

# Research on Digital Teaching Models of Art Courses in Chinese Universities

Tang Yinan

Taishan University, Tai'an , Shandong, China

**Abstract:** Along with the new round of scientific and technological revolution and industrial change, especially the arrival of the emerging Artificial Intelligence (AI) industry, Chinese universities' art education has begun to consider new talent cultivation models, with the construction of digital teaching as the starting point and the breakthrough of traditional art curriculum teaching structure as the new goal. In this process, difficulties and obstacles will be multifaceted, so it is necessary to clarify the current trend of teaching mode, effectively analyze its advantages and disadvantages, propose a relatively practical construction path, and form a new situation of standardized training. This will be the key to determining China's future education reform.

**Keywords:** Digitisation of Chinese Universities; University Art Courses; Digital Transformation; Construction Path; Digital Teaching and Learning

## 1. Introduction

Nowadays, artificial intelligence has become a new industry and trend, in fact, the Chinese government has a clear cultivation plan for the application of digital intelligence industry in teaching and learning from a long time ago, and the large-scale application of digital technology in colleges and universities was in July 2017, when the government issued the "New Generation of Artificial Intelligence Development Plan"<sup>[1]</sup>. Which explicitly states that AI can accelerate the transformation of talent cultivation mode, and in the same period China's Ministry of Education issued the "Guidelines of the Ministry of Education on Further Promoting the Development of Vocational Education Informatisation"<sup>[2]</sup> in 2018, Which pointed out that the construction of information technology education in different stages, stressing that China has transitioned to the accumulation of technical theory and tools

platform construction of the power reserve period, Creating a modern education and teaching model has completed the infrastructure work, for the future development of digital teaching will be refined to the change of different professional fields, as the art of aesthetic education is mainly art, of course, is also the same.

## 2. The Development Trend of Digital Teaching Mode of Art Professional Courses in Colleges and Universities

The digital teaching mode of art professional courses in Chinese colleges and universities is the trend of the development of the new era. With the continuous development of Internet technology, more and more art professional courses in colleges and universities have begun to adopt online education platforms, which makes it more convenient for students to access the course content, including video lectures, online assignments and forum discussions, and also makes teachers begin to think about more diversified modes of teaching and learning innovations, especially the virtual reality (VR) The birth of virtual reality (VR) and augmented reality (AR) technology opens up infinite possibilities of digital future teaching for art professional creation and design, and realises multi-geographical learning union under international vision. At the same time, in the context of building a digital campus, the digital teaching mode can highlight the diversity and richness of learning resources, because the digital teaching platform breaks the boundaries of the classroom and provides a large number of learning resources through digital online forms, such as digital libraries, online art museums and other online platforms, which is conducive to the customisation of students' independent learning plans according to their own interests and learning processes, and also

conducive to the training of It is also conducive to the development of students' independent thinking ability and the integration of disciplines to achieve the overall development of students' comprehensive literacy. However, the digital teaching mode also faces some challenges, such as over-dependence on technology, network security problems and reduced interaction between teachers and students. Therefore, higher education institutions need to continuously improve the digital teaching mode to ensure that it can better meet the multifaceted needs of art students.

### **3. Prevalence of Digital Teaching Models for Art Professional Courses in Chinese Colleges and Universities**

Artificial Intelligence (AI) technology can be regarded as the hottest popular digital technology, especially for art and design students in colleges and universities is transgressive, although equipment-assisted teaching in Chinese college and university art education has become the norm, but for the mastery and implementation of the emerging technology, it is still necessary to accumulate classroom teaching practice, so the digitalisation of the college and university teaching method is still faced with the transition period, especially for the Technology and equipment, quality of teaching resources, interactive learning platforms, self-discipline learning issues, art resource library construction, information security and copyright protection and other aspects of the problem, these issues need schools, teachers, students work together in order to promote the continuous progress and development of digital art education. For the time being, the following issues need to be urgently addressed:

#### **3.1 Inadequate Technology and Equipment**

Balanced development is a problem faced by higher education in various countries, and the same exists for the balanced development of digital education. Although it is mentioned above that the Chinese government has completed 90% of the infrastructure construction in the field of higher education and vocational education, there are still 10% of higher education teaching environments that fail to satisfy the digital course teaching equipment assistance, which means that there are still a number of higher education institutions that

have insufficient technical equipment. Insufficient technical equipment limits the implementation of the digital teaching mode, which also affects the development of the digital teaching mode of art professional courses.

