

Research on the Animation Education Model of Japanese Functional Composite Higher Vocational Education

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Abstract: Aiming at the problems of animation education in higher vocational colleges, such as unclear training goals, insufficient teachers, backward curriculum system and educational methods, this study analyzes the problems of animation vocational education in China based on the functional compound theory and the Japanese animation vocational education concept, and puts forward improvement measures. Starting from the competitive environment faced by higher vocational schools in China, this paper summarizes the components of professional training programs in higher vocational schools, revises the planning of animation professional training programs, gives solutions, and carries out experimental verification, in order to provide some valuable references.

1. Introduction

The large-scale opening of animation major in China does not match the actual needs of society, and does not reach the expected goal [1]. It is necessary to study the advantages of animation vocational education in developed countries, reflect on the existing problems of animation vocational education in China, draw on advanced talent training concepts, and improve the animation education training mode in higher vocational colleges.

The rapid rise of Japan's animation industry is the country's third pillar industry, and also enjoys a worldwide reputation. There are many animation-related enterprises and animation schools in Japan, and there are also abundant theoretical research materials [2]. Chen Zhimin pointed out that animation education has risen in recent years, but animation is a popular and immature major in our country at present, and we should start from the curriculum setting of animation major [3]. Compared with Japan, China's animation education is broad, not enough expertise, out of demand, and not enough attention to first-line issues. Starting with the characteristics of animation industry, Jiang Mingli adopted the talent training mode of "school-enterprise dual integration and development" to achieve the deep integration of school-enterprise cooperation, and paid attention to the training of students' professional ethics and vocational skills, with a view to realizing the animation industry development mode of "graduation is employment, employment can be professional, and professional promotion of entrepreneurship" [4]. China's animation vocational education has short years, insufficient experience, and insufficient research on school-running mode [5].

Therefore, this paper studies Japan's animation vocational education, draws on advanced talent training concepts, explores its internal laws, analyzes the constraints and difficulties of animation talent training, finds out the problems, explores the road of animation vocational education in China, and puts forward the corresponding countermeasures.

2. Vocational animation talent training problems

2.1. Training goals are too broad

At present, the quality of vocational animation majors is uneven, and most students choose to

study in higher vocational colleges because they can't get into good universities. They are not clear about their future career direction and are confused. Students' thirst for knowledge is not strong, and they spend most of the time in class playing mobile phones and sleeping. The overall learning atmosphere of the school is not good, which affects the quality of the training of application-oriented high-skill professionals.

The concept of quality education for professional animation education is not clear, and the understanding of outstanding talents is still a high degree, while the impression of higher vocational education to the society is only a low degree. Most students think that schools do not pay attention to professional quality education.

After the 1990s, the scale of Japanese animation industry is huge, which is sought after by many teenagers. Animation production is a highly professional occupation, and you can choose to study animation in vocational colleges, universities and training classes. The animation industry has achieved great development, and the industry needs talents to supplement, and many universities have begun to pay attention to the training of animation talents. The school can provide corresponding training courses according to the students' employment intention, not to train the animation industry practitioners without characteristics, but to precise job positions: animation image designer, voice actor, DTP operator, animation web production, animation magazine editor, picture book writer, game creator, etc.

2.2. The content of the course is unreasonable and the characteristics are not outstanding

Higher vocational colleges generally copy the curriculum of undergraduate colleges, lack the uniqueness of vocational education schools, can not well meet the needs of enterprises and markets.

The theoretical knowledge taught by teachers cannot be used in practice, and the knowledge learned in the classroom is very limited. The traditional teaching mode is disconnected from the animation industry, which reduces their practical ability. The school-enterprise cooperation is not close enough, and the organic combination of teaching and industry is not realized. What students are exposed to is the content in books. Nowadays, animation production technology is updated rapidly, and the educational model with textbooks as the core of teaching is difficult to make students truly integrate with the animation industry.

Before the 1980s, Japanese animation education was basically a work-study apprenticeship, most of the outstanding animation talents were self-taught, and higher education almost did not involve the field of animation. The teacher of apprenticeship education is the frontline practitioner, and the student learns the effort required by the frontline position.

2.3. The level of teachers is not high, the ability of scientific research is not strong

At present, the "double-qualified" teachers in higher vocational colleges are mainly obtained through off-campus recruitment and on-campus cultivation. However, because the higher vocational colleges do not have enough funds to hire off-campus enterprise elites to teach in the school, most of them build a "double-qualified" teacher team by cultivating themselves in the school. The overall proportion of "double-qualified" teachers in higher vocational colleges is low and can not meet the requirements of teaching.

