

# Research and Practice of ‘Creativity, Innovation and Entrepreneurship’ Education and Training of Digital Art Majors under the Background of ‘Craftsman Spirit’

## -- Taking Qingdao Huanghai University as an Example

Chaoyu Li<sup>1</sup>, Lili Shi<sup>1</sup>, Yu Jian<sup>1</sup>, Wan Lei<sup>1</sup>

<sup>1</sup>Art College of Qingdao Huanghai University, Qingdao 266421, Shandong Province, China

\*Corresponding author: licy04@qdhhc.edu.cn

### ABSTRACT

Innovation drives innovation and innovation drives entrepreneurship. New era, new opportunity, accelerating industrial transformation and strengthening the innovation and construction of various industries to promote national employment are the main development points of China's overall development at this stage. ‘Craftsman Spirit’ has been a topic constantly mentioned during the transformation and upgrading of domestic industries in recent years. At this stage, the rapid development of the whole industry is very important. Digital art, as an art specialty, is a new specialty combining ‘Art and Technology’. The task of reform and innovation in the stage of higher education is more prominent. How to scientifically, reasonably, sustainably and popularize the education and training of relevant talents is of great significance.

**Keywords:** Digital art, Innovation, Entrepreneurship, Creativity, Craftsman spirit, Talent training

### 1. INTRODUCTION

With the rapid development of the information age, various industries at home and abroad are constantly changing under the influence of the progress of digital technology and the renewal of scientific and technological knowledge. At the same time, the training requirements of digital art related professionals in China's application-oriented colleges and universities continue to improve in the Internet environment, which requires art educators to reform the teaching mode in order to meet the needs of social development<sup>[1]</sup>. Under the background of ‘Craftsman Spirit’, cultivate digital art related professionals with the ability of ‘Creativity, Innovation and Entrepreneurship’ (Hereinafter referred to as ‘Three Innovations’), Carry out innovative talent training and education and teaching reform on the basis of craftsman spirit ‘Art + Technology’, So as to effectively and comprehensively solve the sustainable development of digital art related professionals in Colleges and universities in the future. Applied undergraduate talents, as the focus of China's education reform and development at this stage, have received

extensive attention from all walks of life<sup>[2]</sup>. Under the current national development situation, cultivating applied undergraduate talents with ‘Craftsman Spirit’ and ‘Creativity, Innovation and Entrepreneurship’ can meet the practical needs of China's economic transformation and development and industrial structure adjustment to a certain extent. It is also in line with the development goal of improving the talent mechanism of the modern education system and the government oriented goal of ‘Mass entrepreneurship and innovation’<sup>[3]</sup>.

The differences in regional culture and geographical environment have led to the formation of distinctive ‘Craftsman Spirit’ industrial clusters among countries<sup>[4]</sup>. The measures taken by countries for the ‘Craftsman Spirit’ in education and teaching reform will also be different. Represented by Germany, Japan and other countries, the development of its manufacturing industry has always maintained a high level and maintained vigorous vitality under the condition of market economy, the fundamental reason is that they have accurate talent training mode and accurate and effective education and teaching objectives. In the field

of digital art related industries, taking Germany as an example, German designers who pursue perfection in everything uphold their own unique ‘Dual System’ education system, Based on the law, it provides a carrier for the development of high-quality and skilled talents with craftsmanship spirit, and guides the steady formation of ‘Creativity, Innovation and Entrepreneurship’, Innovation and Entrepreneurship’. In addition, the German government pays attention to using laws to provide guarantee for the cultivation of ‘Craftsman Spirit’ in the manufacturing industry<sup>[5]</sup>. The promulgation of several laws and regulations integrates the ‘Craftsman Spirit’ into public education, It lays a foundation for standardizing the management of enterprise vocational education, promoting the industrial upgrading of ‘Creativity, Innovation and Entrepreneurship’, mobilizing the enthusiasm of market subjects and implementing the talent cultivation of ‘Craftsman Spirit’.

## **2. RESEARCH MEANING**

Since the reform and opening up, China's manufacturing industry has developed rapidly, and its comprehensive strength and international competitiveness have been significantly enhanced. However, there are still some problems, such as large but not strong industry<sup>[6]</sup>, weak innovation and poor entrepreneurial positioning.

At present, China's economy has changed from a high-speed growth stage to a high-quality development stage, especially the need to inherit and cultivate the craftsman spirit. Qingdao Huanghai university has always focused on the integration of the ‘Four Cultures’ of traditional culture, red culture, craftsman culture and innovative culture, and has run the ‘Four Cultures’ through the whole process of talent training. Among them, ‘Craftsman Spirit’ is a rigorous and serious spirit of excellence and the pursuit of perfection. The craftsman spirit is not only manifested in paying attention to details, elaborating and pursuing perfection, but also includes keeping pace with the times and being brave in innovation. ‘Craftsman Spirit’ is China's fine tradition, including professional ability, professional ethics,

integrity, industry ethics and other qualities, which has been pursued by people from all walks of life in China. Applied undergraduate can not only cultivate highly skilled professionals required by the society, combined with the industrial environment of ‘Creativity, Innovation and Entrepreneurship’, it can also have moral quality education, which plays an important role in China's transformation from a manufacturing power to a manufacturing power.

