

## Original Research Article

**Analysis of the reform path of the metaverse to empower the creation of film and television short films***Xinyi Shi**Communication University of China, Nanjing, Jiangsu, 211100, China*

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**Abstract:** Metaverse is the next hot direction of the digital industry after cloud computing, blockchain, and digital twins. In China's copyright law, it is emphasized that copyright should be protected by technical means, and under the vigorous protection and support of the state, the content creation industry represented by film continues to explore cutting-edge technologies. Make full use of the emerging industry of the metaverse to inject vitality into the creation of short film content in the film and television industry, and continuously reform the teaching work according to its development trend and requirements, innovate the teaching mode, cultivate students' core literacy based on the requirements of the new curriculum standards, and highlight and strengthen interdisciplinary practice. This paper mainly talks about the reform path of film and television creation teaching that originates from the empowerment of the group, aiming to cultivate all-round and high-quality talents that meet the needs of the industry and the country, and improve students' professional skills and artistic literacy, as well as their sense of social responsibility.

**Keywords:** Metaverse; Empowerment; Film and television shorts; Creative Teaching Reform

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**1. Introduction**

In the teaching of film and television short film creation, the traditional teaching mode is still the mainstay, which mainly focuses on listening, memorizing, understanding, practicing, and examining, and only pays attention to the training of professional skills, and does not pay attention to the cultivation of vocational ability and artistic quality, which affects the long-term development of students. With the promulgation of the new curriculum standard, new requirements have been put forward for the teaching of film and television short film creation, emphasizing "practical education", highlighting the discipline thinking method and inquiry-based learning method, and a large number of practical activities such as experiments, observations, and operations have been added to the new curriculum standard. Based on the aggregate of advanced technologies such as the metaverse, a real learning scene is built to enrich students' experience and feelings, so that students can actively think and explore. In order to promote the teaching reform, teachers need to reform the traditional teaching from three aspects: teaching mode, construction of high-quality teaching resources, and innovative teaching mode, so that students' learning becomes a real scene experience, greatly mobilizes students' learning initiative, and provides all the realistic teaching activity scenarios required for teaching.

**2. The background of the teaching reform of the metaverse to empower the creation of film and television short films**

The metaverse integrates a series of emerging technologies such as artificial intelligence, digital twins, and virtual reality, and the changes in the scenario-based demand for learning and the technical empowerment of the metaverse jointly determine the natural genes of integrated learning in the metaverse. The metaverse is an aggregate of a variety of cutting-edge technologies, with broad development space and potential, which

will bring profound changes to all walks of life. Convenient production tools and well-developed and low-barrier communication channels have also made user-generated content unprecedentedly prosperous, and will increasingly become an important part of the metaverse ecosystem. With the rapid advancement of digital technology, the issue of intellectual property protection for film and television works is becoming increasingly complex. In view of this situation, teachers need to start from the field of education and scientifically analyze the current copyright protection problems faced by film creation, such as the vague definition of copyright, frequent infringements, and the dilemma of identifying the infringement of 3D digital assets in the metaverse space. In order to effectively respond to these challenges, teachers should actively explore the application of metaverse technology in the film and television industry, and improve the quality of talent training through the reform of film and television creation teaching, and at the same time, more effectively promote the development of film and television content creation in the direction of security, openness, innovation and decentralization. In addition, in this situation, it is necessary to continuously improve the standard of talent training according to the development status of metaverse technology, actively explore new education models, and carry out all-round training of individual students through teaching reform, so that students can develop and apply various technical means for film and television creation. It also makes full use of various media platforms for content production, distribution, and consumption, improves the promotion of film and television creation products, and promotes the development of students' future careers<sup>[1]</sup>.

### **3. The path of the metaverse to empower the teaching reform of film and television short film creation**

#### (1) Teaching concept empowerment

First, whole-person education. The concept of whole-person education focuses on the comprehensive and comprehensive development of students, which can change the traditional teaching of academic knowledge and professional skills, and requires teachers to pay attention to cultivating students' artistic quality, vocational ability and aesthetic ability while consolidating the foundation of students, and cultivate students' personality and innovative thinking, so as to enhance students' sense of social responsibility. Based on this concept, teachers can innovate teaching models, integrate curriculum resources, help students build a complete knowledge system, and improve students' practical ability, moral character, and scientific spirit. The metaverse has diversified characteristics, which can enrich the teaching content and means, and can integrate the knowledge of plastic arts, visual expression, literary appreciation, drama narrative, scientific research, and film language analysis to achieve interdisciplinary and multi-faceted teaching, effectively meet the requirements of teaching reform, and improve students' comprehensive literacy.

