# **Animation Industry Development and Design Practice Innovation Research**

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Abstract: The development of China's animation industry has been very backward. With the rapid development of China's economy, the development of the animation industry has improved to some extent, but it is basically in a weak position compared with developed countries. For example, in Japan, animated image design is the world's first, animation style is also novel, and China has been in the status of imitation and reference, the animation character design lacks novelty, and over-learning from other countries' animation styles also lost Own characteristics. So how do you find a road to animation with ethnic characteristics? The key to this is the innovation of animated character design, which broadens the thinking and vision of Chinese animators. Through the observation and analysis of the current domestic animation market, this paper explores how to improve the innovation ability of animation.

#### 1. Current Status of Chinese Animation Image Design

Nowadays, animation plays an important role in our lives. It adds a lot of fun to us. At the same time, different cartoon characters can also reflect the characteristics of different countries. For example, the 2008 Olympic Games mascot can fully reflect our friendly and harmonious concept of governing the country. Not only that, but also in the media advertising, games, movies and other platforms, the role of animation plays an important role. It can be said that in today's multimedia era, The importance of animation design will receive more and more attention.

It is undeniable that compared with developed countries, the development of Chinese animation is still in its infancy. [1]In many places, we need to learn from it. However, our animators should realize that they should learn from others rather than imitate others. What needs to be learned is the idea that developed countries insist on innovation. The cartoon characters in Chinese animation and games generally lack individuality, and people can hardly remember them deeply. Especially in some cartoon characters, we can often find the shadow of Japanese anime, without our cultural characteristics, such an animation derived from imitation. Industrial roads are difficult to make breakthroughs in the future development path. Of course, the author's significance is not to let foreign animation design learn and learn, but to grasp the "degree", now look at our domestic animation market, basically ET animation, we need to learn from the design innovation of foreign cartoon characters Innovate, maintain its cultural style, and inject new vitality into the design of Chinese animation.

Some of the courses offered by the animation design profession are relatively isolated. The courses are not well connected. What are the majors they study? What course is open? What will they cultivate? Nothing, so they can't work in this area. [2]Its characteristics are as follows:

## 1.1 The style of the work is monotonous and lacks national characteristics.

At present, hundreds of colleges and universities in China have opened animation design majors or related courses. The college animation design profession has become homogenized in education and teaching. Most of the majors are based on art and computer application software, almost all The students' works are stereotyped, which has a certain gap with the actual operation of the animation industry. Animation students must have a certain artistic foundation, but they also need systematic learning, including animation production software, animation production process, design concept

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training, and industry situation training.

# 1.2 Talent training does not match the market

There is a disconnect between the talents of the animation design profession and the market demand. Students can't find a job after graduation, and they are forced to change their careers, resulting in waste of resources. In addition to the open curriculum and hardware, another important factor in the professional development of the university is the professional skills of the teachers. The teachers employed by the school may have been the best in the industry. When they go to school to teach, they become a means of earning a living. At the time, their professional skills were outdated and their knowledge remained at the level of a few years ago, which did not meet the needs of professional development. Therefore, it is necessary to strengthen the training of professional teachers.

## 2. The Analysis of Chinese Animation Design Courses

# 2.1 The combination of theoretical teaching and practical teaching, constructing a practical teaching curriculum system

Based on the preliminary investigation of the demand for high-skilled talents, animation design and production professional requirements, relying on the professional steering committee and industry professionals, the characteristics of different positions and post groups in the industry were analyzed, and the professional skills, structure and elements were determined. The ability that graduates should possess, and the structure and elements of these skills are decomposed into all practical teaching links, and a practical teaching curriculum system that complements the theoretical teaching system is established, which highlights the cultivation of professional and practical abilities. [1]In the design of the practical teaching curriculum system that highlights professional ability and practical ability, the following three aspects are mainly considered:

- (1) According to the practical teaching level and vocational skills, according to the basic skills-professional skills-integrated skills training path, organize teaching through practice training, so that students can conduct training, experiment, and then actual work in the school.
- (2) According to the characteristics of animation design and production, adopt the teaching mode of "Geneng integration", "school-enterprise cooperation" and "learning to work together" to strengthen the integration of theoretical and practical courses.
- (3) School-enterprise cooperation, according to the needs of the employer, work with the employer to formulate practical teaching plans and contents, and cooperate with the teaching conditions of teachers, technology and equipment through the two teaching points of the school and the employer. At present, the practice teaching curriculum system of animation design and production adopts the "gradual" practical teaching curriculum system. According to the order of basic ability, professional ability and comprehensive ability, the mutual penetration, promotion and spiral formation are realized, and the basic quality is formed. A practical teaching system with basic and business capabilities and comprehensive capabilities as the goal. According to the different objectives of cultivating basic skills, professional skills and comprehensive skills, practical links should be established that are compatible with the theoretical teaching system.