## **3. RESEARCH CONTENTS AND OBJECTIVES**

It focuses on how to take the practice of ‘Creativity, Innovation and Entrepreneurship’ as the guidance and the ‘Craftsman Spirit’ as the training standard in the education and teaching process of digital art related majors, so as to meet the training requirements of art related professionals in regional application-oriented universities, and carry out the research and Practice of education and teaching reform to adapt to the development trend with the concept of pluralistic integration and rigorous and scientific attitude. Taking the training of digital art related professionals of Qingdao Huanghai University as the starting point, build a theoretical system of ‘Creativity, Innovation and Entrepreneurship’ education and training under the background of ‘Craftsman Spirit’.

At present, digital art related majors of Qingdao Huanghai University include: Digital media art, Visual communication design, Film and television photography and production, Animation, environmental design, etc. Covering more than 70% of its own majors in the Art College of the University. The cultivation of ‘Craftsman Spirit’ in education and teaching should strengthen the integration between disciplines, reshape the curriculum system and improve the talent training mode with the ideas of ‘Creativity, Innovation and Entrepreneurship’ and ‘Art + technology’.

Taking classroom teaching and practical teaching as a breakthrough, innovate the in and out of class teaching system and practical teaching of digital art related majors(Figure 1):

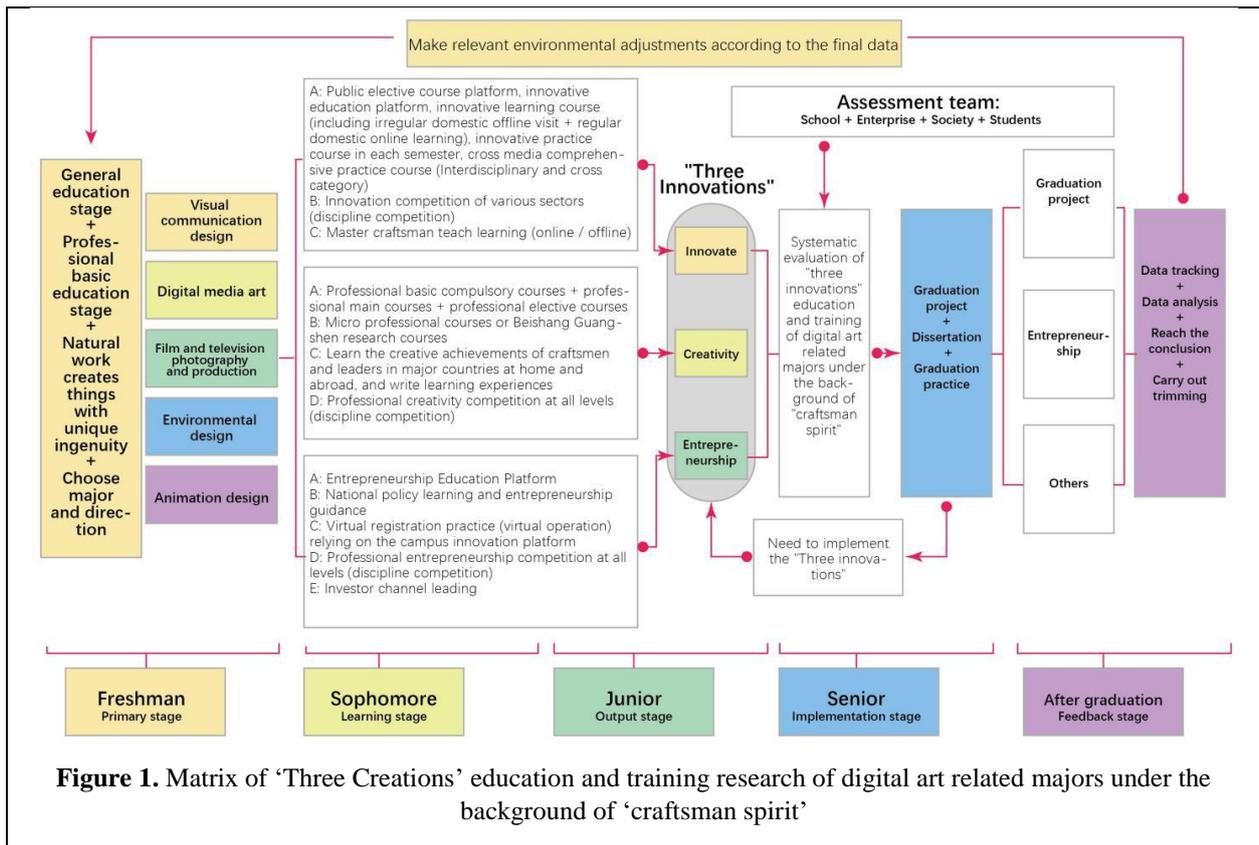


Figure 1. Matrix of 'Three Creations' education and training research of digital art related majors under the background of 'craftsman spirit'

(1) Classroom teaching: try to change the traditional single conceptual, cramming and classroom teaching, and replace it with case teaching, practical teaching, network teaching and innovation and entrepreneurship teaching. Social projects are introduced into the classroom, response design is carried out through basic 'Theory + Project' needs, and courses jointly built by enterprises and craftsmen are introduced. The results are transformed into objectives, forming a comprehensive methodology and practical data accumulation, and enriching various forms of education and teaching effects.

