practice process[3]. The computer display system is in the figure below.

Figure3. Computer display system.

3. Computer-aided design technology teaching

3.1. Enrich the connotation of the subject

The cultivation of applied talents needs to strictly follow the basic educational laws of "humanity principle, individuality principle, creativity principle, activity principle and democratic principle" to realize the standardized path of discipline construction and professional development. Because most college students will directly participate in work after graduation, the training of talents in the visual communication design major needs to break the traditional teaching model of "knowledge transfer as the mainstay and professional skills training as the supplement" to base the various measures of talent training. On top of the requirements of the technical system, only in this way can the students' job practice ability and employment competitiveness be better improved. In addition, in addition to teaching core professional courses to students, colleges and universities should continue to enrich the connotation of disciplines and design more professional courses that meet the actual needs of employers in a divergent way and students can be based on their own hobbies and occupations. Development plans to choose courses to fundamentally improve students' enthusiasm and initiative to participate in professional teaching. Finally, colleges and universities need to strengthen the relationship between schools and enterprises based on the development trend of the industry, such as creating high-quality courses, carrying out the teaching mode of teacher and apprentice and practicing the combination of work and learning.

These new teaching modes are undoubtedly the current visual communication design majors. It is an effective supplement to the training of talents and lays a solid foundation for the deepening reform of subsequent talent training[4]. The computer aided design system is in the figure below.
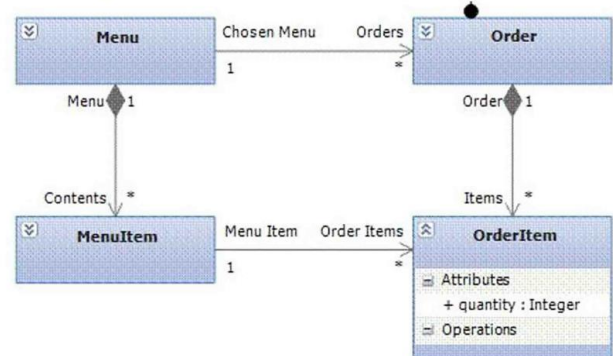

Figure4. Computer aided design system.

3.2. Optimize professional curriculum system

Colleges and universities should actively implement the overall framework of "big platform, small modules" in the process of training professional talents in visual communication design and at the same time realize the strengthening, refinement and refinement of professional teaching, the professional curriculum system should be decomposed and reorganized to achieve Create core courses that meet industry development and industry needs. For example, to implement professional teaching and practical courses in stages for students of different academic years and to further increase the overall proportion of practical teaching, to ensure that students can continuously verify the knowledge they have learned in practice and then achieve the effect of applying what they have learned. In addition, professional teachers can consciously instill the latest developments and industry information in the industry in their usual course teaching and create new course content such as UI interface design, column packaging, film and television advertisements, or they can contact employers during enrollment. Signing relevant agreements for targeted training to cultivate talents according to the actual needs of employers. This talented training

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model undoubtedly solves students' worries about employment and students can re-select employment based on the development of the industry after graduation[5]. The computer build system is in the figure below.
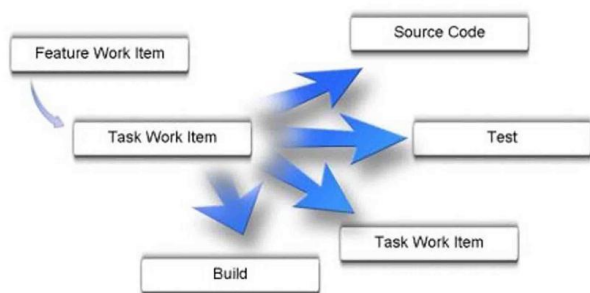

Figure5. Computer build system.

3.3. Improve teaching effectiveness

If the development of universities and the industry provides a large environment for the cultivation of professional talents in visual communication design, then the teaching methods of professional teachers directly affect the final effect of talent cultivation. Therefore, professional teachers must be deeply aware of the necessity and inevitability of professional teaching reforms, actively construct time-effective, interactive and open teaching models and improve the effectiveness of professional teaching through the application of multiple teaching models. For example, create a new four-in-one teaching model of "teaching, learning, practicing and doing" to realize the cross-cooperation of knowledge transfer and post practice, so as to create a teaching system that meets industry needs and professional characteristics. The computer guide system is in the figure below.
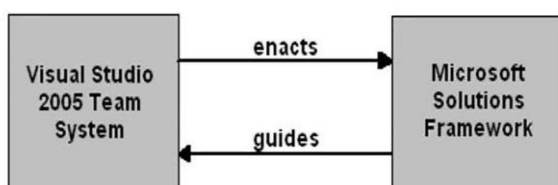

Figure6. Computer guide system.

