Research on Future Art Design Teaching under Condition of Modern Educational Technology

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Abstract. According to the characteristics and state of Chinese art design teaching, we integrated modern educational technology in the current teaching places with a set of electronic double board, teacher-student interaction system and cloud resource platform system. In order to achieve better teacher-student interaction in the future with the premise of Grand Designs, systematic integration and ecological civilization, we formed a special advanced teaching system for art and design disciplines. The system not only provides a reference for the development of the current art design teaching mode, but also can be verified by practice in the continuous evolution of the teaching system.

Introduction

Art design discipline involves visual communication, space design, materials technology and other factors. It imparts professional knowledge and design method of art design, to enable students to use advanced design means to achieve efficient communication design and visual information based on integration of modern aesthetic taste and the realization of information receive and feedback based on vision. China achieved vigorous development in art and design education while it accelerated the pace of integration with international education. From an international perspective, the application of modern educational technology, distance education and network multimedia courses are ubiquitous. The pedagogy of International art design education also advances with the times, the progress of science and people's way of life and ideas. Apparently, the so called perfect set of art design teaching concept and method formed by the end of 1980’s is no longer applicable to the new situation. As a vanguard of global education reform, the art design discipline is to cultivate competent innovative talents. To get a foothold in this movement, we have to break the traditional teaching concept and keep up with the times by using new educational concepts and educational technology. Therefore, it is imperative to explore the future teaching methods and models suitable for Chinese art and design majors with modern educational technology.

Development and Problems of Art Design Teaching in Chinese Colleges and Universities

As early as in the 1990s, China's art design education introduced the three Tectonics with design theory, performance methods and design thinking to format of a preliminary model of local art design education. This is the beginning of the reform of Chinese art education, so that art design education in the mainland has been greatly developed.

However, with the advent of the information industry and the economic era, the economic structure of the whole society, the mode of manufacturing, communication, learning management and other major changes have taken place. People are not conservative any more, but in accordance with their own ideas to create a variety of interesting life and entertainment. As a result, creative thinking has become the urgent demand of the times with the change of ideology. The modern design has been integrated into all aspects of social life, and gradually into the grand design with a concept of macrograph, system, ecology and diversity, and there is much difference of current art design. It mingled with more new elements and became a generalized design from an integrated and ecological civilization perspective. Therefore, the art design education today is far more complex and important, higher education is facing a new situation that must undertake the comprehensive promotion of
quality education and the cultivation of innovative talents. The ways and modes of the teaching must be changed.

Looking back on the past twenty years of art design education, the current art design teaching lack of humanities. In explaining the theoretical knowledge, due to the limitations of the teaching form and classroom time, only the knowledge points were analyzed, but the knowledge extended by the theory is rarely expanded and involved. In the guidance of this teaching concept, students often lack of knowledge of the humanities to clearly express their design ideas in the process, which restrict the development of their creativity.

From the evaluation system of teaching, there are some problems in the evaluation methods of art design teaching in Colleges and universities in China. Because of the limit of time and space, the content and standard of teaching evaluation were set by the teacher. Since this assessment method contains some strong subjective factors of teachers themselves, it lack of uniform standards while the collective scoring mechanism will bring time synchronization and efficiency issues. Therefore, it is impossible to evaluate the students' practical design ability from an objective point of view.

Application Status and New Problems of Modern Educational Technology in Teaching

In recent years, the general practice of applying modern educational technology in art design teaching is to establish multimedia course website to organize teaching, making each knowledge point clear and understandable with abundant content. In the process of teaching, combined with the traditional teaching by means of multimedia modern teaching means, the teacher explains the design theory, method and process arrangement. Through graphic interpretation and case analysis, the teacher presents a series of outstanding design works cases to strengthen students' imagination and feeling. It was proved that this teaching method can stimulate students’ interest in the design of the curriculum, so as to enter the learning state faster and grasp the essentials of curriculum learning in a shorter time.

Another more advanced way is the network classroom. This is a new type of interactive teaching method, the specific method is to set up courses on the college website page and forum topics, teaching information and student works can be published on the website. Students and teachers publish their views, pictures, video and other multimedia information through the forum with intuitive information, which is very good to expand the horizons of students. Teachers can also use real-time conversational tools freely for answering questions. In the process of teaching, teachers and students always interact through the network—the establishment of the exchange group, job transfer and online demonstration and discussion.

Thus, the network classroom extends the teaching process, strengthening the effect of learning and counseling. The construction of the network classroom makes the students easily get communication with teachers and exchange opportunities in their spare time. By offering individualized teaching, guidance become more efficient. Multimedia website is related to the course website for information query. Students can choose the required professional Internet web information, download multimedia data, pictures, video and other information by which expands their horizons so that they will understand the market trends in real time.

In the whole process of teaching, teachers organize students to learn theory, case analysis, design drawing and model making. They supervise and guide the students to complete the model and drawing operations, the mutual exchange of learning, and scores and comments on design work. All of this can be done through the combination of a multimedia course website and a classroom and a model making workshop. Student achievement, work evaluation and counseling dialogue records and other information can be collected online to summarize all aspects of the overall quality of teaching, teaching organization and arrangement. These data should be feedback through the multimedia course website in order to improve the teaching ideas and methods, to achieve a better teaching system of art design.

The above application methods mainly discusses about improving teaching efficiency and quality problems by using modern science and technology means from the learning process and learning.
resources perspectives. But, relative to the rapid changes in the market and the continuous development of the situation, these are far from enough. To understand from a more in-depth viewpoint of the modern educational technology, it an information system engineering involves macro educational planning, strategy, management informationization, micro learning environment, learning mode, teaching and evaluation mode. It is not simply free from the process of teaching and learning by the investing some hardware facilities, much less only demonstrating contents of books on screen and the Internet, continuing to strengthen the existing teaching mode and standards of examination, but the application of modern information technology in the education system for all-round performance, making each student choose the most suitable for their own characteristics and needs of the learning and development, so that education can fully arouse person's ability, cleverness and creativity.

