

# Interdisciplinary Talents Cultivation of Animation Education in Universities Based on University-Enterprise Cooperation Mode

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**Abstract:** The development of animation industry not only brings challenges to Chinese animation education, but also provides more practice opportunities to the development of animation education. The most important problem for animation education is about talent cultivation, that is, how to resolve the conflict between the talent cultivation in animation education and market needs. Based on the analysis on the talent demand of present animation industry and the discussion on the talent cultivation mode of animation education in universities, this article focuses on the topic "interdisciplinary talent cultivation in animation education in universities", proposing ideas and plans related to the development of universities' animation education, so as to promote the development of Chinese animation education.

**Key words:** Animation education, interdisciplinary talents, talent cultivation, university-enterprise cooperation.

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## 1. Introduction

The features of cultural and creative industry has determined that it is necessary to cultivate students' innovative spirit and practical ability. Li Wuwei, President of Shanghai Creative Industry Association thinks that "as the age is moving from world economy to knowledge economy, innovative industry is emerging that embraces innovation, individual creativity and stresses the role of culture and art on supporting and promoting economy" [1]. Animation is one of cultural and creative industries. In recent years, with the strong support of Chinese government on the animation industry, animation education in domestic universities is facing big challenges. First, more and more universities set up the animation major with the lack of qualified teachers; thus, the students cultivated in these universities are not qualified to work for the enterprise. Second, the mature business model and price advantage of animation-cartoon industries in Western countries and Japan make China's domestic animation companies suffer a setback. As an integrated discipline combining technology and art, animation major has higher requirements on students' hands-on ability and comprehensive quality. How to cultivate interdisciplinary talents, which can withstand the enterprise's test to meet the employment needs of the enterprise has become the focus of animation education in universities.

## 2. Interdisciplinary Talent Cultivation Being the Inevitable Trend of Animation Education's Development in China

In China, the development of animation industry changes from demanding for professional talents to demanding for interdisciplinary talents. The interdisciplinary talents of animation industry refer to those who master the skill of creative animation production and other skills, such as UI design, filming, video editing and directing, interactive applications, digital design and web design. The animation education in China has developed from Beijing Film Academy being the only one to more than five hundred universities setting up the animation major. At present, although there are annually more than ten hundred thousand graduates of animation major, the talent supply and market demand is still imbalanced, which seriously restricts the development of Chinese animation industry and supporting industries. The main reason is that the comprehensive ability of the student is not up to the employment standards of the enterprise rather than no enough students of animation major, resulting in that the enterprise cannot get more qualified employees while the student cannot find suitable jobs. The imbalanced development of animation education and the inconformity between the demand of the enterprise and the goal of universities' talent cultivation have been caused by old curriculum systems of universities, outdated ideas, disjunction between theory and practice, disjunction between art and business, single cultivation goal, shortage of teachers with skills and practices, and so on. Therefore, cultivating interdisciplinary talents is catching more and more attention in each university. As a major required for skills and practices, animation needs much time and many real cases for training, and these conditions can be satisfied only in the university-enterprise cooperation mode. In the report on the 15th National Congress of CPC, it has been clearly proposed that, conditioned scientific research institutions, colleges and universities should enter into enterprises in different ways or cooperate with enterprises, taking the industry-university-research cooperative road. With the advent of Internet age and the popularization of new technics and new ideas, the development of animation enterprises has had a more and more strong demand for interdisciplinary talents, and the interdisciplinary talent cultivation has become the inevitable trend in the development of animation education in China.

*2017 Analysis Report on Development Research and Trend of Chinese Animation Industry* has conducted specific investigation, research and analysis on animation industry-related factors, analyzed the development trend and competition trend of animation industry, potential problems in technical standards, market scale and animation industry as well as sticking problems in the development of animation industry, assessed the investment value of animation industry and benefits of animations, and provided constructive suggestions for investment decision makers in animation industry and animation enterprise operators [2]. The premise of all the improvements, however, is the talent cultivation.

### **3. University-Enterprise Cooperation Being an Effective Way of Cultivating Inter-Disciplinary Animation Talents**

University-enterprise cooperation is a kind of education mode aiming to take full advantages of universities and enterprises to ensure the quality of talent cultivation. And its essence is that the talents cultivation in universities is market-oriented and combines with the development of enterprises, society, and industry, achieving a positive circle and a win-win situation, so as to promote social and economic development and prosperity [3].

