

Data analysis and research of "Internet + Innovation and Entrepreneurship" education model based on digital technology

Wenjuan Chai^{1,2}, Cui Yang³

¹School of Visual Art and Design, Guangzhou Academy of Fine Arts, Guangzhou, Guangdong, China

²School of Humanities and Arts, Macao University of Science and Technology, Macao, China

³School of Visual Art and Design of Guangzhou Academy of Fine Arts, Guangzhou, Guangdong, China

okeefe@163.com

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Abstract: With the progress of Internet technology, colleges and universities make full use of scientific and technological forces to carry out the reform of digital media art innovation and entrepreneurship education. This paper studies the current situation and core problems of digital media art innovation and entrepreneurship education in colleges and universities in Guangdong, which puts forward some new education modes for digital media art innovation and Entrepreneurship Education: Online education and offline guidance gives full play to the advantages among the areas in Guangdong, Hong Kong and Macao, meanwhile, improves the structures and makes use of resources. Combining schools and enterprises expands the scope. The research shows that under the background of the Internet, the transformation of the education mode of digital media art innovation and entrepreneurship is not only the reform and development of digital media art innovation and entrepreneurship in Guangdong universities, but also the exploration and practice of the training mode of comprehensive professionals.

1. Introduction

At present, under the background of the Internet, the education mode of digital media art innovation and entrepreneurship in Guangdong colleges and universities is changing with the development of society. Where there are shortcomings in theory and practice, system construction and sustainability of education model, it is necessary to collect and analyze the data of the current situation and development trend of education, and find out the reasons for solving the problems. Sort out the information reflected behind big data, discuss and analyze professional data, study the trend and change of "Internet + Innovation and entrepreneurship" education data based on digital technology, and provide certain reference value for the research of digital media art innovation and entrepreneurship education in Guangdong universities.

2. Overview of digital media art innovation and entrepreneurship education in Colleges and universities in Guangdong

2.1 The meaning of digital media art innovation and entrepreneurship education model

Digital media art major is an undergraduate major in ordinary colleges and universities. It mainly studies the artistic creation and artistic production formed by information technology, and trains compound talents with certain digital technology methods and artistic creation ability. With the development of science and technology, the Internet has become increasingly close to people's life, and the application level of digital media has become more and more extensive. The specialty integrating with literature, science, engineering and art reflects its strong development potential. In the Internet era, digital media involves many fields, such as film and television animation, games, etc. compared with traditional media, it has more advanced equipment and management methods, and

the speed of information dissemination is constantly improving. To better put compound talents majoring in digital media into social practice, it also needs to integrate the educational model of innovation and entrepreneurship. The practical application of innovation and entrepreneurship is not only conducive to the improvement and improvement of students' personal quality and comprehensive ability, but also promotes the development of learning and work, reflecting the connection and complementarity between society and education. Under the internet background, the digital media art innovation and entrepreneurship education model of Guangdong colleges and universities is a model exploration realized in the Internet era. It has important guiding and reference significance for improving the educational concept, strengthening the integration of specialty and industry, and improving the educational model.

2.2 Development and trend of digital media art in Colleges and universities in Guangdong under the background of Internet

Guangdong has good geographical advantages. It is one of the regions with active reform and opening up. It is a place for exchanges at home and abroad. It has cultivated excellent professional talents with the advantages of its geographical environment. The integration and innovation of art promote the growth and development of digital media art in Colleges and universities in Guangdong. The development of digital Internet promotes the technical and artistic level of digital media art in Colleges and universities in Guangdong. In 2015, the Ministry of education implemented the application of digital media art in Colleges and universities, and completed the professional filing of 6 Guangdong colleges and universities in 2016. In 2017, as many as 20 Guangdong colleges and universities realized the application of digital media art. By 2020, the application of this major has increased steadily in 23 colleges and universities[1] While digital media art education and teaching keep pace with the times, the government's encouraging policies and measures also promote the integrated development of innovation and entrepreneurship education mode and specialty. From a macro perspective, the digital media art of Guangdong colleges and universities depends on the scientific and Technological Development in the Internet era. The national strategy of strengthening the country with science and technology promotes the educational atmosphere of Guangdong colleges and universities, and the digital media technology is developing towards high quality and high level; From a micro perspective, Guangdong's advantages of multi field communication and cross professional integration have promoted the new exploration and innovation of digital media education mode, complemented the professional advantages of visual communication design, display design and illustration design, and enhanced the multi field development of Guangdong's digital media art.(See figure 1)

