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Online Teaching at Universities in China: Advancement of Educational Technology or Reality's Helplessness?

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Abstract: The transition to online instruction in Chinese universities, similar to other global regions, may be analyzed from various perspectives. It is a progression in educational technology and an essential response to external factors, such as the COVID-19 outbreak. While technological advancements in the classroom have made online learning possible and increasingly efficient, it has shared difficulties. Many schools were unprepared for the sudden shift to online forms brought on by causes such as the pandemic and environmental issues; this manifests "reality's helplessness." This study adopted a qualitative method and in-depth interviews at selected universities to investigate the online teaching method's lack of some social dimensions fundamental to education, demonstrating significant implications for students' academic and personal growth. Therefore, this paper indicated that there is no "either-or" choice, as both points of view are correct. The outcomes from this study showed the advantages and disadvantages of online education to make better choices that expand kids' access to a high-quality education in China.

Keywords: Online teaching; Educational technology; Studio teaching mode; Internet teaching, China.



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1. Introduction

In recent years, with the rapid development of Internet technology, interconnectivity, and timely information communication have no technical barriers, and information technology teaching at all levels of education and teaching has been more rapidly developed (Dede, 2000; Kirkup & Kirkwood, 2005). Especially since the beginning of 2020, due to the impact of the new Crown pneumonia epidemic, the Ministry of Education of the People's Republic of China is required to take the lead of the government, the main body of colleges and universities, the community to participate in the way, to jointly implement and ensure that colleges and universities in the epidemic prevention and control period of online teaching, to achieve the suspension of classes without stopping to teach, without stopping classes without stopping to learn (Ministry of Education of the People's Republic of China, 2020) with the support of Internet technology, teachers of different schools and different courses. According to their situation, use various online teaching platforms such as Super Star Learning Pass, Super Star Pan-Asia, Rain Classroom, Tencent Conference, Tencent Classroom, Wisdom Tree, China University Mooc, zoom, and so on to carry out live broadcasting or

video broadcasting teaching, and at the same time, with WeChat group, QQ group and other tools to contact with students in real-time, completing the full set of teaching such as lectures, assignments and exams. The whole set of lectures, assignments, exams and other teaching links have been completed, opening up a region-wide, full-coverage, all-around online teaching. With the end of the new coronary pneumonia epidemic, colleges and universities are to resume offline courses fully. Looking back to the online teaching activities during the epidemic, is the progress of educational technology or the reality of helplessness? Where should online teaching go in the future development of education? As a unique teaching mode for art and design majors, the studio teaching mode effectively trains excellent artistic talents. This paper tries to take the studio of the art design profession at a micro level to explore the inspiration of online teaching activities during the epidemic for the future of higher art and design education.

2. Literature Review

Studio teaching is a traditional Western art teaching mode, similar to the "teacher-apprentice" form of teaching, the core of which is student-oriented, based on real practical training and teaching environment, with specific projects as a medium, under the guidance of the studio tutor in the cultivation of fine arts talent (Zhangqing, 2019). In China, the master-apprentice system is mainly adopted to inherit skills in various handicraft industries, which has a longer history than the Western handicraft guild workshop system. Teacher inheritance was once the main inheritance mode in Chinese traditional painting. Still, it was replaced by class school art education in modern times, forming an important phenomenon in the genetic field of Chinese art education. If the pattern course offered during the period of the Republic of China is regarded as the beginning of Chinese design education, it has a history of nearly 100 years. However, due to the limitations of various factors, the real development of Chinese design education began in the 1980s, focusing on introducing and learning from foreign advanced experience. How to more scientifically and reasonably adapt to the central problem explored by domestic design education for a long time (Houming & Dongmin, 2014).