#### **3.1. University-Enterprise Cooperation Promoting the Reform of Cultivation Plan**

With China's animation education starting late and the demand for animation practitioners increasing with the development of animation industry, animation major has been set up in many universities overnight. Cultivated students, however, cannot satisfy the requirements of the enterprise and society due to the shortage of qualified teachers, single cultivation mode, outdated curriculum system, disjunction between major-setting & talent cultivation and social needs, and other factors, thus resulting in a huge

waste of human resources. Sun Jiacong has written in his book *Promoting Healthy Development of Chinese Animation Education by Referring to Advanced Foreign Ideas* that, the motivation of animation education derives from the demand of animation industry for talents, and the talents cultivated in the animation education serve the animation industry and the society [4]. At present, some specialized universities with a long history have realized the problems and devoted to reform the talent cultivation mode, but, most universities still insist on their original teaching methods which is not suitable for the industry development, resulting in the design ideas and practical ability of students lagging behind, thus the employment demands of the society and enterprises cannot be met. The effective way to solving these problems is taking the industry-university-research cooperative road which is advocated by the government. Only by taking the industry-university-research cooperative road, conducting the university-enterprise cooperation and adjusting the talent cultivation plan according to the enterprise and social demands, the universities can make breakthroughs and the student can satisfy more requirements in a larger market.

### **3.2. University-Enterprise Cooperation Promoting Subdivision of the Major**

As an audio-visual art based on the film and television art and with vivid imagination and strong comprehensiveness, animation is a multidisciplinary and diversified interdisciplinary with the specialized characteristic of assembling technics, art and new media [5]. At present, the curriculum of animation major in most universities basically includes basic art courses and basic technical courses. The curriculum settings are distinguished from those of traditional art majors, but, they still cannot completely meet the actual needs of the animation market. Animation is an interdisciplinary major, thus its course cap is large and its curriculum includes various courses, which requires the student to study in different aspects and learn relevant expert knowledge. Present teaching systems in universities can only classify the branches related to the major in general terms, and then set corresponding courses so that students can have a general idea about the overall process after learning these courses. Such a kind of superficial studying results in that students have only learned general knowledge and are not specialized in any field even after graduation. In a word, present teaching systems cannot conduct differential education based on students' interests and development direction and implement the targeted cultivation combining with the specialties of students. The university-enterprise cooperation, however, can make universities deeply understand present industry demands, so that universities can set the curriculum with clear objectives, thus promoting the appropriate subdivision of the major.

### **3.3. University-Enterprise Cooperation Promoting Sustainable Development of Animation Major**

The university-enterprise cooperation has promoted the development of China's higher education on animation major, which will be reflected on following two aspects. First, students study well-established theories in school and improve their practical abilities in enterprises' projects, thus applying theories to practices while further understanding theories through practices. In this way, university-enterprise cooperation changes traditional inculcation education and fully motivates students. Second, in the practice teaching, facilities of most universities cannot conduct multi-disciplinary teaching and the upgrading of the facilities and devices does not keep pace with the industry development. The university-enterprise cooperation not only make students access to advanced devices and technical knowledge of the industry in enterprises, but also ease universities' funding pressure to update the experimental devices and facilities. In conclusion, the university-enterprise cooperation improves the traditional talent cultivation mode, thus graduates can better satisfy the requirements of the animation industry on talents.

### **3.4. University-Enterprise Cooperation Serving as a Bridge between Animation Major and Schools, Enterprises, Students and Society**

University-industry cooperation enables students to apply theoretical knowledge into the enterprise practices. It integrates multidisciplinary resources in the school with industry's equipment and techniques so that both school and enterprises draw on experiences from each other and achieve the resource sharing. Hence it is an effective way to greatly improve the overall quality of students majoring Animation and quality of cultivating professionals [6]. As animation professionals, after all, contribute to the society, they are the fruit of school, enterprise and country. That is, maximizing the interests of university-enterprise cooperation entails joint effort and resources from many aspects because it is a bridge for mutual connection and communication.

