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Research on the Innovation of Teaching Mode of New Media Art Major Education in Private Universities Driven by AI Technology

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Abstract

With the rapid development of Artificial Intelligence (AI) technology, its application in the field of education has gradually become an important force to promote the change of the education teaching mode. This study focuses on the innovation of the education and teaching mode of new media art majors in private colleges driven by AI technology, systematically analyzes the problems of new media art majors in private colleges in terms of the curriculum system, teaching methodology, faculty, and practice teaching, and puts forward targeted innovation strategies. The study points out that multi-dimensional reforms such as optimizing the curriculum system, introducing intelligent teaching tools, strengthening practical teaching, and improving teachers' AI literacy can effectively improve the quality of education and teaching, and stimulate students' creativity and practical ability. At the same time, data-driven decision-making and personalized learning path planning based on AI technology provide strong support for the realization of accurate teaching. This study not only provides a theoretical basis and a practical path for the educational and teaching reform of new media art majors in private colleges and universities, but also provides a useful reference for the in-depth application of AI technology in the field of art education.

Keywords

AI technology; private colleges and universities; new media art; education teaching mode

1. Introduction

With the rapid development of artificial intelligence (AI) technology, its application in the field of education is profoundly changing the traditional teaching mode. Especially in the field of art education, AI technology not only provides new tools and methods for teaching, but also promotes the comprehensive innovation of curriculum content, teaching methods, and assessment systems. For private colleges and universities, this change is both an opportunity and a challenge. As an important part of China's higher education, private colleges and universities have assumed an important mission in talent cultivation and discipline construction. However, constrained by limited resources and insufficient faculty, private colleges and universities are facing many difficulties in the education and teaching of new media art majors, such as weak practical teaching links, insufficient cultivation of students' innovation ability, and a low degree of interdisciplinary integration. These problems need to be solved through the introduction of emerging technologies.

As a specialty that highly relies on the combination of technology and creativity, new media art puts forward higher

requirements for the comprehensive ability of students, and AI technology can effectively make up for the shortcomings of traditional teaching with its powerful data processing ability and intelligent characteristics. For example, through virtual reality (VR), augmented reality (AR) and other technical means, it can provide students with an immersive learning experience; with the help of image generation, voice recognition and other AI tools, it can inspire students to create and improve the quality of their works. In addition, AI can also achieve personalized teaching, helping teachers accurately grasp the learning progress and needs of students, so as to develop a more scientific and reasonable teaching plan.

2. The value of AI technology in the new media arts program

2.1 The role of AI technology in revolutionizing art creation

AI technology is able to automate the generation of high-quality content such as text, images, audio, and video through deep learning of large amounts of data (Jordan, 2015). In the field of new media art, this means that artists can create diverse artworks more conveniently. AI painting technology can quickly generate artworks in different styles, ranging from classical oil paintings to modern abstract art, based on keywords or sketches inputted by users. This efficient content generation capability greatly improves the creative efficiency of artists and also brings more possibilities for art creation.

AI technology is not only limited to content generation, but can also bring users a new art experience through intelligent interaction. In new media art works, AI technology can realize real-time interaction between the work and the audience, such as detecting the audience's expression and emotion through face recognition technology, and adjusting the presentation of the work according to this information. This intelligent interactive experience not only enhances the fun and interactivity of the work, but also provides the audience with a more personalized artistic enjoyment (Lee Gyeong-Geon, 2024).

By learning data from different art genres and styles, AI technology is able to generate artworks with novel and unique styles. This innovative art style not only enriches the expression of new media art but also provides more creative inspiration for artists.

2.2 The auxiliary role of AI technology in education and teaching

AI technology can customize learning plans for students by analyzing their learning habits, aesthetic preferences, and progress trajectories. In the education of new media art majors, this means that each student can obtain learning resources that meet his or her interests and needs, thus improving the learning effect. For students who favor digital art, AI can recommend courses such as dynamic illustration and virtual reality (VR) art; while for students interested in traditional art, classical technique analysis and museum digital collection resources can be provided. This kind of personalized learning path customization not only stimulates students' learning initiative but also promotes their overall development.