Studio teaching mode is one of the teaching modes that domestic colleges and universities began to explore earlier. Guangzhou Academy of Fine Arts is the first institution to explore. In the mid-1980s, the design department of the Guangzhou Academy of Fine Arts realized the importance of the practical ability of design education and founded the "Jimei Design Engineering Company of the Guangzhou Academy of Fine Arts". The company established "Jimei Design Room," focusing on interior design, "Baima Design Room," focusing on visual advertising, and "Sunshine Design Room," focusing on product modeling design (Dingbang & Luwei, 1991). It is also equipped with various internship workshops, model workshops, laboratories, etc. Through the efforts of several generations of Guangmei, Guangmei has formed a unique "combination of production and learning." The academic papers of Yin Dingbang, Tong Huiming and Zhao Jian summarized and introduced in detail the success or failure experience of this teaching model, especially Professor Zhao Jian, in the key period of the development of Guangzhou Academy of Fine Arts (the author calls it the transition period), he found the relevant problems in the teaching of the school in time. He put forward and sought solutions and ideas. The above research results had important reference value in design education theory and practice.

Following the "tutor studio system" of the traditional art discipline of the Central Academy of Fine Arts, the design school of the Central Academy of Fine Arts took the lead in implementing the "tutor studio system" combining "knowledge action meaning" and "teaching-learning research" in domestic design colleges. This traditional education model also has some problems, similar to the education model of the combination of teachers and apprentices. For example, the student union is deeply influenced by artists, which limits students' academic vision and artistic thinking to a certain extent, which is not conducive to multi-directional development (Jing, 2020). After more than half a century of development, adjustment, and improvement while learning from foreign experience and combined with their design environment, many representative teaching modes have been formed, such as the teaching mode of "combination of production and learning", the teaching mode of "studio" system and "combination of art and work" Education mode, etc. the studio teaching mode has been widely used in art colleges and universities in China. It is closely linked, has strong practicality and can effectively promote students' employment, so most domestic undergraduate colleges and universities adopt it. The relevant literature research mainly focuses on how to practice in colleges and universities. With the development of information technology, the classroom model has the latest development. The addition of information technology to effectively meet the needs of modern teaching, fully exploiting the advantages of Internet teaching, to push forward the modern teaching mode is of great help (Chengcheng, 2021).

First, the problem that exists in online teaching in colleges and universities is the low teaching efficiency caused by online multi-platform teaching. Teachers can expand all kinds of online teaching platforms to carry out teaching work through hard research and brainstorming. Still, there is also the problem of low teaching efficiency caused by online multi-platform teaching. Due to server limitations, multi-platform

conversion brought about by the reality of the difficulties and student location network issues, making the platform conversion and application of both sides of the need to spend more energy on teaching and learning accessible to produce a sense of loss and fatigue, to a certain extent, led to the problem of teaching inefficiency. Secondly, the new form of non-adaptability leads to poor teaching effectiveness (Xiao, 2018).

3. Materials and Methods

The studio teaching model originated in Europe and is a specific approach. In the context of the new Crown pneumonia epidemic, online teaching in art and design studios is in full swing, and the reform of the studio teaching mode has encountered unprecedented opportunities and challenges. Based on this, this paper explores the connection between the use of online teaching media and teaching effect through the in-depth interview method in qualitative research. It explores the future development direction of online teaching. Specifically, the research involves three main issues. What are the disadvantages of online teaching for reforming studio teaching mode in art and design majors? What are the advantages of online teaching for developing studio teaching mode? How can online teaching produce high-quality talent and meet the talent training goals of the art and design program?

This study adopts a qualitative research approach, and the relevant field data mainly come from the relevant group of teachers, students, and administrators of art and design majors in College A in Henan Province, China. In terms of research methodology, this study mainly uses the in-depth interview method in qualitative research, adopting a one-to-one approach to in-depth interviews with teachers, students, and administrators of art design professional studios to obtain relevant information about online teaching of art design professional studios in this school. In this study, in-depth interviews were conducted based on the interview outline, with a case time of about an hour, and the interviews were conducted in October 2022. Four current college students, two teachers, and administrators were interviewed face-to-face through phone calls, WeChat, and Tencent QQ to obtain first-hand information. Three were male and three female, aged 18 to 43. With the consent of the interviewees, the interviews were audio-recorded and transcribed, the textual materials were classified according to the framework of the interview outline, keywords were extracted in terms of sub-projects for the main ideas of the interviewees, and the frequency and proportion of each keyword were counted. The basic information and interviews of the six students and teachers interviewed are shown in Table 1.

