

Practice Research on the Paradigm Transformation of AIGC Penetrating into the Teaching Form of Art Majors in Colleges and Universities

Zhen Tian

LIAONING COMMUNICATION UNIVERSITY, Shenyang, Liaoning, 110136, China

Abstract

With multi-modal content, AIGC deeply intervenes in the teaching scene of art majors in colleges and universities, promoting the transformation of teaching objectives from skill training to creative expression and humanistic aesthetics, the transformation of teaching subjects from one-way teaching by teachers to human-machine collaborative creation, the transformation of teaching implementation from closed classrooms to project-driven open learning, and the transformation of teaching evaluation from result judgment to process tracing and comprehensive literacy assessment. Based on the teaching reform practice, this study can form an integrated implementation path of "concept first, curriculum reconstruction, classroom closed-loop, and evaluation innovation", which applies AIGC to teaching, re-sorts out and optimizes the teaching-related processes, clarifies the copyright rules for the use of AIGC in teaching, and strengthens the supervision and management of AIGC in the teaching process, so as to promote its application in teaching and realize the improvement of art talent training efficiency and the enhancement of original ability. The AIGC teaching mode conforms to the needs of the digital cultural industry and the direction of new liberal arts construction, and can provide a stable and feasible practical framework for the intelligent transformation of art education in local colleges and universities.

Keywords

AIGC; Teaching Form; Paradigm Transformation; Human-Machine Collaboration.

1. Introduction

At present, digital technology is constantly promoting profound changes in artistic creation and educational scenarios. With the rapid generation capacity of texts, images, audio and video, 3D models, etc., AIGC has gradually become an important factor affecting the teaching of fine arts, design, digital media, film and television drama and other majors in colleges and universities. Judging from the popularity of more than 30,000 AIGC-related notes and more than 270,000 AI image generation-related notes on social platforms, AIGC has deeply penetrated into various scenarios of artistic creation, with its technology iteration speed measured in "months", while the update cycle of the curriculum system of art education in colleges and universities is often as long as 1-2 years, resulting in an obvious "generation gap" between teaching content and industrial technology development . While AIGC reduces the technical threshold of creation and improves the efficiency of material production, it also puts forward new requirements for the traditional teaching system centered on skill training, software operation and hand-painting skills.

2. The Internal Logic of AIGC Promoting the Paradigm Transformation of Art Teaching in Colleges and Universities

2.1. Transformation of Teaching Objectives

Traditional art teaching has long regarded skill proficiency, work completion and software operation ability as important evaluation standards, and a large number of class hours are used for repetitive content such as basic modeling, effect rendering and layout production, leading students to fall into the misunderstanding of "valuing skills over creativity" and making it difficult to adapt to the diversified needs of artistic creation in the digital age. AIGC can efficiently complete such basic work, such as quickly generating multiple sets of initial design drafts, completing complex effect rendering, and making basic layouts, which liberates students from tedious repetitive labor and promotes the teaching focus to shift to creative planning, narrative expression, cultural interpretation, aesthetic judgment and scheme iteration ability.

2.2. Transformation of Teaching Subjectsve

At the level of teaching subjects, the traditional lecture-based classroom centered on teachers is transforming into a co-creation classroom with human-machine collaboration. In the traditional art classroom, teachers are the only demonstrators and knowledge sources, and students passively accept skill teaching and creation guidance, which limits their learning initiative and creativity. The intervention of AIGC breaks this single subject relationship and builds a three-party collaborative teaching pattern of "teacher-student-AIGC".

Teachers are no longer the only demonstrators and knowledge sources, but more assume the roles of creative guides, process designers, ethical gatekeepers and evaluation organizers, responsible for guiding students to clarify the direction of creation, standardize the use of technology, and control the humanistic connotation and copyright boundary of works. As an auxiliary teaching tool, AIGC undertakes tasks such as material generation, multi-scheme comparison, basic effect presentation and information retrieval. Its rapid generation capacity can provide students with a variety of creative references and reduce the technical threshold for creative implementation.

2.3. Transformation of Teaching Implementation

In terms of teaching venues and actual implementation processes, AIGC has made teaching no longer limited to closed classrooms, but has become an open learning scenario centered on projects. Traditional art teaching is mostly centered on classrooms, and the teaching content is disconnected from actual application scenarios, making it difficult for students to transform what they have learned in class into professional abilities, which is also one of the important reasons for the disconnection between the training of applied art talents in colleges and universities and industrial needs[2].