Japan's animation vocational education emphasizes school-enterprise cooperation, encourages school teachers to work in animation enterprises, and hires a large number of external practitioners who have achieved achievements in the animation industry or have certain influence to teach in schools. The implementation of this "double teacher" mode can effectively make up for the problem that full-time teachers only have theory and lack of practical experience, and also allow the latest and most authoritative content in the industry to quickly penetrate universities and ensure the teaching level of colleges and universities. For example, Masahito Yoshioka, Hideaki Anno, Mamoru Hosoda, and Toshihito Tsumai, who are active in the forefront of the animation industry, are all teaching in colleges and universities, and the practical experience accumulated by years of active in the front line, and the latest industry information, effectively make up for the shortcomings of inadequate practice and backward information of full-time teachers.

2.4. Students lack the cultivation of innovative thinking

Most of our animation vocational education is taught in accordance with textbooks, but also rely on textbooks for examination, lack of innovative consciousness training, animation professional education has become an exam-oriented process, and students' creativity is poor. Animation market has a lot of plagiarism, copying phenomenon, affected by this bad atmosphere, animation vocational education no longer emphasizes originality.

Japanese animation education focuses on personal interests and job requirements. The animation teaching concept for lower grade students is to cultivate the overall perception ability and interest in painting, and to draw according to their own intentions and preferences. Universities and junior colleges carry out professional and detailed training, but there are different focuses, for example, animation majors in junior colleges focus on computer technology and drawing, and comics majors focus on innovation awareness and story cultivation. College comics majors are also included in the literature department, which requires students to learn not only the necessary drawing skills, but also traditional culture, psychology, aesthetics, philosophy, and notation.

The professional division is detailed and comprehensive, and the animation education in Japanese vocational schools attaches great importance to the curriculum, which is rich in curriculum and detailed in classification. Comics can be divided into satirical comics, cartoon comics, situation comics, digital comics, etc., and there are many employment directions such as cartoonist, illustrator, cartoon editor, script creation and so on. Schools can provide courses according to students' employment intentions.

3. Overview of functional compound theory

3.1. Concept definition

The concept of composite design was first used in architectural design, so that each functional space of the building can play its functions harmoniously and efficiently and improve the utilization of resources, so as to further optimize the architectural space. Functional compound refers to the organic recombination of each functional space inside the building according to its own different characteristics to form a new complete system, in order to obtain greater benefits.

When applied to education, the traditional education mode is mainly a single teaching form, limited to the imparting of book knowledge, and the one-to-many form also makes it impossible to teach students according to their aptitude or professional characteristics. With the rise of new disciplines, the demand for interdisciplinary communication is more urgent, and the past education model is gradually unable to adapt to the modern teaching model. In view of a series of problems existing in the field of education, the compound learning place has emerged. The setting of the complex space not only has a unique purpose of use, but also evokes rich behavioral activities, resulting in a vibrant space.

The educational concept has changed, and students, as the main body of teaching, have produced new requirements. The educational space needs to be more diversified and complex, so as to meet the rich needs of different types of users and stimulate more behavioral possibilities. The trend of education compound is conducive to breaking the shackles of original concepts and bringing new opportunities for future development.

The integration of a variety of functional Spaces promotes the communication and cooperation between users of various functions, while sharing resources between each other, reducing the similarities and similarities in space Settings, and also reducing the investment in some hardware facilities. Modern education emphasizes teaching according to students' aptitude and differentiation, but also attaches great importance to the equal sharing of resources. Composite design through a series of design methods, more non-public functional Spaces can also easily share internal resources, which is a strong advantage for animation professionals with special needs in equipment.

3.2. The connotation of functional compound

In the function compound, each function permeates and is compatible with each other, which can

produce greater benefits. Different activities can be carried out in one place, and each functional space can be connected and stimulated to create an active space order under the premise of ensuring that it can exert its own spatial benefits. All functional parts in the system form an organic whole and cannot be separated from each other. The principle of wholeness ensures that each similar or different individual is integrated into an organic and complete whole by considering the wholeness of the design object.

In general, the integrity principle followed by the composite design not only refers to the integrity and unity of education itself as a whole, but also includes the coordination and harmony of education and related affairs, and considers each part as a whole, and finally forms a logical and reasonable layout of the composite whole. When sorting out training programs, we should integrate resources, gather available resources together, consider all aspects, improve and summarize. The characteristics of cultural and educational functional compound design are mainly reflected in: function expansion, space integration and resource sharing. Then explore the connotation of functional compound design: functional compatibility and time period complementarity. Related principles of composite design: adaptability, integrity, openness.