Table 1. Basic information of the interview participants.

Respondent	Identity	Gender	Age
W1	Student	Female	19
W2	Student	Male	21
W3	Lecturer	Male	35
W4	Student	Female	18
W5	Student	Male	19
W6	Lecturer	Female	43

4. Results

Through in-depth interviews, this study focuses on institutional problems reflected in online teaching in the studio of art and design majors on the issues with the learning environment, learning effect, and classroom interaction. Based on this, we further explore the reasons for these problems and summarise the relevant experience accumulated by the interviewed institutions in solving such problems.

4.1. Disadvantages of Online Teaching

4.1.1. Two Minds in One, Poor Learning Outcomes

Studies have shown that information-based education has both advantages and disadvantages. Although the quality and delivery of online master teachers is often higher than that of regular teachers, students are still less self-motivated, and this difference is even more significant when no teacher can directly intervene in the students' listening:

Participant (W1) said, "I sometimes leave the computer on and run off to play by myself when I come across a more boring lesson."

Meanwhile, one participant (W2) stated, "I eat snacks while listening to lectures." On the other hand, a participant (W4) also said, "I watch my favorite TV series at one time and the teacher's lectures at another

time," etc. There are many examples of this kind of double-mindedness. There were also cases where students looked for readymade products online when it was time to hand in their assignments. The final presentation of the students' design assignments was not as good as in the traditional classroom. Participant (W3) said, "The quality of the students' work was significantly worse than the previous classes I taught. It was terrible." It was found that good students could accept and keep up with such a classroom model quickly. Still, students who were less self-motivated and less well-equipped with internet equipment would be more unable to keep up. The inability to become proficient in the system's operation would also reduce their motivation to learn. It ultimately leads to a growing disparity.

4.1.2. Network Lagging: Network Technology Needs to be Built and Upgraded Urgently

Nowadays, the network and media technology is still imperfect, and there are often technical problems such as lagging, dropping, and delaying. The educational environment faced by students studying at home during the epidemic is the home. There is insufficient Wi-Fi coverage at students' homes, and online classes require high internet speeds. Participant (W2) said, "Sometimes when I was listening to the teacher, the internet got stuck, it was too much of a bummer ...". Another participant added, "I also sometimes encounter network jam, need to turn off and on again to re-enter the class, it affects the mood of the class." Participant (W1) said. For teachers taking live webcast classes, the demands on electronic devices and networks at home are the same—the demands on the teacher increase. Teachers must be proficient not only in the face-to-face mode of instruction but also in multimedia technology. Multimedia technology includes proficiency in the use of new devices as well as the language and modes of online lessons. Participant (W5) said, "The epidemic has brought us stress in our lives and technological advances. Online booking and online lessons have become the trend. We need more convenient devices and software to support our online classes. Different teaching models are also needed for those who do not have the means to see students face-to-face." The study found that teachers and students have encountered lagging and poorly flowing networks, leading to a less effective learning experience.

4.1.3. Difficulty in Management and Lack Of Real-Time Feedback and Classroom Interaction

Compared with offline teaching, online teaching lacks a sense of site and real-time. Across the screen, the teacher cannot directly observe each student's attention and emotion, attitude changes, cannot judge the student's interest in the content of learning and understanding, mastery, teachers and students are difficult to real-time, multi-dimensional interaction between the teacher and students. The teacher will not be able to grasp the student's learning situation on time so that the teaching methodology and teaching content are adjusted in a timely manner. The real-time classroom feedback teachers get from students is greatly reduced. Participant (W3) said, "In the past, I could understand the students' status from their language, demeanor and, body movements, etc., but when teaching online, I can only speak through text or turn on the voice system." In offline teaching, teachers can understand the real-time learning status of students from their subconscious language, demeanor and body movements, etc.. In contrast, in online teaching, teachers can only receive immediate feedback from students on the lecture's content by entering text through the students' keyboards or speaking with the voice system turned on.