This teaching mode takes real projects as the carrier, running through the complete chain of demand analysis, preliminary research, creative conception, AI generation, manual optimization, achievement display and review summary, allowing students to carry out learning and creation in real tasks. The combination of online tools and offline creation enables students to complete material generation and scheme iteration with the help of online AIGC tools, and improve their works through offline group discussions, field investigations, manual production and other methods; the connection between on-campus teaching and industrial needs, introducing real enterprise projects, intangible cultural heritage digital projects, discipline competition projects, etc., allows students to understand industry standards, market needs and user thinking; the complementarity between virtual materials and physical production, virtual materials generated by AIGC can be converted into physical

works through 3D printing, physical rendering and other methods, enriching the forms of creation and presentation effects.

2.4. Transformation of Teaching Evaluation

At the level of teaching evaluation, the traditional result-oriented evaluation method is transforming into a process-oriented, value-added and comprehensive evaluation. Traditional art teaching evaluation mostly focuses on the completion of the final work, ignoring the students' creation process, creative ideas and ability improvement, which is difficult to fully reflect the students' comprehensive literacy, and also cannot effectively avoid bad phenomena such as "plagiarism" and "agent work". The intervention of AIGC makes it difficult to directly judge AI-generated content and students' original content through appearance, and the traditional result-oriented evaluation can no longer adapt to the needs of teaching transformation, forcing the reform of the teaching evaluation system.

The transformed evaluation pays more attention to the students' creative ideas, manually modified content, records of the entire creation process, performance in group cooperation, and whether they abide by copyright regulations during creation, so as to ensure the teaching quality and talent training effect.

3. Practical Path of Integrating AIGC into Art Teaching in Colleges and Universities

3.1. Concept First

The teaching concept of AIGC clarifies that artificial intelligence is an auxiliary tool to improve efficiency and cannot replace students' main creation, which is the premise and foundation of integrating AIGC into art teaching. At present, some students have a tendency of "over-reliance on AI and neglect of originality", and some teachers have a mentality of "resisting AI and fearing technology", which have restricted the in-depth integration of AIGC and teaching. Therefore, first of all, we should guide teachers and students to establish a correct human-machine collaborative teaching concept and clarify the auxiliary position of AI through special training, teaching and research discussions, case sharing and other methods.

In teaching, all assignments and works must keep complete process materials, including concept sketches, scripts, keyword records, version screenshots, layered files and manual revisions, and direct submission of AI-generated content is prohibited.[5] Meanwhile, hierarchical application is adopted based on course levels: basic courses focus on tool literacy, keyword training and copyright awareness to help students master basic AIGC skills and clarify copyright boundaries; professional core courses emphasize process integration and design optimization to improve creative efficiency; comprehensive creation and graduation design highlight cross-media innovation and humanistic expression, encouraging students to use AIGC for diverse creative presentation.[1] Through teaching and case guidance, a consensus is reached: AI can assist art but cannot replace human emotion and humanity, thus avoiding technological abuse and empty creation.

3.2. Curriculum Reconstruction

The curriculum system is central to integrating AIGC into teaching. Based on professional training objectives, industrial demands and disciplinary features, we should restructure curricula by organically embedding AIGC rather than merely appending AI modules. We can add compulsory and elective courses including AIGC Art Practice, Digital Copyright, Prompt Engineering and AI Ethics to equip students with standardized usage awareness and relevant skills.[3] For core courses such as Visual Communication, Environmental Design and Digital Media, AIGC can be applied to preliminary creation and iteration while students focus on

aesthetic refinement, functional logic and emotional expression. In the comprehensive creation stage, school-enterprise cooperation, discipline competitions and graduation projects with dual tutors are adopted to enhance students' professional adaptability. Such curriculum reconstruction optimizes teaching objectives and content to fit the human-machine collaborative innovation trend of the digital media industry.

3.3. Classroom Closed-Loop

At the classroom implementation level, combined with the creative characteristics of art majors, form a stable and replicable four-stage teaching closed-loop, realizing the whole-process teaching of "demand guidance - creative development - generation optimization - review and improvement", ensuring the in-depth integration of AIGC and classroom teaching, and improving classroom teaching effectiveness.

The first stage defines needs and constraints, where teachers clarify creation themes, styles, cultural orientations and usage boundaries according to industrial and copyright norms to avoid unlimited generation and infringement.[4] The second stage focuses on creativity and script development, as students submit concept sketches, scripts and keyword schemes reviewed by teachers, who guide them to optimize ideas and standardize keywords for originality. In the third stage, students generate works through multiple rounds of AI creation, screening, partial redrawing and manual retouching while keeping complete process files, with teachers emphasizing manual creation to prevent over-reliance on AI. The fourth stage adopts group evaluation, teacher comments and reflection to strengthen creative expression and human-machine collaboration abilities. Practice shows this model greatly improves classroom efficiency, enriches students' design schemes and deepens their thinking, shifting teaching from technical operation to value discussion and returning to the essence of art education.