#### **3.2 Copyright and Valuation Difficulties**

Due to the establishment of "Internet+" and intelligent network platform, the privacy and copyright issues of teachers and students in the art classroom will be disturbed to a certain extent, especially in the boundaries of originality and copyrighted artworks, which can easily lead to the violation of intellectual property rights or the leakage of original creativity. Artificial intelligence and digital industry belongs to the emerging technology, the creation of digital artwork can greatly shorten the time of creation and research and development, and the legal level of digital copyright and privacy still exists in the formulation of the blind spot, so colleges and universities in the creation of digital teaching of art works, should focus on the protection of the originality of teachers' and students' works, the formation of the digital copyright protection system of colleges and universities, the establishment of a copyright digital research and development library, and the formation of the independent development model of the knowledge from originality to protection of a sustainable and healthy development model.

#### **3.3 Limited Aesthetic Standards**

Fine arts programmes require access to artworks and cultural resources, which may be limited in a digital environment. Although digital brings great convenience, but for the physical appreciation of works of art instead of forming an obstacle, works of art on-site observation and appreciation with the help of the Internet platform is very different, digital construction, although it can help students and teachers who do not leave their homes, to complete the task of classroom teaching, and appreciate the works of art on the network, but there is a distance from the actual works of art to visit and examine, whether it is colour, shape, painting Technique and many other issues, are incomparable with the actual real works of art, in the enrichment of teaching classroom at the same time, digital

teaching should be in the future to create the same experience as the actual viewing effect, improve the teaching resources on the network and the reality of the difference between the gap, make up for the short board gap.

### **3.4 Student Self-Discipline Issues**

Distance learning mode requires students to have stronger self-management ability, otherwise it is easy to decline in learning efficiency. Digital teaching makes it more convenient for students to learn, but it also leads to a decline in students' independent learning ability, and all the original learning means become weakened, students' dependence on digitalisation increases, their self-consciousness decreases, and their artistic thinking becomes singular, so the combination of teachers' design for the art major courses and digitalisation should be connected with the teaching task and training mode, and students' learning initiative for the art major courses should be fully mobilised. The learning initiative of the art professional courses.

### **3.5 Teacher Training Needs**

Teachers need to adapt to digital teaching and improve their skills and educational philosophy to better support students. Teachers of art majors in Chinese colleges and universities need digital transformation teachers with relevant training in technology and teaching methods, especially old teachers need to keep up with the pace of the times and adapt to the new era of digital teaching, and higher education institutions should not only focus on the training of students, but should also help art teachers to master the skills and methods of digital teaching and learning, provide guidance on instructional design and assessment, set up more digital resource sharing platforms, and with the help of the Digital teaching means to strengthen the popularity of digital teaching training, and promote the cooperation of new and old teachers for digital-assisted teaching, which will determine the key to the success of China's future digital teaching mode in higher art education.

### **3.6 Teaching Assessment Re-Established**

After the establishment of the digital model of art professional courses in Chinese colleges and universities, the old teaching methods and assessment systems will be adjusted, and the

practical direction of digital teaching itself will be challenged, and the traditional handicraft-based teaching mode will be scaled down, and teachers will need to look for a new direction to combine with the digital model, but for this kind of combination of the old and the new, how will the traditional classroom tests and teaching programmes be How can traditional classroom tests and lesson plans be replaced? How to effectively carry out the digital assessment of teaching and learning and other issues will be the future of China's higher art programmes to face the challenge and urgently need to be resolved, the continuous improvement and establishment of assessment standards is also the future of every Chinese higher education institutions will complete the task.