Once the feedback is insufficient, the teacher can only rely on his/her teaching experience to control the teaching speed and tempo. Teachers who recorded lessons by uploading them to the Internet mainly focused on theoretical lectures, habitually using courseware to explain to students, and then assigning learning tasks to students after the lesson, which lacked innovativeness. Participant (W3) also said, "Students get tired of the large-scale centralised online teaching method and hang up. Such problems cannot be controlled by teachers during online teaching, such as the phenomenon of students playing with their mobile phones while the courseware is being played, which leads to a significant reduction in the quality of teaching." Participant (W6) said, "There is no way to remind some students in time for their not being online, fidgeting, or being distracted, and teachers' more appealing teaching tools and language are needed." In terms of the mode of delivery, the opportunity for group classroom discussion and live instructor guidance was reduced, with the instructor delivering the lesson via the Internet. The inability to monitor in real-time and delayed classroom feedback makes classroom management difficult.

4.2. Advantages and features of online teaching

4.2.1. Breaking through Time and Space Limitations, Promoting Communication between Teachers and Students

In the traditional college art design professional teaching system, classroom teaching is the main mode of instruction, that is, the teacher on the podium with multimedia, books, and textbooks as the basis for one-way teaching students' art design professional theoretical knowledge and skills. In this teaching mode, the teacher controls the classroom leader, the teaching rhythm, and the depth of knowledge. The students are basically passively accepting the state, and the communication between the teacher and the students is not close. At the same time, under the limitations of the classroom teaching scale, a single teacher often has to face many students, the teacher cannot take into account the learning status of all students, and the teacher cannot be separated from the classroom in the teaching process, only in a limited space and time for teaching.

Participant (W3) said, "Online teaching across the screen breaks the time and space constraints of the traditional classroom, especially to strengthen the teaching interaction and online teaching should not be treated as a live TV broadcast - I say you see." Participant (W1) said, "In the traditional classroom, if I don't understand something, I won't ask, and the teacher speaks over it and passes over it, and when the online classroom encounters a question, I don't understand, I will type it on the screen". Because online teaching does not have the same sense of presence as offline classes, it is more necessary for the teacher to attract students' attention through language, text, graphics, images, and many other means. In the studio teaching mode, teachers can, according to their own teaching needs and arrangements, rely on the project at any time and place to carry out various types of teaching practice. It teaching method effectively breaks through the time and space limitations of classroom teaching and prompts the art design professional teaching hours and geographic area to extend, thus enhancing the effectiveness of professional teaching effectively.

In art design teaching, timely use of online platforms in the communication and interaction module, such as the superstar learning platform Tencent QQ platform. Online lectures, such as the appropriate insertion of discussion, check-in, selection, snatch answer, questionnaire, grouping, mutual evaluation, Q&A, and other teaching interactions, can create an active, relaxed, harmonious classroom atmosphere, stimulate students' learning initiative and rejuvenate the vitality of the art classroom. In addition, in the studio teaching mode, teachers can provide students with one-to-one guidance on the basis of specific projects, get rid of the previous classroom teaching one-to-many communication dilemma, effectively guaranteeing the teachers' long-time counseling and attention to the students, prompting teachers to communicate with the students in-depth, and improving the teachers' mastery of the student's situation, which in turn helps the teachers to carry out targeted teaching according to the needs of the society and the characteristics of the students, and to make the students develop towards applied talents. So that the students the development of application-oriented talents.

4.2.2. Rich Supporting Resources and Prominent Teacher-Led Role

Online teaching, real-time, online teaching under the guidance of the teacher, using a live broadcast platform, teachers and students are in the same cyberspace; the teacher can organize discussions, set up classroom exercises, ask questions or even allow students to study on their own according to the needs of the course. The teacher can play a leading role to the fullest extent. In addition, online teaching also promotes the construction of the school's teaching resource base, which provides a detailed and scientific basis for optimizing teaching. In addition, epidemic prevention related topics or specialised courses can be added to the teaching of art and design courses. Participant (W3) said, "The sudden epidemic also made me start to pay attention to the changes happening around me." For example, in the teaching of the course "Digitally Aided Design Adobe Photoshop", students can be instructed to design public welfare posters with knowledge of epidemic prevention and control; in the course "Spatial Conceptual Design" and "Interior Space Design", students can be guided to think about the design of the centralised quarantine hospitals and conduct research on their interior space design; in the course "Soft Furniture Design", students are allowed to match soft furnishings with centralised quarantine sites. Teach students design psychology, color matching and other knowledge.

