

Research on the Innovation Path of Film and Television Creation Program of Colleges and Universities Empowered by AIGC in the Context of New Quality Productive Forces--Take Modern College of Northwestern University as an example

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ABSTRACT

Driven by New Quality Productive Forces, AIGC technology is reshaping the education mode of film and television creation. This paper analyzes the characteristics of AIGC technology and the pain points of film and television education, and analyzes the current situation of film and television education in colleges and universities on the basis of the characteristics of the school and disciplinary characteristics of Modern College of Northwestern University, focusing on film and television creation courses, exploring the path of innovation of the film and television creation courses empowered by AIGC, in order to provide new paths and methods for film and television education in colleges and universities at the present time.

KEYWORDS

new quality productivity; AIGC; film and television creation program; innovation

With the rapid development of digitalization and intelligent technology, the concept of New Quality Productive Forces has gradually become a hot topic in academia and education. New Quality Productive Forces emphasizes the enhancement of productivity through intelligent technologies (such as artificial intelligence, big data, cloud computing, etc.), a trend that has had a far-reaching impact on various fields, especially education. In the field of film and television creation, the application of new technologies not only improves the efficiency of creation, but also brings about revolutionary changes in the concept and method of creation. Furthermore, the important link in the development of new productivity in film and television is to create a new type of film and television production mode, form a virtuous cycle of film and television talent, science and technology and education, and improve the mechanism of film and television talent training and discipline construction. The new productivity provides new momentum for the training of film and television talents and discipline construction.

The current research on the combination of New Quality Productive Forces and education mainly focuses on the combination of New Quality Productive Forces and the construction of Civics and Politics, such as the theoretical value and practical path of the theory of New Quality Productive Forces into the Civics and Politics class (He Yonglin Shuihong, 2024), or the integration of New Quality Productive Forces with industry and education, and the two-way empowerment of the deep integration of New Quality Productive Forces and industry and education: the reality of the dilemma and the path of practice (Shen Yanyu, 2024), and there are fewer papers on the combination of New Quality Productive Forces and film and television education combined are fewer papers. At the same time, AIGC has been a hotspot of research since its birth, and it is a hotspot of interdisciplinary combination. The current research is mainly in the combination of AIGC and each specific industry, such as the China Communications Research Institute published (2023) AIGC empowers all industries and helps industrial upgrading and iteration, which shows that AIGC is widely used and combined. Meanwhile, the research on the combination of AIGC and film and television mainly focuses on specific media or means, such as the exploration of the application of AIGC technology in film and television production and trend foresight (Ba Xiao, 2023). There are fewer studies on the combination of AIGC and film and television creation education, which further highlights the significance of this study.

1 Status and Background of AIGC Integration of Discipline Construction and Development in Modern College of Northwestern University

1.1 AIGC integrates disciplines to point out a new direction for the current education reform and development

The rapid development of AIGC technology is becoming an important force in promoting educational reform. AIGC not only promotes the updating of subject content and the innovation of teaching methods, but also provides new opportunities for the integration and application of interdisciplinary knowledge. Its application in film and television

creation courses can break the boundaries of traditional disciplines, promote the in-depth integration of computer science, artificial intelligence, media arts and other disciplines, and promote the modernization and diversification of discipline construction.

1.2 Quality film and television creative writing programs are the cornerstone of practice in professional media schools

Modern College of Northwest University is now in a critical period of transformation. After the success of the transformation, the college will be renamed Xi'an Media College. Since its establishment, the school has been adhering to the goal of creating a first-class brand university in China, and has been making continuous efforts to this end. Both the development of the school after the transition and the school's goal of running the school indicate that the school will be deeply plowing in the field of media art, and for the country to cultivate excellent film and media talents. In order to better transform the school into a professional media college, the school even set up its own youth film studio, deep into the practice of film and television creation, which also shows that the school is committed to cultivating film and television creation professionals, and thus film and television creation is particularly important in the professional curriculum. Whether from the school's policy, discipline construction or the school's goal, it shows that film and television creation is an important part of the school's professional development, but also a cornerstone of the school's practice to build a high-quality media colleges.