The cultivation of professional ability is realized through the understanding of internship, individual (knowledge point) training, course training, professional operation and comprehensive training; the comprehensive ability is mainly realized through graduation training, job internship, social practice and various skill competition activities. Actively explore the development of professional skills in a real or simulated environment, highlighting the practicality, openness and professionalism of the teaching process.

# 2.2 Research and teaching of animation design

Higher education in the 21st century is a combination of scientific culture and practical skills, and cultivates applied talents with innovative spirit and practical ability. With the rapid

development of the animation industry, the professional skills and cultural accomplishments of animation practitioners are put forward higher requirements, and professional talents with strong professional knowledge and professional quality should be cultivated. This requires the curriculum design of the animation design profession to be different from other professions, that is, to combine the actual needs of the industry development, and focus on cultivating students' professional innovative thinking and practical ability. At the same time, it also puts forward requirements for those engaged in animation teaching. Teachers should not only pay attention to the professional direction, but also master the knowledge points and related teaching contents, and cooperate with each other in teaching[2].

# (1) Combine the laws of market development and clarify training objectives

The 21st century is an era of international knowledge economy. It has high requirements for the training of professional talents: the cultivated talents should have solid basic skills, extensive knowledge, certain professional knowledge, practical ability and high quality. In other words, we must broaden our knowledge of science and technology, master the basic knowledge of work related to work after graduation, focus on the ability to acquire knowledge, independent thinking and innovation, and improve our moral, cultural and psychological qualities.

# (2) The specific situation of animation professional

At present, the animation design profession is a combination of art, animation and computer animation design and production. These two majors have different requirements for students. The animation art major is a combination of professional courses and cultural courses. When students enter the school, they have a certain art foundation but lack computer knowledge. After graduating from college, they learn on the basis of the original art. Among them, the computer animation design and production major is learned through cultural courses, although there is no artistic foundation, but there is no artistic foundation. You can come to school and study art. No matter what kind of college entrance examination method, there are deficiencies in professional training. Therefore, we should teach according to the students' ability and require students to have different professional sources. The setting of professional courses should be different.

# (3) Rationalization of professional settings

Professional settings are an important indicator of talent development.[3] The syllabus is an important criterion for measuring the quality of professional training. The standardization and implementation of the syllabus directly affects the quality of talent training. Professional courses should be interrelated and decentralized. This is a shallow and deep Difficult process. Since the curriculum of this major is closely related to market demand and professional characteristics, emphasizing practicality and increasing the proportion of practical courses will not only help to further improve students' practical ability and practical operation ability, but also help to cultivate more professional and technical personnel.[2] The ore that seeks market demand. Therefore, animation design is not the study of art and computer application software. The animation design courses are divided into cultural cultivation, professional theory courses, professional basic courses, professional skills courses, professional development courses, etc.; animation design majors develop corresponding syllabuses according to different academic years and Courses, professional learning is divided into three stages. Namely: professional basic stage (professional theory course), professional core stage (professional basic course, professional skill course), professional practice stage (professional skill course, professional development course, professional ethics education). Among them, the main teaching task in the basic stage is to master the basic knowledge and professional knowledge before the study, to cultivate students' interest in learning, logic of thinking, good learning style and correct learning methods, and lay a solid professional foundation for the next stage. The main task of the core stage of the profession is to continue to learn basic skills and professional skills, further expand knowledge, and improve professional thinking and professional skills. The main teaching task of the core stage of the profession is professional innovation practice. For some animation design related units, the practice is no longer empty talk, and the creation of the works is in line with the market and professional development.

(4) Specialized development should be market-oriented, with the core competitiveness as the

core of the professional development of animation talents, and to cultivate the core competitiveness of animation design and production talents, that is, to accurately express the various expressions and body language of the characters with ANIM Ability. Because human expression and body language are the most difficult to understand and express, and the animation is characterized by the design and production of various cartoon characters' expressions and movements, which allows people to understand the designer's meaning at a glance. Therefore, for the animation design professionals, if they can accurately express the expressions and actions of the characters, they will master the core technology of the animation industry of advanced application talents.