4. Characteristics of Japanese animation vocational education

4.1. Japanese animation vocational education can be used for reference

The Japanese government vigorously promotes the concept of vocational education, encourages the development of animation vocational education, and realizes the rapid recovery of the national economy. It is the country's third pillar industry and enjoys a worldwide reputation.

Japanese animation vocational education sets up courses according to social needs, training targets are "professionals", such as cartoons, scenes, digital comics, etc., and animation majors are more flat animation, CG animation, three-dimensional animation, Flash animation, animation writers and so on. In recent years, according to the market needs to add animation special effects, dubbing, soundtrack and other new professional, with The Times. In addition to fine arts and computer technology, humanities courses such as literature, philosophy, and history have been added. At the same time, it also offers programming, design, digital background art, special effects photography and dubbing technology, CG technology and other composite courses to ensure the comprehensive quality of students.

Implementation of school-enterprise cooperation "double teacher" teaching system. Many front-line experts in the industry have rich practical experience, such as directors, original painters and producers can directly teach the most practical and cutting-edge knowledge and technology to students, and complement the school full-time teachers who are strong in theory and weak in practice. We invite professionals with authority and experience in the animation industry to teach at our school, and encourage our teachers to exchange and learn from animation enterprises. Animation vocational schools often invite animation company staff to give lectures or bring students to enterprises or studios to visit practice, which is conducive to closer contact between schools and enterprises and better promote the coordinated development of enterprise and vocational education.

Japanese animation vocational education attaches great importance to practical learning, and has introduced the animation enterprise internship system very early to stimulate students' creativity by enterprise internship, keep up with the needs of the industry, and bring more practical opportunities for students.

Laws and regulations protect us. In the animation industry, where technology is constantly updated, teachers must always be at the forefront of the industry in order to teach students the latest and most practical knowledge. Although the threshold of vocational school teachers is very high, they not only have a high social status but also a higher salary than national civil servants. It is this superior treatment that makes the team of vocational school teachers absorb a large number of outstanding talents, and the huge quantity and excellent quality of Japanese vocational school teachers have led to the success of Japanese vocational education.

To learn the Japanese vocational education model of apprenticeship, we must first dispel teachers' concerns and actively encourage teachers to open studios. In addition, the apprenticeship system is standardized by the credit system, and certain quantitative standards are given for its internship situation and effect in the studio, and credits are given. In this way, the time is flexible, and each student can arrange studio apprenticeship tasks according to their own needs. The studio project is a valuable opportunity for students to practice, which can carry out a certain division of labor, explore the characteristics of students, and teach students according to their aptitude.

4.2. Diversified development trend of animation education

1) Functional complexity: All factors related to animation teaching, including personnel, places, equipment, internal and external social organizations, can be regarded as a small "educational complex", which not only includes the basic functions of culture and education, but also should meet the different needs of special disciplines and professional development, and provide teachers and students with learning, entertainment, communication and services. Animation teaching should adapt to various related factors.

2) Diversity of education platforms: Based on the characteristics of animation majors, relevant professional learning can gradually be separated from the classroom, and students are encouraged to actively absorb learning. Various interactive cultural exchange activities are becoming more diverse, showing multi-mode and multi-level characteristics, and the communication space needs to meet more diversified requirements.

3) the cultural nature of the city: not only to provide a professional place for teaching activities, but also to create an environment for the creation of urban cultural atmosphere, to create a cultural image.

5. Suggestions on training program of animation major in higher vocational colleges

5.1. Teaching in accordance with aptitude, precise positioning, and training of professionals

In the animation professional talent training program, we should carefully divide the computer animation design into several small majors or small classes, highlight the characteristics of training, efficient use of students' own conditions, give play to students' own advantages, and put the training of specialized talents in the first place. Scientifically formulate a reasonable talent training plan, highlight the exercise of students' practical ability, and cultivate professional animation talents suitable for the animation market. Schools should take the initiative to understand the latest needs of the animation industry and cultivate the right talents.

Training goals are too broad. In the limited three years of vocational school study time, it is impossible to cultivate every student into an all-rounder. If the direction of education is wrong, it is impossible to cultivate competitive talents. For example, many people understand animation as computer animation production, attach importance to the use of computer software, and over-ignore the training of students' art skills and drawing ability. Everyone is similar, computer software can be used, and the original drawing ability is poor, which can not adapt to the needs of the job.

