

Value Symbiosis and Knowledge Reconstruction: Research on School-Enterprise Collaborative Paths of Art Basic Theory Teaching in the AI Era

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Abstract: The rapid development of generative artificial intelligence has completely reconstructed the logic of artistic creation and the aesthetic evaluation system. The teaching of basic art theory in colleges and universities is confronted with three practical dilemmas: the disconnection between the traditional theoretical system and emerging art forms, the imbalance between a single teaching subject and interdisciplinary education demands, and the misalignment between static teaching modes and dynamic technological iteration. Based on the core perspectives of value symbiosis and knowledge reconstruction, this paper breaks through the limitation of superficial technical tool integration into teaching, takes school-enterprise collaboration as the core path, and employs bibliometric analysis to explore the internal demands of art theory teaching reform and the essential logic of school-enterprise collaboration in the AI era, to construct a teaching reform and teacher training system for basic art theory adaptable to the intelligent era. Combined with collaborative practice cases between colleges and art technology enterprises, this study reveals the operation mechanism of resource complementarity, responsibility sharing, and achievement sharing between schools and enterprises, and explores the practical path for the deep coupling of art theory and AI technology. The research results provide an operable practical paradigm for the innovation of basic art theory teaching and interdisciplinary education models in colleges and universities in the AI era, and also offer a theoretical reference for the further improvement of the school-enterprise collaborative education mechanism.

Keywords: Value symbiosis; Knowledge reconstruction; Artificial intelligence; Basic art theory teaching; School-enterprise collaboration

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1. Introduction

The iterative breakthroughs in artificial intelligence technology, particularly generative AI, have given rise to entirely new art forms such as algorithmic art, virtual interactive art, and digitally generated art. These innovations have shattered the traditional boundaries of artistic creation, modes of dissemination, and definitions of artistic essence, posing a disruptive challenge to the foundational theoretical teaching of art in universities. As the cornerstone of art education, foundational art theory plays a pivotal role in cultivating students' artistic literacy, constructing theoretical understanding, and establishing aesthetic principles. However, the traditional teaching system, centered around classical art history and aesthetic theory,

can no longer meet the demands for theoretical restructuring and practical transformation brought about by AI art. Against this backdrop, university-enterprise collaboration has emerged as a key approach to breaking the closed loop of university teaching, integrating academic and industrial resources, and achieving value co-creation and knowledge restructuring. By deeply integrating the theoretical strengths of universities with the technological and practical advantages of enterprises, this collaboration can address the practical challenges faced by foundational art theory teaching and drive the intelligent and interdisciplinary transformation of art education in the AI era. This paper takes value co-creation and knowledge restructuring as its research core, systematically exploring innovative paths for university-enterprise collaboration in foundational art theory teaching in the AI era, offering both theoretical research value and practical guidance significance.

2. Practical dilemmas and reform demands in teaching foundational art theory in the AI era

2.1. The paradox between the closed nature of theoretical systems and the openness of artistic forms

Traditional foundational art theory systems have always been constructed around physical art forms such as easel painting and sculpture. From classical aesthetic theory to modern art form analysis, the knowledge framework exhibits strong closedness and lag. In contrast, AI art, characterized by non-physicality, data-driven processes, and algorithm-led creation, has completely overturned the creative logic and essential connotations of traditional art. Emerging art forms are constantly emerging, and the industry is evolving rapidly. Currently, contradictions in university art theory teaching are prominent: the vast majority of textbooks still focus on traditional art content, with minimal coverage of cutting-edge topics such as the creative principles, aesthetic characteristics, and copyright ethics of AI art. Traditional theories fail to address core issues brought about by AI art, such as “creative subjectivity, originality of works, and the reconstruction of aesthetic standards,” leading to a disconnect in students’ cognition and difficulty in forming artistic critical thinking skills suited to the intelligent era. Theoretical teaching is severely disconnected from industry practice^[1].

2.2. The paradox between the singularity of teaching subjects and the complexity of interdisciplinary education

The deep integration of AI and art is essentially a cross-disciplinary integration of art, computer science, communication studies, ethics, and other fields, posing extremely high demands on the interdisciplinary literacy of teaching subjects. However, the current teaching subjects in foundational art theory are highly singular, with teaching primarily undertaken by art theory professionals. While these teachers possess solid theoretical foundations, they lack systematic AI technology training, making it difficult to achieve integrated teaching of theory and technology. On the other hand, computer science teachers, while proficient in technical knowledge, lack art theory literacy and cannot guide students in AI art creation from an aesthetic perspective. The capability shortcomings of singular teaching subjects fail to meet the complex demands of interdisciplinary education, becoming a core bottleneck restricting teaching reform.