AI technology promotes the deep integration of art with science and technology, mathematics, humanities, and other fields, providing rich teaching resources for new media art professional education. In architectural design courses, students can use AI algorithms to optimize the spatial structure, while incorporating historical and cultural elements; in interactive art creation, the combination of AI programming and artistic expression can give birth to innovative forms such as "emotion-aware painting" and "data visualization sculpture". In interactive art creation, the combination of AI programming and artistic expression can give birth to innovative forms such as "emotion-aware painting" and "data visualization sculpture". This kind of interdisciplinary integration of teaching resources not only broadens students' knowledge horizons but also cultivates their creative ability and comprehensive quality.

3. Analysis of the status quo of new media art professional education and teaching mode in private colleges and universities

3.1 Single curriculum system

The current curriculum system of new media art majors in private colleges and universities is mostly based on traditional art courses, such as graphic design, animation production, etc., while the application of emerging technologies (such as AI, big data, virtual reality, etc.) is less involved. This monolithic curriculum is difficult to meet the industry's demand for composite talents, resulting in a lack of sufficient technical reserves and innovation ability when students face actual work scenarios.

New media art is a highly interdisciplinary profession, which requires students to master art design, computer programming, data processing, and other knowledge at the same time. However, at present, the new media art courses in many private colleges and universities are still limited to a single subject area and lack systematic interdisciplinary integration.

In the curriculum system, theoretical courses occupy a large proportion, while the proportion of practical courses is relatively low. This kind of teaching arrangement, which emphasizes theory over practice, makes students have obvious shortcomings in terms of practical operation ability and project experience. Especially in the field of new media art, practical ability is often an important criterion to measure the level of students, so this problem needs to be solved urgently.

3.2 Insufficient innovation in teaching methods

At present, most of the private colleges and universities with new media art majors still use the traditional "duck" teaching method, that is, the teacher as the center of one-way knowledge transfer. This teaching method ignores the students' main position, and it is difficult to stimulate students' interest in learning and active participation. At the same time, due to the lack of interaction, students' understanding and mastery of knowledge are often not deep enough.

With the development of AI technology, new teaching tools such as online learning platforms, virtual classrooms, and intelligent assessment systems have gradually become an important part of modern education. However, many private colleges and universities have more limited investment and technical support in these areas, resulting in a smaller application of intelligent teaching tools. Project-based learning and case teaching are effective methods commonly used in new media art education, which can help students combine theoretical knowledge with practical application. However, due to insufficient faculty and a lack of teaching resources, many private colleges and universities have weak implementation in this area. For example, the lack of real industry case studies or the failure to organize students to participate in actual project development, these problems directly affect the improvement of teaching quality.

3.3 Inadequate assessment system

The current assessment system of new media art majors in private colleges and universities is mostly based on examination results or work results as the only criterion, and pays less attention to students' learning process, innovation ability, and teamwork ability. This kind of monolithic evaluation method easily leads to students' excessive pursuit of short-term goals and neglecting the cultivation of long-term ability.

New media art is a highly practical and creative specialty, and it is difficult to fully reflect students' comprehensive ability by traditional written tests or assignment grading methods. However, many private universities have not yet established a diversified assessment system; for example, students are comprehensively assessed through project presentations, defense sessions, and online portfolios. This limitation makes the assessment results less scientific and fair. Every student has different learning interests and strengths, but the existing assessment system often ignores this and fails to provide adequate personalized support.

3.4 Insufficient teachers

There is a general problem of insufficient teachers in private colleges and universities, especially in such a new specialty as new media art; the number of high-level teachers is even more scarce. In addition, the overall structure of the teaching team is not reasonable enough, with an over-representation of young teachers and fewer senior teachers with rich industry experience, which directly affects the improvement of teaching quality.

Although some teachers have a solid foundation in art theory, there is an obvious shortcoming in the application of new technologies (such as AI, VR/AR, etc.). This lack of technical skills makes it difficult for them to keep up with the cutting edge of industry development in the teaching process, and they are also unable to provide students with the latest technical support and guidance.

Due to limited financial investment, many private universities are unable to provide sufficient training opportunities for teachers, making it difficult to continuously improve their professionalism and teaching ability. At the same time, due to less space for career development, some excellent teachers choose to leave for other universities or enterprises, further aggravating the loss of faculty.

4. AI technology-driven new media art professional education teaching mode innovation strategy

4.1 Integration of AI technology and interdisciplinary knowledge

On the basis of traditional new media art courses, additional course modules related to AI technology, such as machine learning fundamentals, image generation technology, natural language processing, and so on. These courses can not only help students master the basic principles of AI technology, but also apply it to the practice of art creation, thus enhancing

students' comprehensive ability. New media art is a highly interdisciplinary specialty, requiring students to have the ability in art design, computer programming, data analysis, and other aspects. Therefore, the integration of interdisciplinary knowledge should be emphasized in the curriculum.

