The Manifestation of Animation and the Reform of Animation Teaching in Digital Media Era

DOI: 10.23977/avte.2021.030218

ISSN 2523-5834 Vol. 3 Num. 2

Sun Shuo

School of Communication and Media, Guangzhou Huashang College, Guangzhou, Guangdong, 511300, China

Keywords: Digital media, Animation, Form of manifestation, Animation teaching, Reform

Abstract: With the advent of the digital media era, animation has also become a film and television art, with more and more rich forms and contents, which can bring intuitive visual stimulation to the public. The development of digital media has led to the innovation of animation technology, and the emergence of a variety of animation expression ways and production software has injected new vitality and vitality into animation teaching. In the actual teaching process, it is necessary to adapt to the changes of expression form and teaching mode as soon as possible, so as to cultivate more excellent animation professionals. This paper starts with an overview of the digital media age and its influence, and analyzes the expression form of animation in the digital media age. Based on this, this paper puts forward several strategies in terms of clarifying the demand for animation professionals in the era of new media and the innovation and optimization of animation teaching curriculum in the era of digital media. The specific contents are as follows.

1. Introduction

Under the condition of the continuous development of IT industry and Internet industry, digital media appears in the public's vision. It can really sound, text, image mutual integration, and record and spread, for people's life to bring a certain convenience. The emergence of digital media has promoted the development and progress of the whole society. Digital media technology has also brought a certain impact on the teaching of animation major and promoted the reform and improvement of the teaching system.

2. Overview of Digital Media Era and Its Influence

Digital media is a new technology hormone, and has gradually become an indispensable part of the spiritual life of the public. Especially for animation production, digital media enriches the expression of animation, and fully meets the aesthetic needs of the public, and really promotes the continuous development of animation production. For example, there are common animation production software: 2D animation, 3D animation, CG animation, etc., which provides some convenience for animation production. Under the current teaching background of digital media era, the diversification of animation production software can significantly improve the feasibility of animation production^[1]. Animators use digital media technology to create and depict imaginary

pictures, and use digital technology to carry out animation production, so as to successfully complete the animation works. The realistic special effects and scenes in animation can meet the actual aesthetic needs of the public for animation works, enrich the public's senses, and bring intuitive sensory stimulation to people. Therefore, under the background of digital media era, animation industry has a good development opportunity, constantly broaden its own development space, so as to promote the progress and development of related enterprises. This also shows that digital media has promoted the progress of animation industry and achieved the sustainable development goal of animation industry.

3. Manifestations of Animation in the Age of Digital Media

3.1 Two-Dimensional Animation

Two dimensional animation, also known as planar animation, mainly presents the picture on the plane, which belongs to the traditional form of animation. In the era of digital media, it has been gradually recognized and concerned by the public. 2D animation is mainly produced by hand drawing, so the requirements for the ability of animation makers are relatively high. Animation makers need to master hand-painted technology, but also need to be more proficient in the production process of plane animation^[2]. In order to make a good two-dimensional animation, the producer must fully understand the production of things, and understand the basic laws of the movement of things. Record these things in a hand-drawn way, and with the development of things in a logical order, record into a complete work. Among the numerous 2D animation works, Tom and Jerry, Journey to the West and so on are relatively successful 2D animation products, which have been recognized and loved by the public.

And Flash is based on two-dimensional animation, the formation of a new two-dimensional animation production software, completely changed the status quo of animation production. Not only can we make commercial 2D animation, but also need to develop related programs based on animation production. The use of Flash animation, has the advantage of small file capacity, and can be adjusted screen size, and inserted into the webpage for content broadcast. At the present stage, many people on the Internet have begun to use Flash to make web page animation, compared with the animation format of GIF, Flash animation production effect is better, the output format is AVI, can be adapted to most players, can be played in the video disc player, web page. However, the appearance of Flash animation software has completely changed the basic characteristics of hand-drawn 2D animation, making 2D animation more beautiful because of the integration of computer technology. Therefore, to realize the mutual integration of Flash animation software and hand-drawn method has accelerated the development of animation industry.

3.2 Three-Dimensional Animation

Three-dimensional animation is also called 3D animation, which belongs to the new animation with the continuous development of computer technology. As early as 1986, Naughty Lamp appeared in the public eye in the form of 3D animation, and it was tested in the animation market. It was not until 1995 that Toy Story appeared, which really opened up the 3D animation market and promoted it as a new animation mode. After the emergence of 3D animation, a variety of new media of communication emerged at the right moment and gradually became the key way of expression of virtual objects in 3D animation^[3]. For example, the early animation of puppet animation and paper-cut animation are all reflected through dolls and paper-cut techniques. But 3D animation has also changed the traditional way of expression of animation, with the help of multimedia technology, reasonable design of virtual objects, in order to present the animation, promote the sustainable

development of image media.