Strengthening students' practical ability is the main way to train qualified talents of animation major. Japan's school-enterprise cooperation and industry-university combination are carried out smoothly under its perfect laws, and now it has fully proved the superiority of school-enterprise cooperation and industry-university combination model, which is a "win-win-win" cooperation model for schools, enterprises and students, and is conducive to practical teaching. Our country should stipulate the obligations and rights of all parties through laws to make the cooperation between schools and enterprises more standardized.

5.2. Improve the teaching methods of animation major

Adjust the teaching mode and standardize the teaching materials. The classroom mode will be changed from the traditional unilateral output to the interactive type, emphasizing the cultivation of students' innovative thinking and ability. Fully understand the importance of innovation, after

teaching should leave thinking and homework, innovation should be combined with it, leave enough space for students to play, fully mobilize their imagination, provide students with interest points, find confidence and sense of achievement.

In order to improve the original teaching mode and strengthen the teaching centered on school-enterprise cooperation, animation enterprise personnel regularly come to the school to teach or give lectures, students should also move the class to the enterprise, and continue to learn in the practice of visiting, and the time spent in the enterprise to complete the project is also included in the class period. Schools should require teachers to first learn the latest technology and cutting-edge development of the industry, and then teach the cutting-edge technology and knowledge in the animation market to students, while updating the teaching concept, the teaching task is whether the students' ability to meet the requirements.

Animation vocational education can have a unified teaching material, but can not have a unified student, we must teach students according to their aptitude, fully understand the characteristics of students, ensure that students master the basic knowledge and technology under the premise of trying to diversify, targeted teaching mode.

5.3. Improve teachers' pay

In Japanese vocational schools, there is one teacher for every 4.1 students, while in Chinese vocational schools, there is only one teacher for every 19.8 students. Moreover, Japanese teachers have a high social status and superior salary, which makes them attractive and many talents are willing to join the ranks of education, which is also an important reason why Japanese vocational education schools will attract a large number of excellent teachers. Compared with other types of teachers, Chinese vocational college teachers have a lower social status and lower salary, and most of them even have the pressure of enrollment indicators. In order to improve the level of teachers, the most direct and effective way is to increase the salary of teachers in vocational schools.

6. Sichuan Vocational College of science and technology integration pilot

6.1. Establish a variety of characteristic training modes

Sichuan Vocational College of Science and Technology is a comprehensive vocational college, of which Perfect World Art College was established in 2017, and China's leading game film and television company - Perfect World joint training professional and technical talents. The school's existing majors include: animation production technology, animation design, game art design, virtual reality technology application (original painting), virtual reality technology application (next generation technology), virtual reality technology application (special effects technology) and other 10 majors and professional directions.

The college adopts the project characteristic class model to train students. According to the interest of students, the training of students' professional goals, the course design closely follows the industry standards and the company's requirements for talent selection. We teach what the industry and the company need. We introduce high-end course teaching of game design professionals in the industry online, and the core technical staff of the company project team will teach them hand by hand offline. At the same time, there is also a studio training model, from lecturers + tutors + practical training to tutors..

6.2. Carry out special activities

The content of the course will keep up with the industry standards and the company's requirements for talent selection, and the course will be combined online and offline. The high-end teaching courses of the game design major of the University of Abertay will be introduced online, and the core technical staff of the company's project team will teach the course offline.

Teachers organize students to hold seminars from time to time, so that students can speak freely on behalf of students, answer students' learning puzzles, and collect opinions or suggestions for teachers in various subjects. The students gave feedback on the problems or opinions in teaching,

which was summarized and verified by the director of the Teaching and Research Office. Then, the students gave feedback and communication with the student and engineering department and the teachers of relevant subjects, and put forward operational improvement measures and methods..

7. Conclusion

A study on the training scheme of higher vocational animation education reflects not only our requirements for the education of animation professionals in higher vocational colleges, but also the new situation of the reform and development of animation curriculum in higher vocational colleges. Specific strategies include:

1) By comparing all aspects of animation vocational education with Japan, a strong animation country, in-depth research on the characteristics of animation vocational education will be conducted to find out its own problems and apply the right medicine to gradually form a distinctive animation vocational education model.

2) The specifications of the training of animation talents in higher vocational education mainly cover the three elements of knowledge, ability and quality, which is a trinity of interactive development.

3) Based on the reality, we should actively create a good learning atmosphere, deepen curriculum reform, increase teacher training, improve teaching and scientific research ability, strengthen the construction of practical training bases, and strengthen school-enterprise cooperation to improve the quality of animation professional training in higher vocational colleges.

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