
Original Research Article

The three-dimensional curriculum framework of "AI tool operation + creative logic + ethical standards" in the construction and practice of digital media programs

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Abstract: This paper addresses the common issues of "emphasizing skills over thinking and lacking standards" in current digital media professional courses, proposing a new approach to constructing a three-dimensional curriculum system comprising "AI tool operation + creative logic + ethical standards." This system is based on mastering AI tools, emphasizing the enhancement of students' innovative abilities through the guidance of creative thinking logic, and using ethical standards as a value-driven framework to form a progressive curriculum content that integrates skills, thinking, and values. In terms of tool operation, the curriculum not only teaches the basic functions of mainstream AI tools but also focuses on advanced techniques and the exploration of cutting-edge industry technologies. In terms of creative logic, the curriculum utilizes prompt engineering, creative methodologies, and interdisciplinary integration to help students enhance their generative creation and innovative design capabilities. In terms of ethical norms, the curriculum employs case-based teaching, scenario simulations, and specialized discussions to guide students in developing proper professional ethics and a sense of social responsibility. This paper also combines teaching practice to introduce the specific implementation pathways of the three-dimensional curriculum system in terms of teaching methods, evaluation mechanisms, and faculty collaboration, demonstrating its significance in enhancing students' comprehensive literacy, innovative thinking, and professional literacy. Research indicates that this curriculum system not only addresses the shortcomings of existing digital media education but also provides a practical reference model for professional education reform and industry talent cultivation.

Keywords: AI tool operation; creative logic; ethical standards; digital media major

1. Introduction

With the rapid development of artificial intelligence technology, the digital media industry is undergoing a profound and unprecedented transformation. The widespread application of AI in fields such as image generation, video editing, and audio processing has significantly improved creative efficiency and the quality of works, lowering the barriers to entry for digital media creation and revolutionizing production methods. Against this backdrop, this study proposes the construction of a three-dimensional curriculum system comprising "AI tool operation + creative logic + ethical norms," aiming to achieve a comprehensive integration of technology, thinking, and values through the design of progressive teaching content. This system not only focuses on students' proficiency in AI tools but also emphasizes the dominant role of logical thinking in the creative process, while incorporating ethical education to guide students in establishing proper professional standards and a sense of social responsibility. Through the construction and practical exploration of this curriculum system, it is possible to effectively address the shortcomings of the current educational system, promote the in-depth

development of teaching reforms in digital media programs, further enhance students' comprehensive literacy and innovative capabilities, and contribute new talent and momentum to the healthy development and sustained innovation of the digital media industry.

2. Theoretical foundation and research framework

2.1. The trend toward integration of AI and digital media education

With breakthroughs in artificial intelligence technology across multi-modal domains such as images, videos, and audio, the teaching methods and educational objectives of digital media education have undergone a fundamental transformation. The traditional "manual creation—tool learning" model is gradually giving way to the "human-machine collaboration—intelligent creation" model. AI can play a significant role in assisting creative generation, enhancing production efficiency, and expanding expressive forms. However, AI-driven creation has also raised issues such as copyright ownership, algorithmic bias, and ethical controversies. Digital media education urgently needs to introduce a new teaching system to achieve the triple integration of technological application, creative thinking, and ethical standards.

2.2. Overall concept of the three-dimensional curriculum system

Based on the above theoretical background, this study proposes a three-dimensional curriculum system consisting of "AI tool operation + creative logic + ethical norms." This system is composed of three mutually independent yet interdependent modules, forming a complete teaching chain: the tool operation module addresses the question of "whether students can use the tools," cultivating technical application skills; the creative logic module addresses the question of "whether students can innovate," fostering creative thinking; and the ethical norms module addresses the question of "whether students can uphold ethical boundaries," cultivating professional responsibility. Together, these three modules form a spiral-shaped curriculum system progressing from "skills—thinking—values," providing a new teaching pathway for digital media professional education.

3. Construction and implementation of AI tool operation modules

3.1. Course content design

The course design for the AI tool operation module emphasizes a combination of foundational and advanced content while keeping pace with cutting-edge technological developments. First, the course provides a systematic overview of the basic functions and application scenarios of commonly used AI tools, such as DALL·E, Midjourney, and Stable Diffusion in image creation, the functionalities of Premiere Pro and After Effects smart plugins in video editing, and the advantages of audio processing software like Descript. Through case studies and demonstrations, students are guided to master routine operations. Second, advanced skill training covers model parameter adjustment, refined prompt word creation, multi-tool collaboration, and plugin extension applications, enhancing students' ability to use tools in complex creative environments. Finally, the course maintains a dynamic update mechanism, introducing the latest AI creation tools and experimental features each semester, organizing student experiences and explorations to cultivate sensitivity and adaptability to emerging technologies, ensuring that teaching remains aligned with industry development.

3.2. Teaching methods and approaches

During the teaching process, diverse methods are employed to enhance students' learning outcomes. First, project-driven teaching is utilized, using real-world projects such as advertising short film production, virtual

idol design, and interactive device development as teaching vehicles, enabling students to naturally master tool application skills through project practice, thereby enhancing the practicality and relevance of learning. Second, a blended online-offline teaching model is implemented: the online component provides self-study videos, online exercises, and virtual laboratory environments, allowing students to flexibly master foundational operations; while offline classes focus on addressing questions, practical demonstrations, and personalized guidance to enhance the depth and efficiency of learning. Additionally, an industry mentor participation mechanism is implemented, inviting technical experts and creative professionals from the digital media industry to serve as guest lecturers. They share real-world application cases of AI tools in commercial projects based on their own experiences, providing students with opportunities to align with industry standards and enhance their practical skills and professional competence.

