

Innovation in Teaching Digital Media Art and Design in Higher Education under the Background of the New Media Era

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Abstract: In the era of new media, digital media art and design plays a significant role in higher education. Digital media art and design refers to the creation of artistic, innovative, and interactive works through the use of digital technology and media platforms. It encompasses various forms of media such as images, sounds, videos, animations, and interactive interfaces, integrating knowledge and skills from multiple disciplines including art, design, technology, and media. In the context of the new media era, teaching digital media art and design in higher education exhibits characteristics of diversity, practice-oriented approaches, and alignment with industry demands. This paper explores and investigates the concept of digital media art and design in higher education under the backdrop of the new media era, the current state of teaching digital media art and design in higher education, the significance of innovation in teaching digital media art and design in the new media era, as well as strategies for innovative teaching in digital media art and design in higher education in the new media era.

1. Introduction

With the advancement of technology, digital media has become increasingly sophisticated and gradually integrated into everyday teaching practices from a theoretical perspective. Digital media art and design, incorporating advanced educational concepts, offers convenient and diverse teaching tools and resources, innovating teaching activities and presenting them to students in novel and advanced ways. This introduction of resources is crucial for education. Digital media art and design holds vast development prospects and application spaces in the context of the new media era. It not only provides new means of expression and mediums for artistic creation but also finds applications in areas such as advertising, entertainment, education, and cultural heritage preservation, contributing to social innovation and cultural inheritance. In higher education, cultivating students' capabilities in digital media art and design not only meets the demand for professionals in society but also fosters their innovative thinking and comprehensive abilities, enabling them to adapt to the developmental requirements of the digital age.

2. The Concept of Digital Media Art and Design in Higher Education

2.1. Interdisciplinary Collaboration, Creativity, and Innovation

Digital media art and design require the integration of knowledge and skills from various disciplines. Students need to collaborate and communicate with disciplines such as computer science, media studies, and fine arts to enhance their design abilities and creative levels.[1] Digital media art and design emphasize creativity and innovation, encouraging students to incorporate personalized thinking and expression into their designs. Students need to continuously explore new creative methods and technological tools to create unique digital media works.

2.2. Multimedia Integration

Digital media art and design transcends the boundaries of traditional art forms, integrating different media forms to create diverse works. Students need to learn and apply various technical means such as image processing, sound design, video production, animation techniques, etc., to integrate various media elements into their design works.

2.3. Interactivity and Engagement

Digital media art and design emphasize the interactivity and engagement of artworks. Students need to design interactive works that allow audience interaction, using technologies such as touch screens, sensors, virtual reality, etc., to achieve interactive experiences between the audience and the artworks.

2.4. Societal and Cultural Relevance

Digital media art and design not only focus on individual creations but also emphasize the connection between artworks and societal and cultural environments. Students need to pay attention to social and cultural issues and express and explore topics such as social problems, cultural values, and identity through digital media works.

3. The Current Status of Teaching Digital Media Art and Design in Higher Education

3.1. Teaching Content

Teaching digital media art and design in higher education covers various aspects, including art design, digital technology, and media applications. Firstly, students learn the fundamentals of art, including theoretical and practical aspects such as color, composition, form, and materials. These foundational knowledge provide a solid basis for students' creative work in digital media art and design. Secondly, students learn the principles and applications of digital media technology, including technical knowledge and tool applications in image processing, animation production, sound editing, interactive design, etc.[2] Students also need to understand the characteristics and application scenarios of different media platforms, including web media, mobile media, virtual reality, etc., and learn how to create digital media art and designs on different platforms. Lastly, in terms of creativity and expression, students need to develop creative thinking and expression abilities, learning how to effectively express their creativity and ideas through digital media. This includes storytelling, emotional expression, audience engagement, etc.[3]

3.2. Teaching Methods

Teaching methods for digital media art and design in higher education are diverse, focusing on practice-oriented and comprehensive skills development. Through practical projects, students participate in real-world digital media art creation and design, facing practical problems and challenges, which enhances their problem-solving abilities and practical experience. Moreover, teaching in this field is closely related to the industry, emphasizing opportunities for industry practices. Students have the chance to engage and interact with industry professionals through internships, practical training, competitions, etc., gaining insights into the latest industry trends and requirements.