(2) Practical teaching: Practical teaching: 'Do more, speak more and think more', connect with cooperative enterprises and relevant industries in the region, actively participate in social projects, connect with Qingdao's 'Great Craftsman' project, aim at the transformation and upgrading of traditional state-owned enterprises and Qingdao's new urban positioning: build an international famous Marine City, integrate creativity, innovation and entrepreneurship, and enhance the hard strength of applied talent training.

#### 4. RESEARCH SCHEME DESIGN

First of all, we should improve the organization of the research group and clarify the division of labor among members. Actively investigate industry enterprise experts and talents of local 'Great Country Craftsman' projects, collect and analyze a large amount of data, and

track and investigate relevant cases. With reference to the typical representative university industries, industries and enterprises, do a good job in the preliminary preparation and preliminary research work of the subject research, clarify the research direction and formulate the research objectives step by step.

Relying on the advantageous discipline resources and industry resources of the University, build the framework of digital art professional group with the standard of 'Craftsman Spirit', actively broaden the channels and resources of 'Creativity, Innovation and Entrepreneurship', and broaden the training caliber of professionals. Through optimization, we can improve the pertinence of training, the interconnection and penetration of knowledge, the intersection and radiation of disciplines, and meet the social needs and foresight.

Secondly, according to the analysis, adjust some courses of digital art related majors in time to try teaching. Build a training system of 'Creativity, Innovation and Entrepreneurship' that meets the standard of 'Craftsman Spirit'. Build a curriculum system of 'General education + Professional education + Three innovation practical education + Curriculum and completion' under the background of 'Craftsman Spirit'. Focus on the teaching research of 'Craftsman Spirit' and 'Creativity, Innovation and Entrepreneurship': understand the research status by consulting books, magazines and searching the journal network, so as to provide sufficient theoretical basis for this research, and systematically

analyze and sort out these materials to form a literature research review; By comparing with the talent training mode of domestic top scientific research institutes and application-oriented universities, this paper summarizes the teaching application-oriented talent training mode and curriculum system of 'Creativity, Innovation and Entrepreneurship' under the background of 'Craftsman Spirit'; Summarize the research and practice of 'Creativity, Innovation and Entrepreneurship' teaching application-oriented model under the background of 'Craftsman Spirit', and summarize the construction path in line with the development characteristics of digital art related majors in Application-oriented Colleges and universities.

## 5. INNOVATION POINTS AND PRELIMINARY RESULTS

Starting from the school level project, this topic specifically analyzes the general environment and industrial characteristics in the region, and reflects the scientific and systematic characteristics of the 'Creativity, Innovation and Entrepreneurship' education talent training mode under the background of 'Craftsman Spirit' in teaching. Combined with the school's orientation and training objectives of the 14th five year plan in the new era, we should take points from all aspects and step by step. Under the implementation of this plan, we will strive to gradually form a bright spot of digital art industry discipline with the school running characteristics of "four cultures and education" of Qingdao Huanghai University in the next five years, and establish the leading position of digital art discipline of Qingdao Huanghai University in the province.

## 6. CONCLUSIONS

Under the background of 'Craftsman Spirit', the cultivation of digital art related professionals with the ability of 'Creativity, Innovation and Entrepreneurship' (hereinafter referred to as 'Three Innovations') is based on the overall orientation of the country, the 14th five year development plan of Shandong Province and Qingdao City as the benchmark, and the 14th five year development plan of Qingdao Huanghai University as the program. Through the pilot reform of digital art related majors in the school, it meets the social and industrial needs, conforms to the mainstream of social development, adapts to the current all-round education and teaching reform trend implemented nationwide, and forms a 'Creativity, Innovation and Entrepreneurship' education and teaching system under the background of representative 'Craftsman Spirit'. This is to communicate and discuss with sister colleges and universities in Qingdao or the province, and carry out pilot reform or improvement schemes, which meets the needs of national industrial transformation, social talent ability, education and teaching transformation, professional construction

planning, highlights of school running and students' learning objectives.

## AUTHORS' CONTRIBUTIONS

Chaoyu Li conceived the idea of the study. Lili Shi performed the experiments. Yu Jian, Wan Lei analyzed the data and wrote the paper.

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