(5) Conduct school-enterprise cooperation. Carry out school-enterprise cooperation, strengthen the combination of production, study and research, combine enterprise projects with teaching cases, and use enterprise projects as classroom operations or training programs for students, so that students can transform theoretical knowledge into practice and enhance innovation awareness and professional skills learning. At the same time, it strengthened the relationship between professional construction and market demand, and cultivated high-level applied talents with solid theoretical knowledge, excellent technology, high quality and strong sense of innovation.

## 3. The Premise and Method of Improving the Ability of Innovative Thinking

The so-called innovation is to break the original way of thinking and break the shackles of inertial thinking. In daily life, people will unconsciously accumulate life experience. Through long-term experience accumulation, they will make regular judgments on certain things. The inertial thinking mode itself has no problem. This is the embodiment of human active learning. However, in industries with high creative requirements such as design, inertial thinking has become a "taboo".[3] It will enable people to move along established paths, losing innovation and a unique drive. According to the author's many years of teaching experience, many students can't get out of the "weird circle" of inertial thinking, which seriously hinders the cultivation of students' innovative ability. For example, designing a sword, many people will immediately present a specific image in the brain. The sword is mainly composed of three parts: the handle, the hilt and the scabbard. This is the mainstream style, as a weapon often appearing in Chinese weapons. The sword is no stranger to the Chinese. Therefore, it is difficult to design and change in shape design, and the product is mediocre and difficult to impress. If you want to give people an indelible memory, first of all, you need to work hard to design innovation, increase the implantation of art, such as exaggerated ways, to change people's understanding of traditional style, regardless of the shape of characters, weapons. How to break the inertia thinking? The author believes that when designing shapes, we should not draw conclusions easily. At the same time, we can design multiple schemes, and finally refine the characteristics of each scheme. After careful thinking and refinement, we try to increase the difference between animation and reality, and get rid of inertial thinking.

The author has done a long-term research on the innovation of character design, and summarized various ways to improve the ability of design innovation.

#### 3.1 Association method

The key to the Lenovo approach is divergent thinking, which is the earliest mental illness used abroad to analyze mental illness. By using free imagination, it can be judged and analyzed through the description of the patient. In order to improve the designer's ability to innovate, the author applied the idea to the animation research and achieved good teaching results. The following is the specific content of the Lenovo law:

## 1) Waterlogging Association

In daily life, we often see different water marks, such as watermarks on glass, shoe prints on the floor, stains on the walls, and so on. As long as we look closely, we will find that the shape of these water stains is very strange. Through proper association, some of them look like baby faces. They are somewhat like a mountain or some small animals. There are many interesting inspirations that you can modify slightly. These images are used to obtain a new type of character.

2) graphic association

"Graphic association" is the effect of distortion and blur caused by the special effects of existing images and the use of computer software. In the later processing and creation, a new character model is created, such as the handle becomes a fan, Plants become animals.

#### 3.2 Local variational method

In China's animation design, the local variational method is often used, mainly through the local processing of the existing animation model, usually by means of increasing, reducing, expanding and shrinking, expanding the character's head in a well-designed cartoon character. Changes in the hands and hands often make the character look more visually impactful. As we all know, in China, almost all men, women and children know which little hero, what are the main characteristics of this role? The key is its "three-headed and six-armed". As long as two heads are added to a common character, two pairs of arms are added, and the viewer automatically associates this character. There are many other examples.

#### 3.3 Dislocation method

The concept of "misplacement" is very special. It needs to completely break the limitations of traditional concepts, such as destroying the order of animated characters and redefining animated characters. In the classics of The Waste Land, there is such a story. After the emperor collapsed, the sky became an eye and the navel became a mouth. In fact, this is the earliest method of dislocation used by the ancients, usually using the "misplacement method" to shape the monsters and negative characters in the animation works.

## 3.4 Elemental combination method

The "element combination method" also needs to break the convention, extract and combine the excellent images of various things, and finally design a novel animated image. For example, the horse itself mainly depends on "running". In order to achieve the effect of speed increase, a set of wings can be added to the horse, so that once it shakes, it becomes a "Tianma" and can fly freely in the air, which adds to the people. More imagination.

#### 4. Conclusion

The Innovation has always been the top priority of animated character design. Excellent animation works can always break the tradition, giving people a fresh feeling and enhancing people's impression. In short, the author hopes that through the study of innovation ability training, this paper will play a positive role in promoting the development of Chinese animation.

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#### References

- [1] Liz Faber, [United States] Helen Orte. Animation has no limits. Shanghai People's Fine Arts Publishing House, 2004.
- [2] Arnheim. Art and visual perception. China Social Sciences Press, 1993.
- [3] Li Tie, Zhang Haili. Animated character design [M]. Tsinghua University Press, Beijing Jiaotong University Press, 2006.