Research on Optimizing the Talent Cultivation Path of Digital Media Art Major Based on the "Three Drive" Model

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ABSTRACT

This article focuses on the problems in the talent cultivation process of digital media art major, and summarizes the commonly implemented training mode in the current teaching reform of this major, namely the "three drive" model with project-driven, competition-driven, and innovation-driven paths. This article analyzes the problems of imbalanced theoretical knowledge and practical ability cultivation, lagging curriculum system, lack of systematic and coherent competition driven, and imperfect institutional guarantees in the current implementation of the "three drive" model. It proposes optimization measures for the talent cultivation path of the "three drive" model in digital media art majors, including strengthening the construction of the teaching staff, optimizing the curriculum system and practical teaching, strengthening the systematic and coherent competition driven approach, expanding school-enterprise cooperation and industry education integration, and improving institutional guarantees. Practice has proven that by implementing these optimization measures, a digital media art talent training path that meets the needs of the new era can be successfully constructed, laying a solid foundation for cultivating high-quality digital media art talents.

Keywords: Digital media art, Talent cultivation, "Three drive" model.

1. INTRODUCTION

With the rapid development of information technology and digital technology in China, the field of digital media art has ushered in unprecedented prosperity and challenges. The continuous deepening of the digital creative industry not only accelerates the rapid iteration of industry technology, market demand, and business innovation, but also puts forward more stringent requirements for the cultivation of digital media art professionals. Cultivating versatile talents who can keep up with the pace of the industry while possessing innovative, practical, and collaborative abilities has become the key to promoting the reform and development of digital media art education. [1]

Currently, the talent cultivation model for digital media art majors is facing multiple challenges. Firstly, traditional education models often struggle to balance the cultivation of theoretical knowledge and practical abilities, resulting in students having a solid theoretical foundation but lacking practical and innovative skills. Secondly, in the face of rapidly changing industry demands, students are required not only to possess solid professional skills, but also to have interdisciplinary knowledge systems, keen market insights, and the ability to continue learning, which poses a huge challenge to traditional talent cultivation models. Furthermore, there is a certain disconnect between the diversified demand for talent in the industry and the single teaching mode in the current education system, which makes it difficult to meet the urgent market demand for versatile talents.

In this context, this study summarizes and optimizes the "three drive" model of talent cultivation for digital media art majors, namely project driven, competition driven, and innovation driven. By combining case studies, questionnaire surveys, data analysis, expert interviews, reform practices, and other methods, there is a necessity to explore its operational mechanism in depth,

comprehensively evaluate the practical effects of the "three drive" model in improving students' practical ability, innovation ability, and comprehensive quality, and reveal the possible problems and challenges in its practical operation. On this basis, this study combines industry development trends and talent demand characteristics to propose targeted optimization paths and strategies, in order to provide strong support for solving the pain points and difficulties in current talent cultivation, promote the comprehensive improvement of the quality of digital media art professional talent cultivation, and provide solid talent guarantee for the sustainable development of the industry.

2. OVERVIEW OF THE "THREE DRIVE" MODEL

2.1 "Three Drive" Model

The "three drive" model proposed in this study aims to promote students' comprehensive development through diversified, practical, and innovative approaches. This model not only pays attention to the teaching of knowledge, but also pays more attention to the cultivation and practical application of ability, which can build a comprehensive and in-depth growth system in talent cultivation.

The project-driven teaching model is based on the curriculum design and teaching philosophy of "action oriented" and "work process", and is one of the forms of task-driven teaching. [2] It closely integrates learning content with practical projects, allowing students to actively learn, integrate knowledge, and enhance practical abilities in the process of solving specific problems. This model encourages students to apply their learned knowledge across disciplines, explore, operate, and reflect in real-life situations, thereby not only deepening their understanding of theory, but also cultivating teamwork, problem-solving, and innovation abilities. Through project-driven approaches, students are able to comprehensively grasp knowledge, efficiently transform it into practical skills, and lay a solid foundation for their future careers.