4. Computer-aided design software teaching

Computer-aided design education in higher vocational colleges is obviously different from basic computer education in ordinary middle schools and should have its own characteristics. In order to cultivate compound talents with strong hands-on ability in computer-aided design in higher vocational schools, it is necessary to strengthen and attach importance to the basic education of computer-aided design and adopt various forms to improve the education level.The computer-aided design course is in line with the teaching purpose of higher vocational colleges around the stage and the development direction of the stage art class. Under the teaching environment of the college, after the communication and negotiation of professional leaders and teachers, the stage art class should realize the professional use of digital media in space by mastering the computer-aided design course and solve the space through the study and mastery of computer-aided design

The concept of design layout, with certain modeling and operation ability, master the characteristics of different types of space on the stage and expand the use and practice of stage space on this basis and guide students to take this as a route and expand professional Practical ability. In this course, we should focus on completing the basic requirements for computer-aided modeling capabilities, proficiently using 3dmax software to assist in creating space models and mastering the practical operation of basic project modeling for space performances oriented by stage space. Guide and master the basic requirements of the basic space structure, type, proportion and size of the stage. Guided by the project package course, students can master the ideas and methods of professional operation, so that they can apply what they have learned to various professional fields.In terms of professional development, some students are more active in stage creation.

They do not follow the routines, the rules of the performance space basically do not exist and the

creative ideas are unstable. This is difficult for students to expand their professional capabilities. The standard stage should be used as a case for the explanation. At the same time, each student is required to complete the operation and stabilize the creative ideas. Taking into account the direction of professional development, students' creative ideas should be slightly open to pave the way for future professional curriculum creation.The setting of computer-aided design courses must be based on specific courses and the actual situation of students. According to the professional characteristics of different higher vocational colleges, the guiding direction of computer-aided courses must have different setting basis. In art vocational colleges, with the addition of multimedia computers and networks, the main role of teachers is no longer to provide students with information, but to cultivate students' ability to learn and explore independently, allowing students to think and explore actively , Actively discover, thus forming a new stable structure form of teaching activity process. In the whole process, teachers are in a guiding position and students are in a state of leading, passing and accepting learning. At this time, teachers should pay special attention to helping students establish a connection between "new knowledge" and "old knowledge"[6].

5. Conclusion

Since design creation is a highly comprehensive work, designers need to have not only a foundation in painting, but also creative thinking. However, in the stage of university teaching, it should be noted that college students have changed a lot in their cognition. Their intention and purpose have been greatly enhanced, the accuracy and generality of perception have been developed and the abstract concept has also been greatly improved. Consciously express objects according to teaching requirements. College students have a relatively broad field of vision and pursue novelty and uniqueness. Therefore, the development of visual communication courses is more in line with the psychological characteristics of the university for students. It is of great help to teachers and students' professional development and ability improvement.

Acknowledgments

References

[1] Yamada Atsuo, Niikura Ryota, Otani Keita, Aoki Tomonori, Koike Kazuhiko. Automatic detection of colorectal neoplasias in wireless colon capsule endoscopic images using a deep convolutional neural network.[J]. Endoscopy, 2020.

[2] Lin Qizhao, He Tuo, Sun Yongke, He Xin, Qiu Jian. A computer-aided method for identifying the presence of softwood growth ring boundaries.[J]. PloS one, 2020, 15(9).

[3] Hu Tao, Yang Heng, Ni Wei, Lei Yu, Jiang Zhuoyun, Shi Keke, Yu Jinhua, Gu Yuxiang, Wang Yuanyuan. Automatic detection of intracranial aneurysms in 3D-DSA based on a Bayesian optimized filter.[J]. Biomedical engineering online, 2020, 19(1).

[4] NEC Laboratories america inc.; patent issued for computer aided traffic enforcement using dense correspondence estimation with multi-level metric learning and hierarchical matching (USPTO 10,762,359)[J]. Journal of Technology, 2020.

[5] Oh Jong Hyeok, Yu Yun Seop. Investigation of Monolithic 3D Integrated Circuit Inverter with Feedback Field Effect Transistors Using TCAD Simulation.[J]. Micromachines, 2020, 11(9).

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[6]   Jang Won Douk, Yoon Young Jun, Cho Min Su, Jung Jun Hyeok, Lee Sang Ho, Jang Jaewon, Bae Jin-Hyuk, Kang In Man. Design and analysis of metal-oxide-semiconductor field-effect transistor-based capacitorless one-transistor embedded dynamic random-access memory with double-polysilicon layer using grain boundary for hole storage.[J]. Journal of nanoscience and nanotechnology, 2020, 20(11).