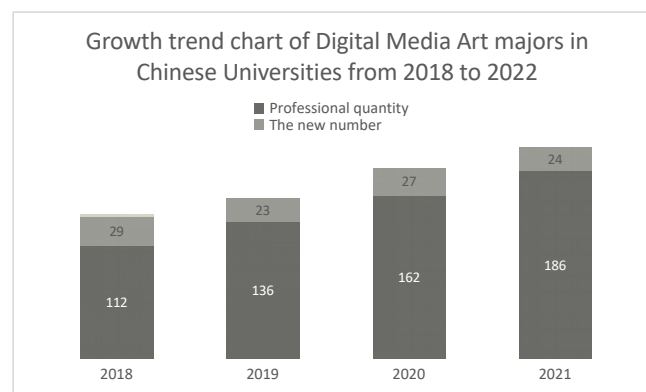


Fig.1 Growth trend chart of Digital Media Art majors in Chinese Universities from 2018 to 2022

2.3 Current situation of innovation and entrepreneurship education in Guangdong under the background of Internet

With the entry of socialism with Chinese characteristics into a new era, colleges and universities have become an indispensable promoter for the implementation of major national and local strategies[2] In 1996, the education revitalization plan for the 21st century formulated by the

Ministry of education stressed that innovation and entrepreneurship education will gradually develop into a compulsory content in Colleges and universities in the future. However, there are still deficiencies and imperfections in the innovation and entrepreneurship education model in Colleges and universities, such as the lack of perfect system of innovation and entrepreneurship education model, the lack of depth of professional integration The lack of mobilization of students' enthusiasm and other problems also provide an opportunity for the reform of educational model. From 2012 to 2020, Guangzhou Education Bureau of Guangdong province carried out the practice of innovation and Entrepreneurship (employment) education projects in Colleges and universities in Guangzhou every year, and participated in Colleges and universities such as Guangdong University of technology, Guangzhou University, South China University of technology, Sun Yat sen University, Shenzhen University, Guangdong vocational and Technical College of light industry, Guangdong huaruan University, etc, Colleges and universities in Guangdong Province apply for and practice innovation and entrepreneurship projects every year.

3. Core issues of digital media art innovation and entrepreneurship education model in Colleges and universities in Guangdong

3.1 Theory and practice bias

On the one hand, Guangdong universities focus on the teaching of educational theoretical knowledge, pay attention to the teaching of professional knowledge related to digital media art, lack the innovative spirit and practical operation ability in the practice of innovation and entrepreneurship, and there is a problem of theoretical and practical bias. For example, in terms of team division of labor, industrial financial management and fund preparation, innovation and entrepreneurship education needs learning and training on the skills and knowledge system of entrepreneurship, and establish excellent qualities such as team spirit and cooperation spirit, so as to be better applied in practice.

On the other hand, the different emphases of theory and practice in Guangdong colleges and universities lead to different actual situations in different colleges and universities. The specific content of the applied digital media art innovation and entrepreneurship education model is lack of flexibility and diversity, and there is a problem of theoretical and practical bias. For the digital media art major in Guangdong universities focusing on theoretical research, its innovation and entrepreneurship education model needs to focus on the teaching of practical ability, so as to promote the combination of theory and practice. For the digital media art major in Guangdong universities focusing on application practice, its innovation and entrepreneurship education mode needs to focus on the sorting and thinking of theoretical creativity and innovation, learn from each other, and give diversified exploration and Research on innovation and entrepreneurship education mode.