Competition-driven teaching is a teaching model that stimulates students' learning potential and competitive awareness by participating in competition activities. It takes competitions as an opportunity to guide students to actively participate and challenge themselves, constantly improving themselves in the tense and effective competition process. Competition driven not only focuses on students' learning outcomes, but also emphasizes their growth and gains in competitions, such as stress resistance, innovative thinking, problem-solving ability, as well as the improvement of self-confidence and competitiveness. This teaching model provides students with an opportunity to showcase themselves and surpass themselves, encouraging them to learn in competition and ultimately achieve comprehensive improvement in personal abilities and overall qualities.

Innovation driven emphasizes the cultivation of students' innovative consciousness, innovative thinking, and innovative ability. Teachers can stimulate students' innovative potential through innovative projects and entrepreneurial practices, encourage them to be brave enough to try and innovate, and maintain competitiveness in the constantly changing social environment. Innovation-driven development helps cultivate students' awareness of innovation and entrepreneurship, market awareness, and competitiveness, laying a solid foundation for their future careers.

2.2 The Current Status of the Implementation of the "Three Drive" Model in Digital Media Art Majors

Currently, digital media art majors in various colleges and universities in China have shown a positive trend and significant results in implementing project-driven, competition-driven, or innovation-driven teaching models. This is manifested in the widespread introduction of project practice, which provides students with rich practical opportunities; The continuous increase in competition participation not only hones students' professional skills, but also broadens their horizons and exhibition platforms; The increasingly strong atmosphere of innovation and entrepreneurship has created favorable conditions for stimulating students' innovative potential.

However, upon further analysis, this model also faces many challenges and problems. Firstly, the teaching staff has become one of the bottlenecks restricting its development. The number of teachers is insufficient, and some teachers lack rich practical experience and innovative ability, making it difficult to effectively guide students to participate in project practice and competitions. [4] Secondly, the disconnection between theory and practice is quite common in the current curriculum system,

and the updating speed of course content cannot keep up with the pace of industry development. Practical teaching design is mainly based on traditional scattered, arbitrary, and virtualized creative practices, with little emphasis on practicality, implementation, and innovation. Comprehensive practical content such as real industry enterprise projects and innovation and entrepreneurship projects is insufficient and the docking effect is poor. Furthermore, the implementation driven by competitions lacks systematicity and coherence, which to some extent affects students' comprehensive and systematic mastery of the core knowledge and skills of digital media art. Excessive pursuit of competition results can also lead to neglecting the cultivation of students' basic knowledge and comprehensive abilities, resulting in deficiencies in their overall knowledge structure and ability system, even though they may achieve good results in certain competitions. [3] Finally, some universities' digital media art majors lack comprehensive institutional safeguards in the implementation of the "three drive" teaching model. The lack of institutional safeguards can also affect the enthusiasm and participation of teachers and students, reducing the effectiveness of the "three drive" teaching model.

3. OPTIMIZATION MEASURES FOR TALENT CULTIVATION PATH IN THE "THREE DRIVE" MODEL OF DIGITAL MEDIA ART MAJORS

Undoubtedly, the application of the "three drive" teaching model in the training process of digital media art professionals conforms to the needs of talent training path reform and is conducive to cultivating high-quality digital media art talents that meet the needs of the new era. But at the same time, it is necessary to realize that in order to further promote the improvement of this model and maximize its potential, practical and feasible solutions must be proposed for existing problems. This study utilized one year to carry out teaching reform practices in the field of digital media art, and researched and summarized specific talent cultivation path optimization measures based on project-driven, competition-driven, and innovation-driven approaches, aiming to create a comprehensive and multi-level growth system for students.

3.1 Strengthening the Construction of the Teaching Staff

The courses of digital media art involve a wide range of fields. Therefore, it is necessary to form a multidisciplinary teaching team. Firstly, cross college teaching can be conducted on campus to strengthen the technical skills training of art teachers and provide practical training, and strengthen the artistic theory learning and training of computer science teachers to enhance their aesthetic abilities. Secondly, it is necessary to actively introduce teachers with industry background and practical experience, and hire industry experts and enterprise mentors to teach part-time. Furthermore, schools arrange teachers to engage in enterprise on-the-job practice and industry training to enhance their professional skills and teaching level. There is a must to optimize teaching methods and evaluation systems based on market demand, adjust teaching cases and project training according to changes in industrial structure, and form a high-quality "dual-qualified" teaching team to improve teaching quality. In addition, attention should also be paid to strengthening teachers' moral character and professional ethics. Based on the integration of art and technology and excellent professional skills, teachers should enhance their sense of responsibility, mission, and achievement in the process of education and teaching.