In view of the current low proportion of practical courses, the proportion of project-based courses and experimental courses should be further increased. Setting up an "AI art creation workshop" allows students to familiarize themselves with all kinds of AI tools through practical operation and complete the process from creative conception to the realization of works. This practice-oriented teaching method helps to improve students' hands-on ability and innovation.

4.2 Enhance teaching effectiveness with the help of AI technology

With the help of AI technology to develop an intelligent teaching platform to provide students with a personalized learning experience (Cao, 2024). Through big data analysis, the intelligent platform can recommend suitable learning resources and practice tasks according to the learning progress and interest direction of each student. In addition, AI can also monitor the learning status of students in real time, discover and solve learning problems in a timely manner, so as to improve learning efficiency (Baidoo-Anu, 2023).

Project-based learning is a task-oriented teaching method that is especially suitable for the teaching needs of new media art majors. With AI technology support, teachers can design more challenging project themes. Students complete the project tasks through teamwork, which not only exercises the practical operation ability, but also cultivates the teamwork spirit and problem-solving ability (Kim, 2024).

AI technology can provide powerful technical support for the virtual classroom, such as voice recognition, real-time translation, and other functions, making communication between teachers and students more convenient. At the same time, through online collaboration tools, students can share their creative achievements and get feedback from teachers and other students anytime and anywhere. This open teaching environment helps to stimulate students' learning motivation and creativity.

4.3 Building a diversified evaluation mechanism

The traditional assessment system often focuses too much on the results and ignores students' efforts and progress in the learning process. With AI technical support, comprehensive tracking and evaluation of students' learning process can be realized by recording their learning trajectories. The intelligent platform can automatically count data such as the time students spend on completing assignments and the frequency of participation in discussions, providing teachers with a more comprehensive basis for evaluation.

The assessment of new media art majors should not be limited to exam results or work results, but should also include multiple dimensions such as students' innovation ability, teamwork ability, and expression ability. Students can be comprehensively assessed through project presentations, defense meetings, online portfolios, etc. AI technology can help teachers quickly analyze a large amount of data to ensure that the assessment results are scientific and fair.

Each student has different learning interests and strengths, so there is a need to create personalized growth profiles to record students' learning characteristics and development potential. AI technology can create an exclusive development plan for each student through data analysis, helping them to better utilize their strengths.

4.4 Strengthen AI technology training and industry cooperation

Teachers are the core force of teaching mode innovation, so it is necessary to strengthen the AI technology training for teachers (Renana Peres, 2023). Schools can invite industry experts to hold lectures or workshops to help teachers master the latest AI technology and teaching methods (Luckin, 2019). In addition, teachers can be encouraged to participate in research projects or enterprise practice to accumulate practical experience.

School-enterprise cooperation is an important way to improve teaching quality. Schools can jointly develop AI teaching platforms with technology companies, or invite enterprise engineers to serve as part-time teachers to provide students with front-line technical guidance. In this way, it can not only make up for the problem of insufficient school resources, but also ensure that the teaching content keeps up with the development trend of the industry.

5. Conclusion

AI technology provides powerful technical support and innovative power for new media art professional teaching (Shen, 2022), which can effectively make up for the shortcomings of the traditional teaching mode and promote the transformation and upgrading of the education and teaching mode. Through multi-dimensional reform initiatives such as

curriculum optimization, teaching method innovation, faculty construction and practice teaching enhancement, new media art majors in private colleges and universities are able to better adapt to the development needs of the AI era and cultivate high-quality art talents with innovative thinking, technical application ability and practical ability (Hui, 2025). At the same time, the study also points out that the application of AI technology in education and teaching still needs to be further improved, especially in the planning of personalized learning paths, the enhancement of teachers' AI literacy and the docking of practical teaching with industry needs, which still need to be continuously explored and improved. In the future, private colleges and universities should continue to deepen the integration of AI technology and new media art education, strengthen interdisciplinary cooperation, optimize the allocation of teaching resources, and improve the quality and effectiveness of teaching. Through continuous exploration and practice, it will provide a useful reference and reference for the innovation of education and teaching mode of new media art majors in private colleges and universities, and promote the high-quality development of professional education.

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