3.2 System construction

1) Imperfect University platform

The construction of Guangdong University platform has developed for some time, but the digital media art major in Guangdong universities has not formed an objective and unified standard for innovation and entrepreneurship evaluation and education, and the education and teaching content of College Teachers in Guangdong Province is lack of systematic and clear requirements. The imperfection of the college platform will bring some problems. In the allocation of college resource platform in Guangdong, innovative entrepreneurial resources are difficult to be reasonably allocated through certain standards, which hinders the systematic construction and improvement of digital media art innovation and entrepreneurship education platform in Colleges and universities in Guangdong.

2) Uneven teacher resources

With the continuous development of social science and technology, the demand for teachers of digital media art specialty is increasing. The digital media art specialty involves a wide range of

disciplines and a variety of project innovation contents. Different Guangdong universities have different requirements for teachers' personal knowledge level, artistic creation ability and innovation and entrepreneurship practice ability, Guangdong universities have a certain deviation in the strength of teachers, resulting in the problem of uneven resources of teachers. Teachers are the enlighteners and leaders of students. A balanced faculty is conducive to the rational use of innovation and entrepreneurship education resources for practical training in Colleges and universities in Guangdong, continuously improve the students' career development level, and promote the integration and improvement of digital media technology. The weak and uneven faculty is difficult to improve the practice level of innovation and entrepreneurship.

3) The scope of student participation is small

The traditional classroom model focuses on imparting knowledge and supplemented by practical training, which is not conducive to mobilizing students' interest and initiative. The innovation and entrepreneurship education model limited to the traditional classroom has a small range of students' participation. Innovation and entrepreneurship education focuses on cultivating students' innovation and entrepreneurship ability. Each student's interest and expertise vary from person to person. The innovation and entrepreneurship education model that gives full play to his personal expertise is conducive to guiding students' participation in the development of practice, while the innovation and entrepreneurship education model based on concept is not conducive to guiding students' entrepreneurial positioning. Guangdong University Digital Media Art Innovation and entrepreneurship for students of this major, the typical cases and practice platform of innovation and entrepreneurship education can effectively stimulate students' independent initiative, such as college students' digital media art innovation and entrepreneurship plan competition, digital media art innovation and entrepreneurship incubation plan, etc. If students' enthusiasm is low and the scope of participation is small, it is difficult to carry out the follow-up guidance of innovation and entrepreneurship education.

3.3 Sustainability of education model

As an educational method and strategy, digital media art innovation and entrepreneurship education model in Colleges and universities in Guangdong affects the sustainable development of students' future career. The sustainability of education model is closely related to individual development. Most digital media art innovation and entrepreneurship education models in Guangdong universities have limited funds and training time in the process of practice, which is difficult to sustainably affect students' innovation and entrepreneurship ability under the condition of limited resources. The content of traditional classroom is limited, and the guidance of digital media art innovation and entrepreneurship education is lack of depth and breadth.

4. Exploration and practice of digital media art innovation and entrepreneurship education model in Colleges and universities in Guangdong

4.1 Online education, offline guidance

In terms of education mode, integrate the online and offline advantages of digital media art innovation and entrepreneurship education in Guangdong universities, realize the education mode of online education and offline guidance, and realize the combined development of theory and knowledge. The traditional digital media art innovation and entrepreneurship education model is limited to classroom education, and the teaching content is affected by the curriculum, which is not conducive to the further development and improvement of the innovation and entrepreneurship education model.

In terms of online education, based on the more powerful information knowledge and professional development platform of the Internet, the digital media art under the Internet relies on the needs of the development of the digital age, and the diversity and adaptability of online education are conducive to students' independent choice of innovation and entrepreneurship goals for content learning and mastery, At the same time, the learning advantage of repeatedly watching the online

digital media art innovation and entrepreneurship course promotes the consolidation and improvement of innovation and entrepreneurship knowledge. In the process of practice, students majoring in digital media art carry out targeted training and learning of the course to improve problem-solving efficiency and coping ability. Online education is conducive to making up for the ability level of college teachers, sorting and classifying by using the network courses of colleges and universities in Guangdong and the excellent network resources after screening, so as to meet the learning directions and fields of innovation and Entrepreneurship of different students, establish the awareness of teaching students according to their aptitude, promote the development of students' personality and make up for the imbalance of teachers.