1.3 Overview of the Film and Television Creation Program at Modern College of Northwestern University

Overview of the film and television creation course system curriculum at Modern College of Northwestern University. In Modern College of Northwestern University, the film and television creation courses cover media arts majors such as radio and television choreography, drama and film directing, cinematography, film and television photography and production, photography, acting, new media art, digital media art, network and new media, etc., accounting for 60% of the majors in the school. All of these majors involve film and television creation courses. In terms of curriculum, they include playwriting courses (e.g., Fundamentals of Playwriting, Screenwriting for Film and Television, Short Drama Creation); video filming courses (e.g., Documentary Creation, Microfilm Creation, Director's Clip Exercise, Fundamentals of Directing); and film and television post-production courses (e.g., Nonlinear Editing, Film and Television Editing and Synthesis).

With the increasing maturity of AIGC technology, especially in the field of playwriting and directing teaching, AIGC technology has become an important tool to promote curriculum innovation. In the course 'Playwriting Fundamentals' and 'Directing Clip Exercise' taught by me, AIGC has been applied to specific classroom practice. In the classroom, students have been using software such as Doubao, Wenxin Yiyin, ChatGPT, etc. to modify and polish their script ideas, enrich and enhance the characters' verbal actions, etc. AIGC technology assists students in script writing, generating diverse script frameworks and ideas.

For the course 'Director's Clip Exercise', the facilitator used Wisdom Tree APP to create an online course for the course, adopting a combination of 'online + offline', with students signing in, classroom discussions, and students' daily homework submission online. This 'online + offline' combination of teaching methods not only enriches the classroom teaching methods and means, but also increases the diversity of teacher-student interaction, thus further promoting the flexibility and personalisation of teaching. The previous practice of the facilitator has laid the foundation for the research on the innovative path of AIGC-enabled film and television creation courses in colleges and universities, and provides a practical basis for the completion and exploration of this research.

Analysis of the current situation and challenges of film and television creation courses in colleges and universities. At present, in the traditional film and television creation courses, the class mode and creation mode are relatively single, and the students' creative ability is limited, which leads to the failure of the course content to dock with the needs of the industry. AIGC technology has the potential to be integrated into the film and television creation courses, and through the introduction of AIGC technology, it can enhance the modernization of the courses, stimulate the students' interest in creativity and innovative thinking, and strengthen the practical ability.

2 Path Innovation of AIGC-Enabled Film and Television Creation Course in the Context of New Quality Productivity

Based on the current curriculum system and course content of film and television creation in modern colleges, as well as the challenges faced by the college at the moment, the following paths are proposed:

2.1 Optimize the deep integration of curriculum and AI technology to enhance the efficiency and innovation of the film and television creation process

For the current film and television creation course system of Modern College, it can be divided into playwriting creation courses, video filming creation courses, and post-production courses. **Playwriting courses** such as "Playwriting Fundamentals" and "Screenwriting for Film and Television" can be integrated into AI-assisted teaching in the original knowledge teaching. AIGC technology is utilized for automatic script generation, creative conception and plot development. For example, natural language processing (NLP) technology is used to help students generate the first draft of the script, and the AI provides diverse creative solutions based on the theme, plot and character settings. Students can also interact with the AI to develop stories and facilitate creative inspiration. For the **video filming courses** now offered by the college such as "Microfilm Creation", "Documentary Creation", "Micro Short Drama Creation", etc., the learning and use of software such as Gemini, Midjourney, Sora, etc., can be introduced on the basis of traditional teaching. Gemini can quickly generate a variety of styles of unique images and effects, Midjourney's AI painting technology can generate highly artistic images, and Sora can generate coherent and realistic video sequences, which greatly enhance the visual effect of film and television works. For the **film and television post-production courses** now offered by the college, such as Non-linear Editing, Film and Television Editing and Synthesis, and Film and Television Music and Sound, the AIGC tools can also provide efficient support in the post-production process, such as editing, dubbing, and sound effects production. For example, AI can automate video editing, provide fast rough cuts, and automatically generate background music or special effect sounds in post-processing audio to reduce students' workload. In music, AIGC technology can generate original musical melodies, harmonies and rhythms, providing musicians with new sources of inspiration and opportunities to explore new musical styles. AIGC can also be used for tasks such as music mastering, mixing and production to improve the quality of musical works. The optimization course covers the entire creative process of playwriting, filming and post-production to enhance the efficiency and innovation of creative work.