3.2 Optimizing the Curriculum System and Practical Teaching

Interdisciplinary teaching can help students break through their understanding of their original majors and cultivate their innovative abilities. The digital media art major at Shandong Women's University continuously improves the curriculum system of "integrating art and science" in the process of talent cultivation, promoting interdisciplinary teaching. This requires students to possess interdisciplinary knowledge reserves on the basis of artistic thinking and design skills, providing them with better learning and development channels. In the 2023 talent training program, a curriculum system of "basic sharing, middle-level separation, high-level mutual selection, and top-level integration" was established, [5] and an interdisciplinary curriculum group was formed based on the underlying logic of the industrial operation mode. Firstly, general education platform courses mainly include ideological and political education, physical education, and foreign language

courses, while integrating computational thinking and innovation and entrepreneurship courses to broaden students' interdisciplinary knowledge horizons. Secondly, the foundational courses of the subject include sketching, color, photography, art introduction, graphic and image processing, design thinking and expression, etc., which solve basic knowledge and skill problems and help students enter professional roles. Thirdly, the core courses of the major include digital painting, camera technology, video editing, 3D modeling and animation, digital special effects and other courses, with "art+technology" as the core, to cultivate students' ability to meet the needs of current science, technology and industry in the process of innovative practice. Fourthly, professional elective courses include video packaging design, video special effects synthesis, interactive video design, etc., achieving the integration of knowledge and action in professional expansion teaching. Fifthly, the practical education component includes a 16-week professional training program for joining school enterprise cooperation companies, an 8-week graduation project, which transforms artistic concepts into projects and deeply integrates design and practice in the process of project implementation and application.

In addition, this major dynamically adjusts course content and structure based on industry development trends and technological updates, ensuring the timeliness and foresight of teaching content. In course design, emphasis is placed on the combination of theory and practice, deepening students' understanding and application ability of theoretical knowledge through case analysis, project training, and other methods. At the same time, comprehensive practical courses will be added, introducing real industry enterprise projects, innovation and entrepreneurship projects and other comprehensive practical content to enhance the practicality and innovation of the courses.

3.3 Strengthening the Systematicity and Coherence of Competition-driven Systems

Building a comprehensive and balanced competition-driven system is crucial for the effective implementation of competition-driven teaching models in digital media art major. Based on years of rich practical experience, this major has not only organized detailed competition plans that closely align with the forefront of the profession and teaching objectives, but also clearly defined multi-level competition types and participation stages from basic training to advanced challenges. Specific measurable expected results have also been set to motivate students to continue making progress.

In order to ensure the achievement of teaching goals, digital media art major has formed a diversified competition guidance team composed of industry experts, senior teachers, and outstanding contestants from previous years. Through systematic course design, practical exercises, and personalized coaching, it is a must to provide comprehensive support from theory to practice for participating students, ensuring that they can gradually deepen their understanding of the core knowledge of digital media art and master relevant skills proficiently during the competition process. At the same time, it attaches great importance to the organic integration of competitions and basic teaching. By flexibly adjusting the teaching plan, it ensures that competition preparation and daily teaching complement each other, pursuing excellent competition results while not neglecting the construction of students' basic knowledge system and the comprehensive improvement of their abilities. This effectively avoids the problems of knowledge one sidedness and ability shortcomings that may arise from excessive competition. This balancing strategy not only enhances students' overall competitiveness, but also lays a solid foundation for their long-term development in the field of digital media art in the future.

3.4 Expanding School-Enterprise Cooperation and Integrating Industry and Education

This major continuously expands school-enterprise cooperation and industry education integration, establishes long-term cooperative relationships with multiple well-known enterprises in the industry, and jointly develops talent training plans.[6] This school-enterprise joint training mechanism not only ensures the practicality and foresight of teaching content, but also promotes deep cooperation between both parties in talent cultivation. By closely collaborating with enterprises, jointly developing practical courses, conducting internships and training activities, this major has further optimized the talent cultivation path of the "three drive" model. These measures not only improve the quality and effectiveness of teaching, but also provide students with more

practical opportunities, enhancing their innovative spirit and practical ability.

