"AI+IP" Dual-Wheel Drive: A Theoretical Framework for Modular Curriculum Reconstruction in Film and Television Education

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Abstract

Under the background of the deep penetration of AIGC technology into the film and television industry, the traditional film and television professional courses are faced with structural difficulties such as lagging teaching content, fragmentation of technology embedding, and deviation of tool orientation from the essence of education. This study puts forward the theoretical framework of ' AI + IP ' two-wheel-driven curriculum innovation, with the three design principles of ability progression, horizontal coupling and project-driven, and constructs the four modules of prompt word workshop, AI dynamic narrative, sound and emotion, ethics and textual research, forming a step-by-step training path from technical cognition to the whole process of human-computer collaborative creation, which provides a systematic theoretical reference for the AIGC curriculum reform of film and television major.

Keywords

AIGC, film and television professional, two-wheel drive, modular reconstruction, theoretical framework.

1. The Realistic Dilemma of the Reconstruction of Film and Television Professional Courses

With the rapid development of AIGC technology in the world, the content production mode of the film and television industry is undergoing profound remodeling. From AI-assisted script creation to full-process AI-generated short films, the speed of technical iteration and the wide range of application scenarios pose unprecedented challenges to the training of film and television professionals in colleges and universities. Traditional film and television professional courses have exposed three structural dilemmas in response to this technological change.

1.1. Technical Iteration is Seriously Out of Line with Textbook Update

The version of AIGC tool is iterated frequently, and some software reaches monthly or even weekly frequency. However, college textbooks are subject to the writing and publishing cycle, and the content update seriously lags behind the industrial practice. At the same time, the ' reverse generation gap ' between teachers ' learning speed of emerging technologies and students ' learning speed further aggravates the gap between teaching content and industrial demand.

1.2. Technology Embedding Presents Fragmentation Characteristics

At present, the AIGC curriculum reform in most colleges and universities is single-point implantation, that is, adding AI teaching modules to existing courses, but there is a lack of connection and progressive relationship between modules. The AI content of basic courses and high-level courses is repeated or broken. The course group is nominally established, but in essence it is still fragmented, lacking the organic coupling between the overall framework design and the modules.

1.3. Tool Orientation Deviates from the Essence of Education

In the current teaching, there is a general tendency to narrow AIGC education into " tool training, " overemphasizing the operational proficiency of specific software, while ignoring the cultivation of AI thinking, the training of prompt design logic, the design of man-machine collaboration process and the cultivation of critical evaluation ability of AI generated content. At the same time, ethical education is seriously absent, and students generally lack copyright awareness and ethical judgment ability when using AI to generate materials. This model deviates from the educational essence of film and television education ' to cultivate creators with aesthetic judgment and humanistic quality '. The superposition of the three dilemmas profoundly reveals that the current reform urgently needs to construct a systematic curriculum innovation framework from the theoretical level.

2. 'AI + IP ' Two-wheel Drive : The Core Idea of the Theoretical Framework

In view of the above difficulties, this study proposes a theoretical framework of ' AI + IP ' two-wheel-driven curriculum innovation. The core logic of the framework is that AIGC technology and film and television IP content constitute the two parallel driving forces of curriculum innovation. The two work together and support each other to jointly promote the film and television professional courses from " technology embedded repair " to " framework traction reconstruction. "

Specifically, the ' AI wheel ' points to the longitudinal line of AIGC technical ability training, covering technical dimensions such as prompt word design, agent construction, and human-machine collaborative creation ; 'IP wheel ' points to the horizontal line of film and television IP content creation ability, covering narrative construction, role shaping, sound design and other content dimensions. The two driving forces take the ' modular course group ' as the interlocking gear, and realize the deep integration through the three design principles. The essence of this framework is a systematic project to upgrade AIGC education from " tool skill training " to " AI thinking + IP thinking dual ability training. " Based on this, this study further builds a complete research framework with three principles as the framework, four modules as the core carrier, and three guarantees as the landing support.

3. Module Group Construction : Three Principles and Four Modules

3.1. Module Group Design Principles

First, the principle of progressive ability. Ability training should follow a gradual path from cognition to application and then to integration. The basic layer covers the theoretical basis of film and television, the basic cognition of AIGC, the basis of prompt words and ethical enlightenment ; the application layer focuses on the specific use and scene adaptation of AI tools in each link ; the integration layer points to the whole process of human-machine collaborative creation, project management and work output. A supporting relationship is formed among all levels to ensure that students have the comprehensive ability to independently use AIGC tools to complete film and television creation. This principle embodies the vertical logic of ' AI wheel ' from foundation to higher order.

Second, the principle of lateral coupling. AIGC should serve the creation and operation of film and television IP. The combination of technical module and IP module produces works together-for example, the ' prompt word workshop ' module is coupled with the ' dynamic narrative ' IP module to form a landing short film project. This principle aims to make students understand the core value of " technology serves content, " which is the specific way of " AI + IP " double wheel at the curriculum level.