4. Construction and implementation of the creative logic module

4.1. Course content design

The Creative Logic Module is designed to break through the limitations of single-tool-based teaching and enhance students' creative thinking and logical reasoning skills. First, it introduces creative studies, design thinking, and innovation methodologies to help students establish a comprehensive framework from problem identification to creative generation. Second, it teaches keyword selection, contextual design, and semantic control methods, enabling students to guide AI creation through precise prompt word combinations and achieve human-machine collaboration. Third, it introduces creative methods such as brainstorming, reverse thinking, and cross-disciplinary combinations, combined with case analyses, to help students master the entire process strategy. Finally, it organizes interdisciplinary creative tasks, such as digital installation art, interactive storytelling, and advertising creative design, and analyzes the creative highlights and success factors of classic projects to promote students' deep understanding and application of creative logic.

4.2. Teaching methods and approaches

During the teaching process, diverse methods are employed to enhance students' breadth of thinking and creativity. First, heuristic teaching is used, where teachers guide students to think from multiple angles through open-ended questions, avoiding fixed thinking patterns. Second, group collaboration learning is promoted, where students complete creative design tasks in teams, leveraging collective wisdom to solve complex problems, and improving communication skills and collaborative spirit through the process. Additionally, the course regularly hosts creative workshops, inviting renowned artists, directors, or advertising creatives for on-site guidance and exchanges, enabling students to gain inspiration in real-world creative contexts. Concurrently, the course emphasizes interdisciplinary integration, offering joint courses that incorporate knowledge from psychology, sociology, literature, and other fields into digital media creativity, helping students transcend the limitations of single-discipline thinking and develop a more open and multidimensional creative perspective^[10].

5. Construction and implementation of the ethical standards module

5.1. Course content design

This study designed a systematic implementation path to ensure the implementation of a three-dimensional curriculum system consisting of "AI tool operation + creative logic + ethical norms." First, the curriculum structure was integrated, with three modules arranged in a progressive order of "basic skills—creative

deepening—value guidance"to help students learn step by step. Second, teaching resources were integrated to build a three-tiered platform of "on-campus—off-campus—industry"to provide basic training, self-study channels, and real application scenarios. Third, faculty development involves establishing a multidisciplinary, interdisciplinary teaching team comprising experts from multiple fields. Fourth, teaching operational mechanisms include implementing a semester-based rolling update system to maintain the course's cutting-edge relevance and practical value.

5.2. Teaching methods and tools

In terms of teaching methods, the ethics module emphasizes guiding students in developing value-based thinking and a sense of responsibility. First, discussion-based teaching is employed, with instructors using open-ended questions as entry points, such as "Should AI-generated works be entitled to copyright?"to encourage students to engage in multi-perspective debates, deepening their understanding through critical thinking[11]. Second, case-driven learning is implemented, where students conduct group research and analyze real-world cases to summarize lessons and warnings, enhancing their ability to perceive industry risks. Third, a mock court and role-playing session is established, allowing students to engage in ethical defense and judgment in "legal trial"or "business negotiation"scenarios, strengthening their ability to respond to complex ethical issues.

6. Conclusion

This paper focuses on the reform of practical teaching in the field of digital media technology, proposing and implementing a three-dimensional curriculum framework comprising "AI tool operation + creative logic + ethical norms."Research indicates that this framework effectively addresses the shortcomings of traditional curricula, which prioritize skills over critical thinking and lack ethical guidelines. It not only enhances students' proficiency in AI tool operation and their ability to apply these tools creatively but also strengthens their innovative logic and professional ethical literacy, thereby promoting the comprehensive enhancement of their overall competence and employment competitiveness. The course has demonstrated excellent results in content updates, industry-academia integration, and interdisciplinary expansion, providing a replicable model for digital media education reform.

About the author

Guo Hui (1993-), male, born in Datong, Shanxi Province, China, Master's degree, Assistant Professor, research interests mainly include: the design and construction of digital media professional courses.

References

- [1] Zhou Jie, Liu Zhen, Tong Weifeng. The Value Logic and Practical Exploration of Generative Artificial Intelligence in Enhancing Adaptive Learning in Vocational Education [J]. Chinese Vocational and Technical Education, 2025, (15): 51-59.
- [2] Zheng Huiwen. Exploring Precision Teaching Models in Ideological and Political Education Empowered by Artificial Intelligence [J]. Public Relations World, 2025, (15): 190-192.
- [3] Wang Qianjun. Innovative Applications and Ethical Challenges of Generative AI in International Communication [J]. Broadcasting and Television Information, 2025, 32(07): 23-25.
- [4] You Jianxin. AI: The Engine Driving Comprehensive Transformation in Business Schools [J]. Shanghai Management Science, 2025, 47(04): 9-13.
- [5] Han Zhi-xiao. Research on the Construction of a "Three-Dimensional, Three-Tier" Innovation and Entrepreneurship Curriculum System in Higher Vocational Colleges [J]. Henan Agriculture, 2023, (21): 20-22.