3.4. Evaluation Escort

In the teaching evaluation reform of art courses, construct a comprehensive evaluation system centered on creative ability, practical process and standardized use, break the limitations of traditional result-oriented evaluation, highlight process-oriented evaluation and value-added evaluation, strengthen the guidance of original spirit and humanistic value, and effectively avoid problems such as abuse of AI tools and irregular submission of achievements. The evaluation focuses on three core dimensions: first, the creative and narrative expression of works, focusing on evaluating the originality of students' creativity, the fit of themes, the effect of emotional transmission and the level of aesthetics, which is the core value of works of art; second, process achievements and team cooperation, focusing on evaluating the completeness of students' creation process, traces of manual modification, the quality of keyword writing, as well as their communication and coordination ability and sense of responsibility in group cooperation, recording students' growth and progress through process portfolios; third, technical application norms and copyright ethics, focusing on evaluating the standardization of students' AIGC use, the completeness of process materials, and whether they abide by copyright regulations and have infringement risks, guiding students to establish a correct sense of copyright. By scientifically setting evaluation weights, including 40% for creative ability, 30% for process achievements and 30% for standardized use, the guidance of original spirit and humanistic value is strengthened. Some courses also introduce the portfolio evaluation method, integrating classroom performance, research notes, scheme modification process and peer evaluation results, making the evaluation more objective and comprehensive, and truly reflecting students' professional ability and growth effectiveness.

3.5. System Guarantee

From the perspective of guarantee and support, schools need to build a sound support system to provide platform, faculty and system guarantee for the integration of AIGC into art teaching, and promote the orderly progress of teaching reform. First of all, build an educational version of the AIGC teaching environment, introduce genuine AIGC teaching tools and material libraries, avoid copyright risks caused by the use of unauthorized tools, and provide a safe and standardized teaching platform for teachers and students; second, strengthen the construction of the faculty team, improve teachers' digital teaching ability through teaching and research activities, workshops, enterprise exchanges, online training and other methods, promote teachers to transform from skill demonstrators to curriculum designers and creative guides, help teachers master AIGC tool processes, teaching application methods and risk prevention and control points, and solve the problem that some teachers "cannot use or dare not use".

At the same time, improve the detailed rules of teaching management, clarify the use boundary and requirements of AIGC in course assignments, exams and graduation design, form an operable, inspectable and traceable management mechanism, and clearly define and guide the irregular use of AI. Colleges and departments regularly organize AIGC teaching public classes, case sharing meetings and achievement exhibitions, encourage teachers to boldly explore and steadily innovate in teaching, and support and encourage courses and teams with outstanding results, creating a positive and prudent atmosphere for intelligent teaching reform. In addition, establish a school-enterprise cooperation mechanism, introduce enterprise resources, allow teachers and students to timely understand the latest industry technologies and needs, and ensure that teaching reform is synchronized with industry development.

4. Practical Effects and Governance of Practical Problems

4.1. Practical Effects of Integrating AIGC

After continuous practice, the reform of integrating AIGC into art teaching has achieved obvious results, making breakthroughs in classroom teaching, talent training, industry-university integration and teaching management. At the classroom teaching level, the classroom efficiency has been significantly improved, the time occupied by basic rendering and repetitive skill training has been reduced, the proportion of class hours for creative discussion, cultural interpretation and scheme optimization has increased, the classroom atmosphere has become more active, the interaction between teachers and students has become more frequent, and students' learning initiative and creativity have been fully stimulated. At the talent training level, students' original awareness and narrative ability have been enhanced, the phenomenon of work homogenization has been improved, the presentation of schemes has become more diverse, and their cross-media expression ability and rapid learning ability have been significantly improved, making them more able to adapt to the changing job needs of the digital cultural industry.

At the level of industry-university integration, the connection between classrooms and the industry has become smoother, the landing rate of students' works in brand design, short video creation, space performance, digital cultural and creative fields has increased, and some students' works have been commercially applied through school-enterprise cooperation projects, with enhanced professional adaptability, effectively solving the problem of disconnection between the training of applied art talents in colleges and universities and industrial needs. In teaching management, the process recording and tracing mechanism has effectively reduced the irregular use of AI, the classroom atmosphere has become more rigorous, the awareness of academic integrity has been strengthened, and students can

consciously standardize the use of AIGC tools and attach importance to original creation. From the perspective of long-term educational effect, students have a higher acceptance of new technologies, and their innovative thinking and practical ability have been significantly improved, laying a solid foundation for their subsequent career development.