4.2.3 Optimise Professional Teaching Structure and Proportion of Practical Teaching Links

As a special teaching method, the studio teaching mode can effectively optimize the teaching structure of art design majors in colleges and universities and promote the transformation of traditional single-type curriculum teaching to multi-dimensional practical teaching. For a long time, higher education usually adopted classroom teaching as the main teaching method to complete the talent cultivation plan through the curriculum, and art and design majors that require a lot of practice also adopted curriculum teaching as the main teaching mode. In the classroom teaching mode, the practical teaching process becomes a secondary part, and some universities even neglect the practical process, resulting in a decrease in the

quality of practical teaching and making it difficult for students to improve their professional skills and meet the standards for cultivating applied talents. From the perspective of studio teaching, teachers can adjust the teaching content at any time according to the specific arrangement of the studio and the personal professional needs of students, effectively breaking away from the traditional teaching structure and transitioning from "course oriented" to "topic-oriented", making knowledge education more systematic and technical learning more comprehensive (Zhenzhen, 2021).

At the same time, in the studio teaching environment, students need to complete various specific operations when following up on project topics. It increases the proportion of practical teaching links in the art design profession, and students' professional skills are trained. Art design courses need to rely on specific projects. Students have to complete design tasks, which will involve research, design, argumentation, modification, and other aspects, which can help students understand all aspects of the skills required for art design so that they can combine theoretical knowledge with specific practice and improve their professional skills while consolidating the theoretical foundation, so as to meet the standards for training applied talents.

5. Conclusions

Online teaching and offline teaching have the same goal, assume the same responsibilities, and have the same requirements. It requires us, when carrying out online teaching, to strictly implement the teaching norms, implement all links, conduct in-depth discussions, brainstorm, constantly optimize the network environment, constantly enhance the technical means, constantly improve the teaching methods, and carry out each online class in a solid manner, to effectively improve the quality of teaching. To ensure the smooth implementation of online teaching, the "Implementation Plan for Online Teaching during the COVID-19 pandemic" was formulated at the school level. The organization and implementation of online teaching have deployed totally. The relevant teaching and research departments and teachers were required to formulate an online course syllabus and teaching plan. Media studies is a multidisciplinary field that investigates the impacts and interpretations of many forms of media, encompassing mass communication technology. It requires relevant teaching and research departments and teachers to make online course syllabuses and teaching plans, organize teachers to make preparations for the use of online teaching platforms, select courses, prepare courses and attend classes, and so on, to ensure that online teaching activities are carried out in an orderly manner.

In conclusion, in the post-epidemic era, offline teaching should be aligned with online teaching and do a good job of effectively connecting online teaching with offline teaching after the resumption of classes, laying a solid foundation for blended teaching reform, and then creating a "new normal" of blended teaching, realizing the migration and integration of offline classroom to the online classroom. Integration of online and offline hybrid teaching modes is an inevitable requirement to improve the teaching system of art design further. Mixed teaching makes full use of the Internet +, virtual reality, panoramic video, and other technologies to complete teaching in a high-quality way without meeting. Online teaching is also one of the future university teaching methods. With the full implementation of lifelong education in the 21st-century education revitalization action plan as an action, open education, adult education, and other rapid development, the future of lifelong education, diversification, and vocational education is increasingly open. The online teaching mode will coexist with offline teaching. Remote online teaching is also one of the effective teaching methods to create a perfect and flexible network of online teaching modes. The teaching method aims to create a perfect and flexible network of teaching resources to better play the role of online teaching.

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