Different from 2D animation, the main media of 3D animation is digital technology. Based on the development background of the current era, the application of digital technology has been very extensive, and appears in movies and animations. For example, the film Titanic used digital technology to show the sinking ship, and the domestic cartoon Lotus Lantern also introduced digital technology. Using computer media to simulate real things, can accurately control the data, operation, and fully meet people's actual aesthetic needs, 3D animation image technology can also achieve good animation visual performance effect, can simulate the real image, bring people good visual enjoyment. All operations are carried out on the computer, which can effectively avoid the influence and restriction of external conditions.

3.3 Cg Animation

Compared with 2D animation and 3D animation, CG animation is a more advanced form of animation. It retains the advantages of 2D animation and 3D animation, and makes use of the reasonable operation of 3D software to present a good visual effect of animation for the public. CG animation is mainly the use of 3D modeling technology, the corresponding animation template to create animation, do not need to manually adjust the position of the key frame. As long as the camera position is appropriate, and the key frame is turned on, the picture rendering of the previously completed shooting part can be carried out, and the post-production and editing can be carried out with computer technology. By using the way of CG animation production, creators can turn their imagination into real pictures, and ensure that things in reality can be reproduced in animation, highlighting the vivid animation effect, and creating a good imagination space for people^[4]. For example, in the CG animation film Finding Nemo, it is impossible to really shoot the underwater scene on the spot, so CG animation is needed. In the production process of CG animation, only scientific adjustment of program programming and relevant parameters can ensure that CG animation automatically generates the scene required by the creator, and that the scene has certain visual impact, so as to bring shock and influence to the public from the visual level. At present, many movies have made use of CG animation for creation, such as the popular Transformers and The Avengers series of movies, which all use CG animation for special effects production. In recent years, China's animation industry has been gradually moving towards the direction of CG animation production, with the release of highly acclaimed animations such as Jiang Ziya and Nezha, which also indicates that China's animation industry has made great progress in the digital media era.

In short, under the background of digital media era, the form of animation is in the stage of continuous development and innovation, and many forms of animation have attracted the attention of the public. In the process of animation production, it is necessary to use a variety of animation production methods, add relevant special effects elements, and improve the visual impact of the animation picture. While realizing the integration of animation art and imagination, the quality of animation works can be effectively improved. Based on this, the teaching mode and method of animation major also need constant reform to adapt to the relevant technology.

4. Animation Teaching Reform in the New Media Era

4.1 Clarify the Needs of Animation Professionals in the New Media Era

For most animation practitioners, in order to adapt to the new digital media environment as soon as possible, they need to improve their artistic modeling ability and design ability, and they also need to have a good mathematical and physical foundation. In the era of digital media, animation

professionals should have good imagination ability and more rigorous thinking^[5]. Compared with the actual situation in the past, the animation professionals needed by the current society can not be limited to the traditional animation production, but need to study and explore in various fields in the process of practice. For example, I design mobile APP programs, film and television post-editing and production, online game development, visual communication design and other fields. In different digital media fields, can bring people different development opportunities. Only by adapting to the current social environment can we achieve substantial development in all practical work.

According to the development status of China's digital media industry, animation major has gradually become an emerging discipline with art as the core and technology as the auxiliary. In the teaching process of theory and practice, the integration of art and technology has been realized. In the process of training and education professional students, many universities have joined the training on digital media knowledge, makes the animation professionals can gain not only at all levels of television, media advertising agency, film and television animation production company internship opportunities, also can be in after graduation in modelling design, multimedia web design, digital arts company office counterpart industries.

In the new era background, the sustainable development of digital media industry, for China's colleges and universities cultivating innovative animation professionals to provide the corresponding help, a large number of outstanding art accomplishment and scientific literacy have both talent into the social practice work, also to develop application design talents input a large number of high-quality talent, and laid a solid foundation for social harmonious development.