Second, interactive education. The concept of interactive education focuses on improving the pertinence and effectiveness of teaching, and requires teachers to be student-centered, focusing on cultivating students' emotional understanding and cognitive ability, social adaptability, and innovative thinking ability. In the process of teaching, the teaching of knowledge and skills, the shaping of emotional values, and the cultivation of social responsibility are carried out simultaneously, so as to create a three-dimensional environment for the all-round development of students. In order to achieve the above goals, the metaverse technology can be applied to it, combining information technology, virtual reality technology, and augmented reality technology to create a learning situation that combines virtual and reality for students, so that students can immerse themselves in it, interact with the virtual world and the real world in real time, and enrich students' experience and feelings. The

core of metaverse technology is human-computer interaction, which can create personalized and intelligent classrooms, broaden the time and space for classroom teaching, better promote interactive education, realize real-time information feedback, dynamic adjustment, and achieve interactive teaching goals. In addition, under the metaverse technology, it can drive students' cooperative inquiry, cultivate students' social skills, and allow students to better adapt to different work scenarios, which can cultivate students' problem-solving skills and lay the foundation for later employment<sup>[2]</sup>.

### (2) Teaching space empowerment

First, virtual space. Under the metaverse, an open, three-dimensional, and diversified virtual space can be created for the creation and teaching of film and television short films, which can break through the limitations of traditional classroom teaching, and allow students to learn knowledge, master skills, and practice exploration in a digital and networked virtual space, so as to innovate teaching methods. In the virtual space, the combination of theory and practice, the combination of static and dynamic, the combination of two-way and one-way can be realized. For example, teachers can use simulation technology to simulate the creation of short films, so that students can truly experience different responsibilities, and can compete to be directors, producers, dubbing engineers, lighting engineers, etc., so as to better plan, conceive and layout short films, and ensure that the creation of short films is more perfect. In addition, in the virtual space, the narrative can also obtain resources in real time, exchange ideas, industry experience, learn from each other, and improve the learning effect.

Second, real space. Under the metaverse, it can also make full use of the real space, give full play to the role of new technologies to enhance its core position, optimize the layout, improve functions, and effectively meet the requirements of education reform. In the creation of film and television short films, it is necessary to have a shooting training base, equipped with various imaging equipment and facilities that meet industry standards, so that students can operate, experience, think hands-on, and master various production skills and methods on the spot. At the same time, it is also necessary to provide students with a variety of high-performance shooting tools, editing software, special effects workers, etc., and strengthen the construction of pre-workstations, mid-term training bases, and post-production studios, so as to realize the combination of theory and practice, the application of professional knowledge and the improvement of vocational ability.

### (3) Teaching mode empowerment

First, prepare for class. Teachers need to carefully plan the teaching plan and clarify the learning tasks at different levels and with different difficulties, such as requiring students to master basic theoretical knowledge in the early stage, core skills training in the middle stage, and new technology application in the later stage. And through the metaverse data tracking technology, we can comprehensively track and evaluate students' learning and task completion, and provide personalized guidance for students. In addition, under the metaverse, students can be guided to practice various shooting, editing, retouching, and special effects production skills, and scientifically match scenes, lighting, colors, sound effects, etc., to continuously improve students' hands-on ability and innovative thinking ability, so as to meet the relevant requirements [3].

Second, it is carried out during the lesson. Teachers should create diversified scenarios under the metaverse, guide students to analyze problems through scenarios, truly feel the charm, connotation and value of film and television art, stimulate students' enthusiasm for learning, promote students to enter deep learning, master and skillfully apply advanced technology, and evaluate and test students' homework to ensure that they meet the teaching requirements.

#### **4. Concluding remarks**

In short, at present, the education industry is also paying attention to metaverse-related industries, and the virtual world with high simulation and full immersion in the metaverse description is gradually approaching reality. The development of metaverse-related technologies has also had an impact on the film and television industry, bringing changes throughout the early, mid, and late stages of film and television production, and also putting forward higher requirements for the cultivation of talents. Therefore, teachers need to grasp the current trend of the times, based on the teaching theory of the metaverse, and start from three aspects: concept, teaching space, and teaching mode, to realize the organic combination of classroom on-site teaching and virtual space, real world, and digital world, so as to provide convenience for teacher-student interaction, student-student interaction, and student development, and promote the modernization of the field of film and television education.

#### **References**

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