Third, the project-driven principle. Starting from the innovation and entrepreneurship projects and discipline competitions, the exclusive agents are constructed for different project types. The project sources include college students ' innovation and entrepreneurship training programs, subject competitions and real projects of school-enterprise cooperation. The composition formula of the agent is : agent = project goal + recommendation tool chain + prompt word strategy + evaluation standard. After the project is started, the requirement analysis is carried out, and the adaptation module is called from the course module library to form the project-specific learning path. This principle ensures that the two-wheel drive always points to real creative practice.

3.2. Four Core Module Groups

Module group one : prompt word workshop. Prompt word design is the core skill of AIGC tool use. The teaching content covers the basic structure of prompt words, the grammatical differences of different tools, the design strategy of prompt word chain and the skills of negative prompt words. In the practice link, students are required to design prompt words of more than three versions of different strategies around the same creative goal, and compare and analyze the difference of generation effect. In terms of horizontal coupling with IP, guide students to establish an exclusive prompt lexicon for specific IP roles or scenarios, and realize the first occlusion of ' AI wheel ' and ' IP wheel ' at the basic layer. [1]

Module group 2 : AI dynamic narrative. Narrative ability is the core quality of film and television creation. The teaching content includes the use of AI tools to generate story frames and compare multiple versions, AI-assisted role arc design and plot node generation, and AI construction method of multi-outcome narrative structure. Students must use at least two AI tools to complete the script and split-lens design of the complete short film, undergo no less than three versions of iterative optimization, and expand the derived storyline based on a given IP worldview.

Module group three : voice and emotion. Sound design is an important carrier of emotional communication in film and television works. The teaching content covers speech synthesis and emotion adjustment, style and emotion control of AI music generation, and AI generation and synthesis of environmental sound effects. Students must independently complete a full set of AI audio design for short clips, and can explain how sound design serves narrative emotions. Encourage students to customize exclusive sound models for specific IP roles.

Module group four : ethics and textual research. This module adheres to the three core requirements of scientificity, accuracy and standardization. The teaching content covers the copyright ownership of AI generated content, reasonable use boundary, deep synthesis and false information prevention, AI work signature specification, etc., and actively explores the docking path with industry certification. The four module groups follow the logic of ' ability progression ', and the module group four runs through the whole process, providing an ethical framework for all technology applications. Each module group takes ' AI + IP ' two-wheel drive as the underlying logic - both training the operation ability of AIGC tools and always anchoring the creation goal of IP content.

4. Implementation Path and Evaluation System

4.1. Teaching Staff Construction

This study proposes a hierarchical training system: the entry level requires all teachers to achieve AIGC tool cognition and basic operation level ; to cultivate the ability of curriculum integration and project guidance for key teachers ; the high-level focuses on the core team to improve the ability of curriculum design and agent construction. Establish an interdisciplinary collaboration mechanism, promote joint lesson preparation between film and television

teachers and computer-related professional teachers, and establish an ' AI teaching support center ' to provide technical services. Establish a ' Student AI Assistant ' mechanism, select senior students with strong tool ability to assist teaching, and actively introduce industry resources, and invite AIGC film and television application front-line practitioners to open workshops.

4.2. Teaching Mode Innovation

First, project-based learning, with ' mass entrepreneurship and innovation projects ' or participating works as the core output of the semester, forms a complete closed loop of ' project initiation-demand analysis-module call-agent assistance-work output-review summary '. Second, agent-assisted teaching, preset AI agents for different project types, so that students can explore independently within the framework. Third, man-machine collaboration workshops, set up ' man-machine PK ' links, compare the differences between artificial, pure AI, and man-machine collaboration, and strengthen students ' judgment. Fourth, flip the classroom, make the basic operation content into a video for students to learn independently before class, and focus on creative practice and work review in class time. The above strategies together constitute the landing carrier of the two-wheel drive framework at the teaching implementation level.[2]

4.3. Reconstruction of Evaluation System

Establish three core criteria : process takes precedence over results, focusing on the whole process of iteration of works ; the division of labor between human and machine is clarified, and the boundary between AI generation and artificial creation is accurately defined.[3] The evaluation dimension is diversified, and the technical application, creative planning, value judgment and ethical thinking ability are comprehensively evaluated. In the implementation of the AI use reporting system, students must attach the ' AI application manual ' when submitting their academic works, including the AI generation section, the artificial original section, the optimization and adjustment details, the prompt word use record and the copyright ethics self-examination results.

5. Conclusion

This study takes ' AI + IP ' two-wheel drive as the theoretical core, and completes the theoretical framework of modular reconstruction of film and television professional curriculum group. The research clarifies the triple dilemma of AIGC empowering film and television education ; this paper puts forward the core concept of ' AI + IP ' two-wheel drive, and clarifies the curriculum innovation logic of technical ability training and IP content creation. Three design principles are established, and four core teaching module groups are constructed. It clarifies the implementation path of the trinity of teacher construction, teaching implementation and evaluation reform. Future research can be promoted in depth from three aspects : deepening the empirical research of two-wheel drive theory ; build a cross-university shared curriculum module library and agent resource library ; to participate in the formulation of AI film and television education industry standards, and provide unified normative guidance for film and television personnel training.

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