In terms of offline guidance, it solves the problems of lack of practical application and teacher-student interaction of innovation and entrepreneurship education online. On the basis of learning the content of innovation and entrepreneurship online courses, students can solve problems through offline guidance of teachers or professionals, classroom communication and practical inspection. In case of regional and time problems, you can also answer questions through online social media and communication tools. The innovation and entrepreneurship education mode of offline guidance is to reposition teachers from "knowledge imparter" to "learning instructor", [3] promote the improvement and improvement of teachers' education and teaching ability, help students learn to analyze, sort out and solve problems, and improve students' practical ability while improving students' initiative. Facing challenges posed by novel coronavirus pneumonia, Guangdong universities are actively exploring innovative and entrepreneurial education models, organizing online teaching in a rational and orderly way, and realizing "stop classes without stopping learning" through online education. With the improvement of the epidemic situation, teachers and students face to face exchanges and guidance work under the line, so as to ensure the quality of education in Guangdong digital media art major. (See figure 2)

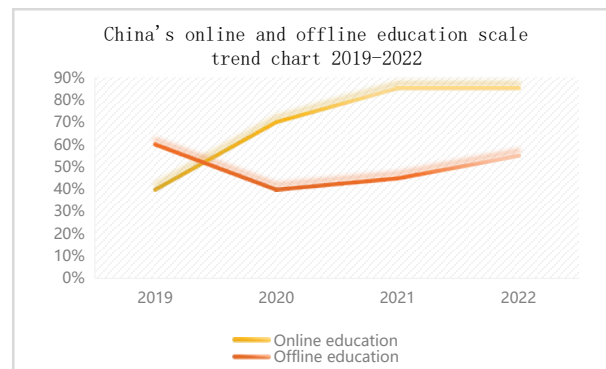


Fig.2 China's online and offline education scale trend chart 2019-2022

4.2 Give play to advantages and integrate Guangdong, Hong Kong and Macao

According to the implementation opinions of the Ministry of education on the construction of first-class undergraduate courses and the opinions of Guangdong Provincial Department of education on strengthening the construction of first-class courses in Ideological and political education, Guangdong Provincial Department of education will continue to strengthen the construction of learning platforms in Colleges and universities in 2019, improve the curriculum construction level of colleges and universities in Guangdong Province, and promote the improvement of the mode of online courses, Continuously improve the quality and content of online courses in Colleges and universities in Guangdong Province, give play to regional and resource advantages, accelerate and deepen the exchanges and cooperation between colleges and universities in the Great Bay Area of Guangdong, Hong Kong and Macao, and integrate the experience of innovation and entrepreneurship education model in Guangdong, Hong Kong and Macao, so as to promote the exploration and practice of digital media art innovation and entrepreneurship education model in Colleges and universities in Guangdong.

The construction of the Great Bay Area of Guangdong, Hong Kong and Macao has an important impact on Guangdong's economic and cultural development. Local colleges and universities are

often the educational and cultural center of their region. They have unique geographical and resource advantages to participate in regional economic and social development[4]. The courses of different universities have strong competitiveness and advantages. Many advanced course contents and construction ideas are an important way to explore the innovative and entrepreneurial education mode of digital media art in Guangdong Universities under the background of Internet. For example, Sun Yat sen University strives to promote the exchange and cooperation of the education platform of Guangdong, Hong Kong and Macao Dawan district. Sun Yat sen University exchanged with China Foreign Affairs Bureau in December 2019 and reached an agreement to sign the strategic cooperation agreement of Guangdong, Hong Kong and Macao Dawan District International Communication Research Center, so as to give full play to the discipline advantages and create a learning and exchange platform combining theory and practice. Taking advantage of the Internet, Sun Yat sen University actively strives for the establishment of digital media art innovation and entrepreneurship education platform in Guangdong, Hong Kong and Macao, absorbs entrepreneurial experience and academic resources from Guangdong, Hong Kong and Macao, and realizes the high-quality development of digital media art innovation and entrepreneurship education model in Guangdong universities.