In order to enhance students' industry awareness and understanding, this major actively introduces corporate resources. Enterprise experts are invited to participate in teaching, bringing not only rich industry experience and cutting-edge technology, but also guiding students to participate in enterprise projects, enabling students to learn and grow in practice. In addition, this major regularly holds industry lectures and invites business representatives to share industry trends and successful cases, broadening students' horizons. The introduction of these enterprise resources not only enriches teaching activities, but also provides students with more opportunities to interact and communicate with the industry, which helps them better adapt to market demands.

3.5 Improving Institutional Safeguards

This major continuously strengthens organizational management to ensure the implementation of the "three drive" talent training model and effectively achieve the goal of improving the quality of talent training. It is a must to establish a special management organization responsible for planning, coordinating, and supervising the entire process of implementing the "three drive" model, and dynamically monitoring and providing feedback on information data for flexible adjustment of implementation plans.

In addition, under the institutional guarantee of the school and college, this major continuously improves its incentive mechanism. On the one hand, it is necessary to establish a sound student incentive mechanism, including scholarships, awards, innovation funds, and other incentive measures, to reward and support students who have outstanding performance in project practice, competition participation, innovation and entrepreneurship. On the other hand, it is also necessary to optimize the teacher incentive mechanism, improve the teacher assessment and evaluation system, incorporate the contributions and achievements of teachers in the implementation of the "three drive" model into the assessment scope, and stimulate teachers' enthusiasm and creativity.

4. CONCLUSION

This article focuses on the application of the "three drive" model — project-driven, competition-driven, and innovation-driven model — in the cultivation of digital media art professionals, and proposes a series of optimization measures based on teaching reform experience. This model not only enriches the theoretical system of talent training, but also provides a practical path to improve the quality of professional education.

Although this study has achieved certain results in optimizing the talent training path for digital media art majors, it still needs further deepening and improvement. In the future, this major will continue to expand its cooperation with enterprises, forming a virtuous cycle of "industry-university-research-application", and strengthening exchanges and cooperation with international colleges and universities and enterprises to enhance students' international competitiveness. At the same time, this major will also explore more online and offline teaching models, using technologies such as big data and artificial intelligence to achieve personalized teaching and accurate evaluation. In addition, this major will strengthen the cultivation of humanistic literacy, enhance students' cultural literacy and aesthetic ability, and enable them to better undertake the mission of cultural inheritance and innovation. In short, the optimization of the talent cultivation path for digital media art majors is a continuous process. This major will continue to pay attention to industry trends and changes in talent demand, continuously improve and optimize the "three drive" model, and cultivate more high-quality digital media art talents.

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REFERENCES

[1] Tang Yingfan, Construction and Empirical Study of the "Four in One" Teaching Model for Digital Media Art Major [J]. New Horizon, 2024, (07): 161-163.

[2] Zhao Xiaoxiong, Ning Guoqin, Innovation of Digital Media Education Concept in the Era of Media Fusion: Reflections on the Practice of

"Project+Competition" Dual-Drive Teaching Mode [J]. Art Education, 2018, (20): 65-66.

[3] Li Wenguo, Deng Yaqi, Zhang Lincheng, etc., Discussion on the Training Mode of Applied Innovative Talents Driven by Discipline Competition + Innovation Project [J]. University Education, 2022, (09): 216-218.

[4] Jian Bin, Shen Xiajuan, Reform and Practice of Teaching Mode in Digital Media Art Major in Colleges and Universities [J]. Journal of Taiyuan City Vocational College, 2024, (05): 86-90. DOI:10.16227/j.cnki.tycs.2024.0279.

[5] Wu Jiabao, Research on the Cultivation Path of Innovative Digital Media Art Talents under the Perspective of "Double High" Construction [J]. Journal of Changzhou College of Information Technology, 2022, 21(06): 78-80.

[6] Li Yan, Qi Jingning, Zhang Xu, Research on the Training Path of Digital Media Art Design Talents in Local Universities from the Perspective of Production-Education Integration [J]. Design, 2024, 37(01): 94-96. DOI:10.20055/j.cnki.1003-0069.001434.