3.3. Practical Opportunities

Higher education institutions emphasize providing practical opportunities for students to engage in real-world creation and application of digital media art and design. Regarding internships, universities can establish partnerships with media organizations, design companies, art studios, etc., to provide internship opportunities for students. Through internships, students can learn practical operations and gain industry experience, enhancing their practical abilities. In terms of practical courses, universities can offer practical training courses related to digital media art and design, providing students with practical platforms for creation and design. Through practical projects, students can enhance their creative abilities and problem-solving skills. Competitions and exhibitions provide platforms for universities to organize students' participation in various digital media art and design competitions and exhibitions. This provides opportunities for students to showcase their works, increase their exposure, and engage in networking opportunities.[4]

4. The Significance of Innovative Teaching in Digital Media Art and Design in Higher Education in the Context of the New Media Era

In the context of the new media era, innovative teaching in digital media art and design in higher education holds significant importance. With the continuous development and application of new media technologies, the field of digital media art and design has become increasingly diverse and versatile. This section will explore the significance of innovative teaching in digital media art and design in higher education from the following perspectives:

4.1. Keeping Up with Industry Trends

In the new media era, digital media art and design are rapidly evolving and widely applied in various fields. One of the significances of innovative teaching in higher education is to keep up with industry trends. Through teaching innovation, universities can promptly adjust their teaching content and methods to align with industry demands. This cultivates professionals who can adapt to industry developments, thus enhancing their competitiveness in the job market.[5]

Teaching innovation may involve the introduction of new media technologies and tools, the establishment of new courses or specialized directions, and the provision of practical opportunities through industry collaborations. Through these innovations, universities can better meet the needs of students and industries, nurturing digital media art and design talents with innovative thinking and practical abilities.

4.2. Cultivating Comprehensive Skills and Interdisciplinary Abilities

The field of digital media art and design in the new media era requires interdisciplinary knowledge

and abilities. Traditional art and design education often focuses on artistic skills and aesthetic expression, while in digital media art and design, students need to grasp knowledge from various fields such as digital technology, media communication, and interactive design. Thus, one of the significances of innovative teaching in higher education is to cultivate students' comprehensive skills and interdisciplinary abilities.

Teaching innovation can be realized through the establishment of interdisciplinary courses or specialized directions, organization of interdisciplinary practical projects, and provision of guidance from interdisciplinary mentors. Through interdisciplinary learning and practice, students gain a more comprehensive knowledge base and skill set, strengthening their problem-solving and innovative abilities. The cultivation of comprehensive skills and interdisciplinary abilities enables students to better adapt to the development and challenges of the digital media art and design field.

4.3. Emphasizing Practice and Practical Applications

The field of digital media art and design in the new media era emphasizes practice and practical applications. One of the significances of innovative teaching is to focus on cultivating practical skills and applications. Traditional theoretical teaching often becomes disconnected from practical applications, leading to difficulties for students when they face actual work situations after graduation. Therefore, teaching in digital media art and design in higher education needs to incorporate innovative teaching methods and provide practical opportunities for students to apply their knowledge and skills to real projects.

Teaching innovation can be achieved through the implementation of practical courses, internships, industry collaboration projects, and other approaches. Through practice, students can understand industry needs and gain practical experience, enhancing their problem-solving and teamwork abilities. Simultaneously, practice helps students build confidence and increases their employability.

4.4. Nurturing Innovative Thinking and Entrepreneurial Abilities

The field of digital media art and design in the new media era requires talents with innovative thinking and entrepreneurial abilities. One of the significances of innovative teaching is to cultivate students' innovative thinking and entrepreneurial abilities. In the teaching process, universities can promote students' creativity, problem-solving abilities, and encourage innovative practices to foster their innovative capabilities. Teaching innovation may involve introducing innovative courses and projects, organizing innovation competitions and entrepreneurial training, and providing resources and support for innovation and entrepreneurship. Through these innovations, universities can cultivate talents in digital media art and design with an innovative spirit and entrepreneurial capabilities, contributing to social innovation and economic development.