4.2. Practical Problems in the Integration of AIGC into Teaching

At the same time, some problems that need continuous governance have been exposed in practice. These problems are not caused by AIGC itself, but by the fact that teaching guidance, system norms and ability adaptation have not fully kept up with the speed of technological development, and must be solved through systematic governance.

First the problem of students' technology dependence is prominent. Some students have a certain degree of technology dependence, over-reliance on AI-generated results, lack of active deepening and aesthetic judgment, and even directly submit AI-generated works, ignoring manual retouching and creative optimization, leading to works lacking humanistic connotation and personal style, and showing a tendency of "creative emptiness"; second, copyright risks still exist, including unclear ownership of AIGC training data, irregular use of materials by students, vague commercial boundaries and other problems. Some students arbitrarily use others' works as AI "reference images", or imitate the style of specific artists to generate works and mark them as "original", which has infringement risks; third, teachers' ability needs to be improved. Some teachers do not master the AIGC workflow well and are difficult to carry out high-quality teaching guidance, especially middle-aged and elderly teachers, who have a mentality of "fearing technology and resisting reform" and insufficient digital teaching ability; fourth, there are still loopholes in process management. A few students have incomplete process materials, forged process records and other situations, which makes it difficult to effectively trace the originality and creation process of works, bringing difficulties to teaching evaluation and management.

4.3. Targeted Governance Strategies for Practical Problems

In response to the above problems, this study has gradually formed corresponding governance strategies in practice, constructing a four-in-one governance system of "guidance, standardization, improvement and control" to ensure the healthy and orderly progress of integrating AIGC into teaching.

First, strengthen the rigid requirement of manual retouching, clarify that AI-generated content is only used as a reference for the first draft, and a sufficient proportion of manual creation and optimization traces must be retained, and the process materials shall be taken as the key basis for scoring.

Second, strengthen copyright and compliance education, promote the use of education-authorized tools and genuine material libraries, popularize basic knowledge of digital copyright, and clarify the signing and citation norms of AI-generated content.

Third, improve the hierarchical training of teachers, incorporate AIGC teaching reform into curriculum construction and teaching evaluation, and establish a training mechanism of "young teachers leading, middle-aged and elderly teachers following up", supporting teachers to participate in practical projects and industry exchanges.

5. Conclusion

The penetration of AIGC into the teaching form of art majors in colleges and universities is a systematic paradigm transformation involving objectives, subjects, processes, evaluation and culture. Its essence is to liberate art education from repetitive skill training and return to the core of creativity, aesthetics, narrative, expression and humanistic care. AIGC does not replace artistic creation, but provides more efficient support for the implementation of creativity and

new possibilities for the improvement of talent training quality. Its integration with art teaching is in line with the development trend of "human-machine collaborative innovation" in the digital cultural industry and the direction of new liberal arts construction.

In the era of rapid technological iteration, the fundamental task of art education has not changed. It is still to shape the soul, shape life and shape new people, and cultivate new-era artists with faith, feelings and responsibilities. From the perspective of actual teaching effects, the integrated teaching reform carried out around the renewal of teaching concepts, curriculum system reconstruction, classroom mode optimization, evaluation method reform and creative ethics norms has strong feasibility and operability, effectively solving many problems existing in traditional art teaching, improving the quality of talent training, and providing a practical sample for the intelligent transformation of art education in colleges and universities.

Acknowledgments

2025 Liaoning Private Education Association Educational Science Research Achievements: Practical Study on AIGC-driven Paradigm Transformation of University Art Teaching (Project No.: LMJX2025189).

References

- [1] Li Xiguang. Transformation and Reconstruction of Art Education in the Intelligent Era[J]. China Higher Education, 2023(12):57.
- [2] Zhang Zikang. The Impact of Generative AI on Contemporary Art Education and Its Response[J]. Art Observation, 2023(08):15.
- [3] Wang Min. Research on the Teaching Application of AIGC Technology in College Design Courses[J]. Decoration, 2023(07):125.
- [4] Chen Yuanyuan. Research on the Human-Machine Collaborative Teaching Mode of Digital Media Art Major[J]. Contemporary Cinema, 2024(02):157.
- [5] Liu Chang. The Copyright Boundary and Teaching Norms of AIGC in College Art Creation[J]. Publishing Wide Angle, 2023(18):77.