## **4.The Construction Path of Digital Models of Art Professional Courses in Chinese Universities**

The establishment of a digital model for the professional art curriculum in Chinese colleges and universities requires the formulation of a clear strategy and policy for digital transformation, and the identification of digital education as a necessary path for the modernisation of higher art education in the future. Specific aspects include the continuous construction of new basic technology platforms, the creation of "Internet+" digital platforms, and the improvement of the digital level of the art professional teaching team and the digital learning ability of students, among other paths, as described below:

### **4.1 "Internet+" Basic Digital Platform Construction**

Colleges and universities need to provide long-term maintenance of digital technology equipment and a stable network environment to assist the teaching of digital professional art courses, we know that China's art professional field is classified more, for contemporary art and art design majors, digital classroom teaching is the most beneficial discipline for paperless teaching and the waste of human resources will reduce the cost of a great deal, while accompanying the "Internet +" and other Chinese big data platform sharing, can reach the integrated

capacity of teaching, experiments, school-enterprise cooperation, so to ensure the stability of network infrastructure equipment and maintenance of computer hardware and software is a must to meet the infrastructure path of digital teaching.

#### **4.2 Building a High-Quality Digital Learning Platform for the Fine Arts Profession**

The construction of a high-quality digital platform for art majors needs to be supported by rich and convenient teaching resources, including independent learning management systems and resource platforms suitable for the long-term development of modern colleges and universities, such as digital platforms for boutique classrooms, faculty management software and online examination software, and intelligent class scheduling. At present, the most commonly used network platform software for teaching in Chinese universities is Study Pass.

The advantage of this software is that it has a huge platform of educational resources, which integrates high-quality educational content from all over the country, including courses, videos, test questions and study materials. These resources can help students learn and master knowledge better. At the same time, it provides a variety of learning modes, including live teaching, online video learning, course forum discussion and online Q&A, etc., so that students can do anytime, anywhere interaction and learning. In addition to the use of learning and art professional software, Chinese universities and colleges at the same time there is a wide range of digital teaching aided by the general category of software, such as the Chinese scientific and technological achievements management system (CSTC), Pan-Pu software, construction project management information system (CPIMS) and so on, the establishment of these software in the convenience of teachers and students to share learning resources at the same time, but also to the digital office of the university to provide a great deal of convenience, I believe that the digital teaching classroom can be with the near future, and the students to do anytime, anywhere interaction and learning. The digital teaching classroom in the near future can cooperate with the industry and social resources to obtain the integration of software digitalisation and create more social value.

#### **4.3 Improvement of the Digitalisation of the Teaching Staff in Art**

The future digital teaching platform is constantly updated, how to realise the platform construction to play a powerful function of digital, the real operator is the college art teachers, so the college art teachers need to continue to systematically improve the digital level of art professional courses, different stages of the digital teaching training for young and old teachers, so that they can apply the relevant software in the teaching and production of network courses. Give full play to the function of all kinds of digital teaching tools, to build a perfect art digital teaching system, at the same time, colleges and universities should also actively reform the existing art teacher structure, to ensure and accelerate the digital transformation of the art professional teaching team, the implementation of the digital teaching assessment system, to lay a good foundation for the improvement of the digital level of the art curriculum.

#### **4.4 Enhancing Digital Learning for art Students in Higher Education**

Nowadays, the education of art professional courses in Chinese colleges and universities is still a student-oriented education model, but there is actually differentiation from the perspective of students' own growth. Firstly, students come from different provinces and cities in China before they enter the classroom of colleges and universities, and the degree of digital teaching they receive is different, which determines whether the students can quickly adapt to the digital teaching mode of art in colleges and universities in the digital teaching mode, so as to benefit from it. Secondly, it is suggested that junior and senior high school art teaching should appropriately introduce digital teaching models to align with digital teaching in colleges and universities to form an orderly docking of the integration of large, medium and small-sized teaching. Furthermore, students are encouraged to understand, master, and apply digital learning modes to form a combined thinking that promotes the integration and intersection of disciplines. At the same time, colleges and universities can stage digital art teacher-student exchange exhibitions, so that

teachers can influence students through multimedia creation and reap better learning results.