2.3. The paradox between the static nature of teaching modes and the dynamic nature of technological iteration

The iteration speed of artificial intelligence technology is growing exponentially, with technology updates such as the open-sourcing of Stable Diffusion and the text-to-video generation by Sora continuously shortening the technology update cycle and rapidly changing artistic creation forms and industry demands. However, the teaching mode of foundational art theory in universities has long been ossified, exhibiting obvious static characteristics: course content updates lag, with textbook revision cycles lasting 3–5 years, unable to keep pace with technological advancements; teaching methods are singular, still dominated by theoretical lectures and work appreciation, lacking practical and interactive teaching designs; evaluation systems are one-sided, focusing on the assessment of theoretical knowledge memorization while neglecting the cultivation of technical application, innovative thinking, and ethical judgment abilities. The severe misalignment between

static teaching modes and dynamic technological iteration ultimately leads to a disconnect between students' learning and application, making it difficult for them to adapt to the development demands of the art industry in the AI era.

3. The core logic of university-enterprise collaboration: Value symbiosis and knowledge reconstruction

3.1. Value symbiosis: The core essence of mutual empowerment between universities and enterprises

University-enterprise collaboration is not a simple aggregation of resources from universities and enterprises but rather a deep cooperative system centered on value symbiosis. Universities, leveraging their systematic and academic advantages in foundational art theory, infuse aesthetic connotations and humanistic essence into AI art creation, assisting enterprises in optimizing the aesthetic algorithms of AI-generated models and addressing the industry's pain point of AI works lacking artistic charm. Enterprises, on the other hand, utilize their cutting-edge and practical advantages in AI technology to provide universities with the latest technological tools, industry trends, and practical scenarios, breaking the closed nature of university teaching. Both parties form a bidirectional value loop of "theory empowering technology and technology feeding back into teaching," achieving symbiotic and win-win outcomes in academic and industrial values. This is also the core essence of university-enterprise collaboration, empowering art teaching reform^[2].

3.2. Knowledge reconstruction: A key pathway for interdisciplinary integration

Based on value symbiosis, university-enterprise collaboration promotes the systematic reconstruction of the foundational art theoretical knowledge system, breaking down the single-disciplinary boundaries of traditional theories and integrating diverse knowledge contents such as art theory, AI technology, industry practices, and ethical norms. Universities are responsible for sorting out and innovating traditional art theories, incorporating new theoretical propositions of the AI era. Enterprises transform technical knowledge and project practice knowledge into teaching content. Together, they establish an interdisciplinary knowledge system of "traditional theory + AI technology + practical application," enabling foundational art theory to keep pace with the development of AI technology and achieving the updating, expansion, and reconstruction of knowledge content, thereby addressing the disconnect between theory and technology, as well as teaching and practice, at its root.

3.3. Collaborative operation: A dynamically adaptive talent cultivation mechanism

Guided by value symbiosis and knowledge reconstruction, universities and enterprises establish a dynamically adaptive collaborative talent cultivation mechanism. In terms of talent cultivation entities, a dual-instructor teaching team consisting of university theoretical instructors and enterprise technical instructors is created to achieve complementary capabilities and collaborative teaching. Regarding teaching operations, enterprises continuously transmit information on technological iterations and industry demands, which is swiftly converted into teaching resources, enabling teaching content to dynamically adapt to technological advancements. In practical training, relying on real project scenarios within enterprises, students complete knowledge transformation and skill enhancement through practical combat, forming a complete talent cultivation chain of knowledge reconstruction, skill development, and value realization.