2.2 Building an Online Collaborative Learning Platform Combined with Intelligent Instructional Design to Promote Students' Individualized Creative Ability

With the existing conditions of Modern College of Northwestern University, especially in the past two years with the participation of first-line teachers in the construction of online courses, the college has the conditions and ability to build an online collaborative learning platform and realize intelligent teaching. **Building an online collaborative learning platform** is to use artificial intelligence technology to analyze students' learning behaviors and social networks to provide students with personalized collaborative learning recommendations and support, where students can share their learning freedom, discuss problems, and work together to solve practical problems, and promote communication and cooperation among students. The facilitator has implemented this concept in the Directing Clip Practice course, which is effective and worth promoting. **Intelligent instructional design**, on the other hand, uses AI to analyze students' creative styles and learning progress to customize personalized learning programs. For example, AI can analyze students' past works, speculate on their areas of expertise and deficiencies, and give them targeted learning advice. AI can also monitor students' creative progress in real time during the teaching process, providing instant feedback and directions for improvement. This kind of intelligent teaching not only improves students' interest in learning, but also stimulates their enthusiasm for creation.

2.3 Strengthening teacher training and teaching support in parallel to enhance teachers' teaching ability and support for the application of AIGC technology

In order to smoothly promote AIGC-enabled film and television creation courses, teachers also need to master the basic use of AIGC technology and teaching strategies. According to the research, the front-line teachers of Modern College of Northwestern University who are engaged in related film and television creation are deeply convinced that their teaching needs to be closely integrated with the development of the times, especially those who teach post-production, and study AI-related courses online at their own expense. Moderator also to be able to follow the good AI technology into the classroom teaching, self-study Midjourney and other software, its creative process in film and television, especially in the production of sub-shot effect is remarkable, through the software to draw a good story version of the sub-shot in advance, greatly reducing the cost of film and television production, and improve the quality of film and television productions. Nowadays, the era of new quality productivity requires intelligent technology to improve the level of productivity, so schools can provide training in AIGC technology for front-line teachers to ensure that they can effectively lead students in creation and operation. Teaching support can be strengthened through the establishment of a complete AIGC technical support system, including instructional videos, operation manuals, and technical consultation to

ensure that students and teachers can utilize AIGC tools efficiently.

2.4 Establishing a systematic evaluation mechanism and real-time feedback system to promote the continuous improvement and enhancement of students' creative process

The reform of teaching is not only the reform of content, but the promotion of students' improvement through the reform of content and teaching mode is the fundamental purpose. Therefore, the establishment of a systematic evaluation mechanism and real-time feedback system becomes particularly important. In this regard, it can still be realized with the help of AIGC technology. For the establishment of real-time feedback mechanism, AIGC tools can provide instant feedback on students' works and help students find problems and make improvements. It is well known that the students of art majors in modern colleges are a bit weak in self-control and fundamentals, and the establishment of a timely and effective evaluation mechanism and feedback system can urge students to further improve their professional level. On this basis, the construction of work display and communication platform can be a closed loop of teaching-learning-using, then build online work display and communication platform, students can share their creative achievements, comment and discuss with each other, teachers can comment and guide them, enhance learning interaction and sharing. The teacher can comment and guide the students, and enhance the interactivity and sharing of learning.

Under the wave of New Quality Productive Forces development, AIGC technology brings infinite possibilities for the innovation of film and television creation courses in Modern College of Northwest University. However, we have to realize that the comprehensive and deep integration of AIGC technology into the film and television creation course is a long-term and complex process, and we are bound to face many new challenges in the process of practice. However, these challenges are also opportunities to promote educational change. With the continuous progress and improvement of the technology, as well as the continuous exploration of its application by educators, AIGC will play a more significant role in the film and television creation courses in colleges and universities. The innovative path proposed in this paper can provide useful reference for the reform of film and television creation courses in Modern College of Northwest University and even more colleges and universities, and promote the cause of China's film and television education to move to a new height under the drive of the new quality of productivity, thus injecting constant vitality into the vigorous development of the film and television industry.

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References

- [1] He Yonglin, Shui Hong. Theoretical Value and Practical Path of Integrating New Quality Productivity Theory into Civics Classes[J]. Journal of Langfang Normal College (Social Science Edition).2025.1.
- [2] Shen Yanrui, Hu Zongyu. Two-way Empowerment of New Quality Productivity and Deep Integration of Industry and Education: Realistic Dilemma and Practical Path[J]. China University Science and Technology.2025.3.
- [3] Ba Xiao. Reinvention and Generation:The Application of AIGC in Film Image Production[J]. Film Literature.2025.4.