The main difference between modern educational technology and traditional teaching is that it avoided simply “learning” or “teaching” centered concept, namely, one-sided teaching concept. Instead, “Teaching-Learning Integration” or “Teacher-student Dual-subject mode” has played an important role in the teaching of art design. Since all teaching activities are completed under the guidance of certain teaching ideas, advanced appropriate educational thought is the power and source of educational reform and development. Therefore, to bring forth new ideas and break the old teaching ideas and methods, the first step is to establish a correct teaching guidance with the development of the times. What is the correct teaching guiding ideology? The core content of teaching reform can be used to solve this problem, namely, quality education and creative education.

Quality education refers to the correct way to guide students to acquire the major-centered knowledge system and related capabilities during university study. But at the same time not rigidly adhere to the limitations of the professional. Innovative education is to cultivate students' creativity, but also require the teacher to foster the students according to their aptitude, create new styles of teaching. Then, in the condition of modern teaching, how to help students complete quality education, like the Bauhaus School of design did, and achieve the development of each student's innovation potential in the curriculum of art design? The key is teaching interaction.

**Future Teaching Site Model of Art Design**

After years of teaching practice, exploration and summary, I think the future art design teaching field model is as follows:

![Future teaching site model of art design](image)

This model consists of eight parts: multimedia computer, to complete the display of graphic images processing; electronic screen system, two parallel electronic screen used to assist the teaching of
theoretical knowledge; teaching software control system, the relevant function is used to control the
electronic screen and the classroom equipment; the cloud resource platform for all materials and work
of the courses; the interaction system between teachers and students, the use of intelligent terminals to
a certain number of connections for students through Wi-Fi, so as to realize the interactive teaching
and classroom interaction; image capture machine, used to detect and identify the teachers’ or the
students’ movement, feedback to the interactive system, realize the function; hanging type telephone,
to achieve real time conversation function; large screen touching machine, for students in the
classroom access to information at any time, and realize interactive teaching.

Teachers should possess keen professional insight and innovative design consciousness. Under the
condition of modern education technology, the teaching of art design emphasize more on skills
demonstration and theory explanations by teachers to broaden the content of knowledge points.
Teachers can arrange the overall context of operation learning according to the characteristics of the
course, or teach step by step with clear and vivid impartation based on the understanding and degree
of different students. Teachers in this circumstance requires double qualities, not only can overall
grasp of theoretical knowledge explanation and analysis, but also can use computer technology to
implement interactive network curriculum, or even they have a certain software design skills
concerning CAD model making skills and output, showing the contents of a complete design
curriculum, enable students to grasp the design essentials, and to complete of the final work of digital
design plan and model after they understand the design theory.

The future of teaching should be composed of electronic double board, teacher-student interaction,
interactive teaching, and remote cloud resource platform system with modern furniture. Compared
with the previous classroom system, the mechanism is more complex. The basic structure of remote
interactive teaching system is the 4 sets of figures capture camera and dozens of hanging type
telephone. The figure capture cameras are to capture teaching image and recognize teachers and
students according to the human body movement, while the hanging type telephones are the
microphone-pickup equipment. As a form of intelligent terminal, the tablet computer screen replaced
the blackboard. Because it not only function as a book to display text and graphics, but also can
display video, animation and digital multimedia information. Simultaneously, as a complement for
the traditional classroom, the tablet computer can enhance classroom interaction by using wireless
network. Accordingly, the classroom is surrounded by a certain number of touch type integrated
machines, which are in line with the diversity of chairs in the future classroom layout for student team
collaboration, research, learning and exchange. The elements of art design teaching in the future has
been evolved from the “traditional five elements”, namely, a teacher, a unified teaching content, a
group of synchronous learning students, plus a fixed time and space, to the “new teaching five
elements” under the background of the development of modern education technology, namely, team
teachers in a classroom at the same time, the hierarchical classification teaching content, personalized
learning status of students, flexible teaching time and open teaching space.

Of course, the future art design teaching does not exclude the traditional teaching elements, but to
integrate them with new elements or continue to retain their advantages. The wireless network covers
the entire classroom as the multimedia digital information exchange between each screen terminal is
transmitted, providing technical support for the interaction between teachers and students in the
classroom. Based on the interactive electronic whiteboard, the electronic double board system is
formed by adopting the technology of single machine double positioning. With the corresponding
teaching software control system, the next two large screens in the classroom can achieve dual
interactive linkage and remote command, and a variety of teaching resources based on the control
system of electronic screen teaching software can be present at the same time. This will perform the
function of “you can write, can write”, and classroom writing marks can be saved at any time.
In general, compared with the traditional multimedia teaching, the future elements of education will
change inevitably with the integration of wireless networks, intelligent terminals, video equipment
and related software system. The structure of the future classroom will become more complex, and
these structural changes will bring a new revolution of educational functions and teaching system.
Conclusions and Prospects for the Future

Modernization of educational technology is an important part of educational reform in China. This technology can provide better external conditions for the development of innovative education and quality education, promote the development of educational innovation and reform, especially for art design education. At the same time, to carry out innovative education and quality education in the professional course design in the future, to create more excellent teaching achievements with cultivating more innovative talents under an environment place more emphasis teaching interaction and teacher-student interaction will promote the development of modern educational technology. From a long-term perspective, the application of modern educational technology in the education of art design is not only a trend in history, but also the starting point and touchstone of our pursuit of art education.

References