#### 4.5 Accelerating the Arts Resource Sharing Model

The traditional art resource management in Chinese universities is based on library management, supplemented by electronic management. According to the traditional borrowing mode, knowledge information is difficult to form a rapid sharing, although the current stage of resource library management has formed a digital model, but the upload terminal for art materials is a certain limitation, while the students' mobile terminals have a limited range of access to resources, resulting in the dissemination of resources there is a lack of sharing, the convenience of the problem is not strong. For example, a number of students borrow physical books at the same time, which will lead to a shortage of such books, but digital libraries do not have such problems. Therefore, the future management of electronic mode of art resources in colleges and universities will be an inevitable choice, colleges and universities in the process of network resource construction, should pay attention to the sharing of resource dissemination, to provide more convenient reading terminals, the use of digital and mobile phone terminals combined with the convenient mode, so that students read and share the art resources at any time and any place to achieve the expansion of artistic thinking, and to achieve the rapid cultivation of innovative talents.

#### 5. Summary

In summary, the digital teaching mode can provide college art students with a completely different learning experience, enrich the teaching content of the art classroom, and is an effective way to improve the teaching effect of art majors in Chinese higher education now and in the future. The emergence of digital technology greatly expands the vision of the art classroom, helps students to master art literature in a low-carbon and environmentally friendly way, and provides a good supporting effect for the construction and implementation of various teaching means. Therefore, the digital teaching mode of Chinese higher education art professional courses is the trend of future development, teachers and students should work together, help each other and improve together,

with the help of digital technology to achieve the stage reform of work appreciation, painting teaching and art resources, to create an intelligent and convenient digital learning platform under the integrated mode of university, secondary school and primary school, and work together to contribute to the digital teaching of Chinese higher education art courses.

#### References

- [1]Central People's Government of the People's Republic of China. State Council Issues New Generation Artificial Intelligence Development Plan.[Online].Available:[https://www.gov.cn/xinwen/2017-07/20/content\\_5212064.htm](https://www.gov.cn/xinwen/2017-07/20/content_5212064.htm)(20-July,2017).
- [2]Guiding Opinions of the Ministry of Education on Further Promoting the Development of Vocational Education Informatisation .[Online].Available:[https://www.gov.cn/xinwen/2017-09/12/content\\_5224526.htm](https://www.gov.cn/xinwen/2017-09/12/content_5224526.htm).(12-September,2017).
- [3]Wu Xiaolin,Xing Yi Fei.Knowledge Replication or Innovation Inspiration? -Challenges and Opportunities of Artificial Intelligence (ChatGPT) for Graduate Education in Social Sciences [J].Journal of Guangxi Normal University (Philosophy and Social Science Edition). 2023,59(62):66-74.
- [4]Li Li, Zhang Dandan. The Path of Professional Growth for Open University Teachers in the Era of "Intelligence + 5G" - Based on the Horizon 2020 Report: Teaching and Learning Edition [J]. Journal of Jilin Radio and Television University. 2020(1):142—145.
- [5]Li Fujuan,Yao JT,Liu H,et al.Management and Construction of Practice Teaching Base of "Shuangchuang-type" Talent Cultivation Based on OBE Concept-Taking Innovation Base of Mechanical Engineering School of Yanshan University as an Example[J].Education and Teaching Forum, 2019(47):357-359.
- [6]Lei Yue. Exploration of Legal Issues in the Development of Artificial Intelligence[J]. Journal of Beijing University of Posts and Telecommunications (Social Science Edition),2020(20):17-24.

- [7] Qiu Yannan, Li Zhengtao. Challenge - Integration - Transformation: Review of the Conference "ChatGPT and Future Education" [J]. Modern Distance Education Research, 2023, 35(3): 3-12, 21.
- [8] Zhang Zhong. The impact of generative artificial intelligence technology on the field of education - An interview about ChatGPT [J]. Research on Electrochemical Education, 2023, 44(2): 5-14.
- [9] Tian Ma, Mao Wei, Zhao Qingfang. Multiple learning communities: a path to teacher development in the age of artificial intelligence [J]. People's Education, 2018(Z2): 85-88.
- [10] Yang Xuhui, Shen Shusheng. Reconstructing Artificial Intelligence Education Curriculum - From Social Construction to Social Reality [J]. China Electronic Education, 2021(10): 72-78.