## **4. Interdisciplinary Animation Talents Cultivation Taking Cultural and Artistic Innovation and Employment Ability as a Core**

School of Art and Design of Xi'an University of Technology has remained committed to exploring the effective U-I cooperation modes to enhance the teaching effects of art teaching and students' practical ability. Based on this idea, School of Art and Design encourages all majors to set up university-industry cooperation laboratory. In 2013, the collaboration was established between Animation Major in Department of Image Animation and many enterprises such as Shaanxi Flybird Cultural Development Co., Ltd., Beijing HXSD Science and Technology Co., and Xi'an Lihou Research Institute of Innovative Technology. The school and one of the enterprises set up Xi'an University of Technology-Lihou Workshop of Digital Animation and Innovation, which covers an area of 60 square meters and includes 22 office cubicles (See Fig. 1). Drawing on the mode of high-tech business incubators, the workshop is intended to develop students' innovation and entrepreneurship (I&E) capability in the spare time by integrating enterprise and schools' resources. Meanwhile, an innovative team mode of tutors, enterprise mentors and student groups is formed in the workshop. Such mode can elevate teaching effects during the cultivation of practical ability, practicing the cooperation awareness under the form of enterprise management and enhance the innovation ability in the entrepreneurial practices. Currently, we have trained teams in the game design, User Interface (UI) design, virtual design and the brand cultivation of We-Media. And UI team has become the long-term supplier of HSBC Software Development (Guangdong) Limited (HSDC), which is one of subsidiary companies of Hong Kong and Shanghai Banking Corporation (HSBC).



Fig. 1. Xi'an University of Technology-Lihou Workshop of Digital Animation and Innovation.

Apart from the on-campus innovation incubation, professional teachers and student teams in the workshop, together with enterprises, have applied the supporting I&E project called "Product Development

of Guanzhong Cultural Brand”, which is hosted by Science and Technology Bureau of Beilin District, Xi’an. The project has been approved with supporting funds reaching 50, 000 yuan. Also, an entrepreneurial workshop founded by Zhai Jiajia, the 2016 graduated postgraduate, has settled in the innovation base of Xi’an Lihou Research Institute of Innovative Technology and got support and development (See Fig. 2). Based on that, Zhai set up Xi’an Creator Film and TV Media Co., Ltd. Generally, those achievements have not only enhanced I&E awareness for students, but also strengthened their ability of putting knowledge and skills into practice, intensifying the teaching through practice.



Fig. 2. Entrepreneurial workshop created by the graduate called Zhai Jiajia, focusing on developing cultural innovative products.

The mode of innovation group raises more comprehensive requirements for involvers’ artistic attainment and comprehensive ability. The university-industry cooperation that regards I&E capability as the cultivating goals breaks the traditional mode. It is a new try to cultivate interdisciplinary students with well-rounded artistic quality, offering new thoughts to adjust the directions of future talent cultivation.

## **5. Ideas and Plans of Interdisciplinary Animation Talents Cultivation**

At present, as for the interdisciplinary animation talents cultivation, universities and enterprises should strengthen communication with each other and jointly make cultivation plans. And, the plan should be based on the curriculum system of animation major in universities, and aim to strengthen the talent cultivation and improve students’ comprehensive quality, thus raising the employment rate of students.

### **5.1. Universities and Enterprises Strengthening Communication and Jointly Undertaking Related Competitions**

Enterprises start related competitions in universities, enterprises raising themes of the competition, providing necessary materials and setting awards; universities organizing students to take part in the competition and providing theoretical and technical guidance; and students taking part in the competition on his own or in a team to respond to the school and enterprises (See Fig. 3). The competition can give full play to students’ creative thinking, providing enterprises new ideas on products and projects. In the competition, students design works under a certain theme, which develops the practical ability and teamwork ability of students; in the stage of reporting the project proposal, students’ ability of expressing their design ideas and describing their works is improved; and, in the evaluation, comparison and interaction stage, students can communicate with enterprises thus getting the latest information about the industry and market needs, and they can find their own advantages and disadvantages by comparing with



other people thus promoting their comprehensive qualities.