4.2 Innovation and Optimization of Animation Teaching Curriculum in the Era of Digital Media

There are still many problems to be solved when analyzing the current situation of the development of China's digital media industry. In the stage of practical teaching, colleges and universities need to constantly optimize and reform the teaching curriculum setting of traditional animation majors, so as to help students adapt to the social environment of the new era as soon as possible. Students majoring in animation can choose their own learning direction when they study. In the course setting, relevant educators need to take this feature as the basis to help students choose suitable learning methods and enhance their interest in professional practical knowledge. When I major in basic professional courses, I need to focus on mastering and memorizing the contents of many parts, such as color and sketch, as well as understanding the content of animation introduction and Chinese and foreign art history. In the stage of continuous innovation and optimization of curriculum setting, colleges and universities should analyze the learning needs of different students, clarify the direction of guidance, and realize the split education of traditional two-dimensional animation teaching courses^[6]. For example, when students learn two-dimensional animation related knowledge, they need to correctly design web pages, carry out image processing, animation production, character action design, animation creation and other courses. It educates and trains students with innovative curriculum setting of animation major, so that they can choose suitable enterprises according to their professional knowledge after graduation, and successfully participate in the work related to animation production.

4.3 Innovation of Teaching Methods of Animation Major in Universities in the Era of Digital Media

In recent years, China's animation market has gradually become saturated, and government departments have gradually weakened their support for animation major, which makes many

colleges and universities ignore the significance of practical education in the actual teaching stage of animation major. The teaching method adopted is relatively simple and outdated, and the teaching form is also relatively conservative, which is not conducive to stimulating students' interest in theoretical knowledge of animation major, affecting the teaching effect of animation major, and making most students face problems from many aspects after entering the society and employment. Therefore, in the era of digital media, colleges and universities need to optimize and innovate the teaching methods of animation major, and combine with the actual development of the society to enable more students to contact the practical projects related to digital media and significantly improve the animation production level of students^[7]. In this process, with industrial training as the core, students can collect more animation projects related to digital media and actively try to participate in the production process. Such as the production of film and television special effects, the development of mobile phone APP, the design of game characters.

4.4 Establish a Studio and Create a Research and Development Platform for Original "Animation Ip" of the School

With the help of original animation IP form, you can generate game products, comics, animation, music, etc. Based on this development mode, all colleges and universities can refer to the management system of enterprises to set up original animation IP studios and carry out research and development activities smoothly. In combination with relevant design content, we should do a good job of promotion design. Relevant staff of animation IP studio should be responsible for animation, cartoon, mobile game development, packaging design and other work. Each student team should complete its own basic tasks to ensure the smooth implementation of research and development work^[8]. Based on this, the parallel studio was gradually integrated into an innovation and entrepreneurship platform, and the person in charge of the project studio and the team leader formed a secondary management system to promote the smooth progress of the design project. This new way of working organization makes animation major students actively participate in the process of animation design, and creates a good environment for students to exercise, the basic tasks of the project to implement the individual. In the creation stage, each responsible group will form frequent communication and cooperation, and form the original animation IP platform, so as to give full play to the actual effect of the platform, achieve good teaching effect, and promote the integration of innovation and entrepreneurship platform and original IP research and development.

5. Conclusion

In a word, under the development background of the digital media era, both the terminal form and the transmission mode have presented diversified characteristics. In the teaching process of animation major, colleges and universities need to pay more attention to the reasonable setting of teaching courses, the innovation of teaching ideas, combined with the development of teaching tasks and digital media, broaden the vision of students, and lay a good foundation for the smooth employment of students.

References

^[1] Kong Weiyu. Research on the Development of 3D Animation in the Era of Digital Media [J]. Media Forum, 2020, 3(18):33+35.

^[2] Gao Xin. On the Production Technology of Digital Animation in the Era of Digital Media [J]. Digital Technology and Application, 202, 38(04):72-73.

^[3] Tian Xue. The Influence of Digital Media on Animation Design in the New Media Era [J]. Western Radio and

- Television, 2019(20):142-143.
- [4] MA Wenting. Research on the Expression Form of Animation in the Digital Media Era [J]. Journal of Nanchang Normal University, 2019, 40(03):42-44.
- [5] Li Jiashun. Innovative Application and Performance Analysis of Digital Animation Creation in the New Media Era [J]. Research on propagation force, 2019, 3(17):37.
- [6] Zhang Mengtian. Application and Development of Traditional Chinese Ink Animation in the Digital Media Era [J]. House of Drama, 2019(02):101-102.
- [7] Wang Yan. Aesthetics of Animation Art in Digital Media Era [J]. Journal of Heihe University, 2017, 8(03):185-186.
- [8] Wang Yu. Research on the Artistic Characteristics of Network Animation Short Film in the New Digital Media Era [J]. Art Research of Design, 2014, 4(06):65-70+75.