4.3 Improve the structure and make use of resources

Improving the structure of innovation and entrepreneurship education and using resources to form their own advantages are conducive to the digital media art innovation and entrepreneurship education in Guangdong Universities under the background of the Internet, breaking the barriers of education and forming a new ecology of education model[5]. The systematic induction of online education resources in Colleges and universities in Guangdong is conducive to students' multi-level learning induction and summary at different learning stages, step by step, and improve the quality of digital media art innovation and entrepreneurship education platform. Offline, in addition to classroom teaching, digital media art innovation and entrepreneurship knowledge competition, proposal competition and entrepreneurship incubation projects are conducive to promoting the sustainability of innovation and entrepreneurship, It is also an investigation and test of students' knowledge and ability, and an important embodiment of teaching practice in Colleges and universities in Guangdong. For example, in September 2019, Guangzhou Academy of fine arts launched the offline exchange activity of graduates' follow-up visit, understood and learned the innovation and entrepreneurship situation and practical experience of excellent graduates through offline research, and improved the reform of education mode in understanding the company's development history, business model and development strategy[6]. At the same time, Guangzhou Academy of fine arts has actively issued relevant incentive policies and incubation funds for innovation and entrepreneurship. In order to better attract professionals, Guangzhou Academy of fine arts has established the innovation and entrepreneurship college. The innovation and entrepreneurship incubation base established by the college provides a broader platform for college students and valuable development opportunities for digital media art students, Through practice, constantly improve the digital media art innovation and entrepreneurship education model in Guangdong colleges and universities.

4.4 Expand the scope in combination with courses

Combining the course knowledge and expanding the learning scope in the way of promoting practical application by projects is conducive to the multi field exploration of digital media art innovation and Entrepreneurship Model in Colleges and universities in Guangdong. Relevant innovation and entrepreneurship projects are one of the sources of experience for students to incubate innovation and entrepreneurship. Good projects can promote teachers and students to understand the process and work content of entrepreneurship, summarize and reflect on the shortcomings and problems of the project. On March 25, 2019, Guangdong Provincial Department of Education issued the announcement on soliciting 2019 school enterprise cooperation and collaborative education project, encouraging schools and enterprises to cooperate, professional students to use their knowledge in work practice, and the experience and technology of enterprises

provide new learning contents for schools. The project funds are supported by enterprises through the integration of Internet resources and the strength of enterprises, Improve the improvement level of digital media art innovation and Entrepreneurship Model in Guangdong colleges and universities, and promote the training of professionals in Guangdong colleges and universities. In the expanded scope of school enterprise cooperation, the integration of learning and work promotes the combination of academic and technology, and promotes the cultivation of high-quality talents. For example, Guangzhou software college and enterprises have collaborate with them. In 2014, the "Internet plus software industry project innovation ecosystem" was established. The advantages of resources and school education mode were complementation, and their advantages were fully exploited. The mode of innovation and entrepreneurship education in digital media in Guangdong was transformed effectively, and the level of education was improved. Keep up with the development of the Internet era, promote the practice of digital media innovation and entrepreneurship projects, and provide excellent exploration cases of digital media innovation and entrepreneurship education model for colleges and universities in Guangdong.

5. Conclusion

The Internet era has brought new thinking and practical content to the exploration of digital media art innovation and entrepreneurship education mode in Guangdong universities. Online and offline advantages complement each other, change the innovation and entrepreneurship education mode, and integrate the exploration of educational resources in Guangdong, Hong Kong and Macao Bay Area. It is not only the reform and development of digital media art innovation and entrepreneurship in Guangdong universities, It is also the exploration and practice of the training mode of comprehensive professional talents. This study provides the theoretical and practical reference value for the innovation and entrepreneurship education mode of digital media art in Colleges and universities in Guangdong Province, promotes the multi-level integration of innovation and entrepreneurship education mode in Colleges and universities in Guangdong, improves the innovation and entrepreneurship education structure, and meets the development needs of the times. At the same time, different universities have their own advantages and disadvantages of digital media resources, strengthen the cooperation between schools and schools, schools and enterprises to learn from each other, make up for resource constraints, expand the scope of exchange and cooperation. Strengthening cooperation is an important way to improve digital media art innovation and entrepreneurship education in Colleges and universities in Guangdong.(See figure 3)



Fig.3 Research on innovation of educational model

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