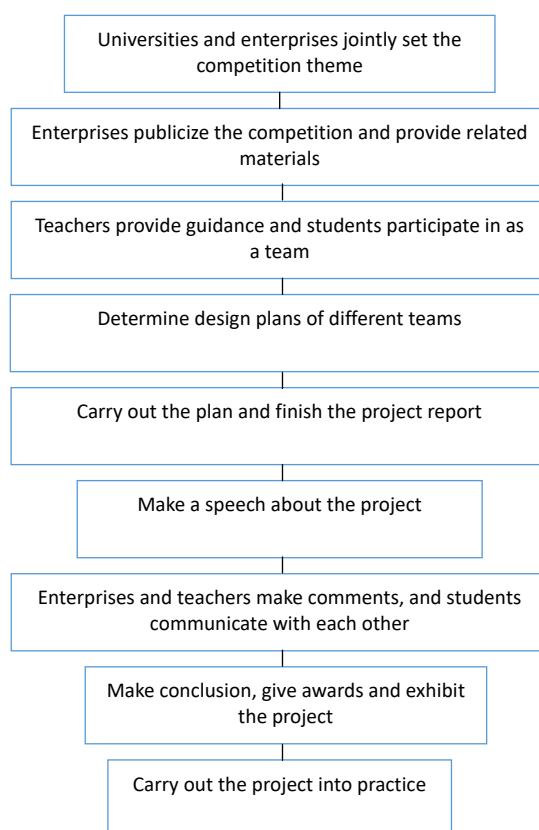


Fig. 3. Processes of competition jointly started by university and enterprise (Source: Drawn by the author).

## 5.2. Taking Scientific Research Projects of Teachers as Examples to Be Analyzed in Classes

With the development of animation industry, students not only need to acquire a lot of professional knowledge, but also need to possess the independent thinking and high scientific research abilities. Scientific research projects that teachers of universities participated in generally are prospective in animation industry with advanced technics, most of which are projects cooperating with enterprises or institutions. Taking the scientific research projects of teachers as examples in classes, students can understand basic ideas and study methods of scientific research projects through the analysis on the examples. At the same time, encouraging students to participate in teachers' scientific research projects so as to understand the actual need of animation industry from enterprises involved in projects, improve students' ability of solving problems, inspire students to extract their ideas in practices and further develop students' thinking applying ability..

## 5.3. Cooperating with Enterprises and Building Cooperation Platform in Universities

Universities are with good teaching management conditions, strong academic atmosphere and qualified teachers. By cooperating with enterprises and building cooperation platforms in universities, universities can conduct projects in a relatively independent space, which facilitates teachers to organize and manage students and provides a transition platform for students. Teachers can get the project information and the experience of carrying out a project from enterprises, assign students participating in the project according to their interests and specialties, and guide students to finish the project through teamwork. When carrying out the project, enterprises can periodically provide corresponding technical training in universities and

teachers provide theoretical guidance, so that students can improve their comprehensive ability after participating in the entire project. The cooperation platform provides enterprises opportunities to select excellent students and excellent graduates who have participated in projects provided by the platform can directly be on board by recommendation, thus saving the cost of new employee training and providing more and better job opportunities for students. Project income can be fed back to the construction of university-enterprise cooperation platform, providing financial support for experimental devices and practices, thus achieving sustainable development of the cooperation platform. Universities and enterprises organize industry-related communication lectures, academic reporting activities and project experience sharing activities so as to enhance the communication and cooperation between enterprises and teachers and students, create an open teaching environment and improve the industry-university-research cooperative teaching mode.

#### **5.4. Improving Internship Courses of Senior Students**

In universities, the curriculum of senior students is arranged with internship courses. As for the internship course, most universities have low requirements on students with no limitation on the place of internship, and students only need to submit the information form of internship unit after the internship. Some universities, however, will take the unified management, uniformly recommending students to enterprises that cooperate with the university. Both of these two management styles are with disadvantages which is not conducive to effectively carry out the internship of students. Universities should strengthen communication with enterprises to fully understand present industry needs; cooperate with more high-quality enterprises, providing more choices for students; and make talent cultivation plan after discussing with enterprises. Moreover, universities should take different ways to teach students according to their interests, encourage students to choose the internship unit on their own and provide corresponding vocational guidance.

### **6. Conclusion**

The animation education in universities shoulders the important responsibility of transporting talents to Chinese animation industry. With the development of animation industry, its demand for interdisciplinary talents will gradually increase. Therefore, universities need to break traditional teaching mode, strengthen cooperation and communication with enterprises, and broaden and deepen the university-enterprise cooperation. The university-enterprise cooperation can improve the practical ability and comprehensive quality of college students, relieving the employment pressure of graduates; improve comprehensive teaching level of universities in a certain degree; and provide a way for enterprises to introduce high-quality talents. In a word, the university-enterprise cooperation promotes the further development of Chinese animation industry, truly achieving win-win cooperation.

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