4. Practical pathways for school-enterprise collaboration in teaching fundamental theories of art in the AI era

4.1. Establishing a trinary collaborative safeguard mechanism to solidify the foundation for value co-creation

In teaching, with the goal of stable mutual benefit and efficient operation, a trinary collaborative safeguard mechanism encompassing "organizational decision-making, resource sharing, and risk prevention and control for interests" should be established to lay a solid foundation for in-depth school-enterprise cooperation^[3]. Establish an AI art education

collaborative center with a dual school-enterprise responsibility system to coordinate teaching reform, resource integration, project practice, and other tasks. Set up specialized working groups and implement a regular communication mechanism to ensure synchronized collaboration between both parties. Build a school-enterprise resource-sharing platform where enterprises open up AI creation platforms, art datasets, and real projects, while universities provide theoretical faculty, venues, and literature resources, enabling mutual resource complementarity. Clarify rules for intellectual property rights and benefit distribution from achievements, and establish a comprehensive risk prevention and control system covering copyright and practical safety to safeguard the legitimate rights and interests of both school and enterprise parties, achieving long-term and stable value co-creation.

4.2. Developing a four-dimensional integrated curriculum system to promote knowledge reconstruction implementation

Centered on the core goal of knowledge reconstruction, break away from traditional curriculum setup models and develop a curriculum system integrating “traditional theoretical innovation, AI technology fusion, practical application advancement, and ethical norm guidance”^[4]. Innovate traditional core courses by reconstructing the content of art history and aesthetic principles from an AI perspective and adding special chapters on AI art. Offer interdisciplinary technical courses covering topics such as an introduction to AI art, creative techniques, and digital aesthetics, taught jointly by faculty from both schools and enterprises. Construct a three-tier practical curriculum system that uses real enterprise projects as carriers to carry out basic, advanced, and innovative practices at different levels. Add courses on AI art ethics and regulations to strengthen copyright and ethical education, building a brand-new curriculum system that combines theoretical depth, technical practicality, and value orientation, and achieving systematic reconstruction of fundamental art theoretical knowledge.

4.3. Innovating a dual-instructor-guided, project-driven teaching model to optimize the education process

Implement a teaching model featuring dual-instructor collaboration and project-driven learning to form a closed-loop teaching process. Each semester, enterprises select real projects and transform them into teaching tasks. Students form groups to bid for and undertake these projects, with continuous collaborative guidance from instructors from both schools and enterprises throughout the entire process, from scheme design to achievement acceptance. Adopt teaching methods that involve joint preparation before class, collaboration during class, and joint evaluation after class, advancing theoretical explanations and technical demonstrations simultaneously to break away from the limitations of single teaching methods. Construct a diversified evaluation system that includes process evaluation, outcome evaluation, and industry evaluation to comprehensively assess students’ theoretical application, technical practicality, and innovation capabilities, truly transforming the outcomes of knowledge reconstruction into students’ comprehensive qualities and achieving the value goals of school-enterprise collaborative education.

4.4. Implementing a three-stage progressive faculty development program to solidify talent support for reform

In response to the shortcomings in teachers’ interdisciplinary capabilities, implement a three-stage progressive program for developing composite faculty members through centralized training, joint teaching and research, and practical enhancement^[5]. Conduct centralized training where enterprise experts and university theoretical mentors teach knowledge on the integration of AI technology and theory. Establish a joint school-enterprise teaching and research platform to jointly develop courses, cases, and teaching materials, and regularly conduct lesson preparation and teaching discussions. Implement a dual-instructor mutual employment system where university teachers participate in real combat projects in enterprises, and enterprise experts come to campuses to teach, promoting the transformation of teachers’ practical experience into teaching content, and building a dual-instructor faculty team that understands theory, excels in technology, and is skilled in practice, providing talent support for the reform of fundamental art theory teaching and knowledge reconstruction.

5. Conclusion

The core of reforming fundamental art theory teaching in the AI era lies in being value co-creation-oriented and knowledge reconstruction-centered, breaking down the barriers between university teaching and industry practice through school-enterprise collaboration, resolving the triple dilemmas of traditional teaching, and achieving deep coupling between art theory and AI technology. The value of school-enterprise collaboration lies not only in resource complementarity but also in promoting the reconstruction of the knowledge system, innovation in teaching models, and transformation of the faculty team in fundamental art theory, building a new paradigm of art education suitable for the intelligent era. The collaborative safeguard mechanism, four-dimensional curriculum system, project-driven teaching model, and three-stage faculty development pathway form a complete practical pathway for school-enterprise collaboration, providing a replicable and promotable plan for the reform of fundamental art theory teaching in universities. In the future, it is necessary to further deepen the school-enterprise collaboration, continuously promote value co-creation and knowledge reconstruction, continuously innovate interdisciplinary talent cultivation models, and inject lasting impetus into the high-quality development of art education in the AI era.

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