In summary, innovative teaching in digital media art and design in higher education holds significant importance in the context of the new media era. Teaching innovation allows teaching to align with industry development trends, cultivates students' comprehensive skills and interdisciplinary abilities, emphasizes practice and practical applications, and nurtures students' innovative thinking and entrepreneurial abilities. Through these innovations, universities can cultivate professionals who meet industry demands, contributing to the development of the field of digital media art and design and societal progress.

5. Strategies for Innovative Teaching in Digital Media Art and Design in Higher Education in the Context of the New Media Era

In the context of the new media era, innovative strategies are needed in the teaching of digital

media art and design in higher education to adapt to industry demands and challenges. The following strategies should be actively implemented:

5.1. Clarify Teaching Objectives

Teaching objectives should focus on both imparting knowledge and nurturing students. Considering the background of the new media era, it is important to establish a comprehensive objective system that encompasses knowledge, skills, processes, methods, as well as the cultivation of emotional attitudes and values. This approach aligns with the concept of balanced and comprehensive education. Firstly, thorough research and analysis of the digital media art and design curriculum should be conducted based on the educational and teaching conditions of higher education institutions. Secondly, the knowledge system of the discipline should be thoroughly understood, highlighting key and challenging areas. Lastly, teaching in digital media art and design should not be confined to the classroom, but extend beyond the campus and involve real-world engagement.

Furthermore, based on the investigations, regardless of the discipline, the cultivation of innovative thinking, practical skills, teamwork awareness, and other qualities have become crucial, particularly for digital media art and design majors. Therefore, the clarification of objectives should include the establishment of correct values, life perspectives, worldviews, and educational philosophies.

5.2. Update Curriculum Design

To introduce new media technologies and update the curriculum, universities should incorporate the teaching of emerging technologies like virtual reality (VR), augmented reality, and artificial intelligence. Students need to grasp the fundamental principles and application methods of these technologies to meet the new challenges in the field of digital media art and design.

As for interdisciplinary courses, universities should offer courses that integrate art and design with disciplines such as computer science, media studies, and psychology. This approach enhances students' comprehensive skills and interdisciplinary abilities, thereby increasing their competitiveness in the field of digital media art and design.

Regarding practice-oriented courses, universities should design practical courses that emphasize students' practical skills and abilities. Through practical projects, case studies, and workshops, students will gain an in-depth understanding of real-world work environments and processes, enhancing their practical application abilities.

5.3. Innovative Teaching Methods

To implement project-driven teaching methods that organize students into groups to complete real projects, universities should introduce this approach to cultivate students' teamwork, problem-solving, and innovative thinking abilities.

To adopt a flipped classroom teaching model, where classroom time is dedicated to discussions, practice, and creative work, while traditional knowledge dissemination is shifted outside the classroom, universities can improve students' engagement and self-directed learning abilities.

Additionally, universities should utilize multimedia technologies and tools for teaching, including the use of images, videos, audios, and other formats of materials and case studies. Through multimedia teaching, artistic design concepts and techniques can be better presented and explained.

To encourage student collaboration and communication within teams through group work, students should participate in project planning, design, and implementation, fostering teamwork and collaboration skills. Guidance and mentoring from instructors are also crucial in digital media art and design teaching. Instructors provide personalized guidance and support based on students' interests

and strengths, helping them discover and develop their creative styles and potentials.

5.4. Practical Opportunities and Industry Collaboration

Offer internships and practical training opportunities, establish collaborations with industries, and provide students with internship and practical training opportunities. Students can learn and practice in real work environments, understanding industry workflows and requirements. Furthermore, invite industry professionals to serve as mentors, providing guidance and support. Mentors can share their experiences and knowledge, helping students stay informed about industry trends and developments. It is also essential to collaborate with companies, organizations, or institutions to undertake digital media art and design projects. Through industry collaborations, students can gain exposure to real project demands and enhance their problem-solving and teamwork abilities.

In summary, in the context of the new media era, innovative teaching in digital media art and design in higher education should emphasize practice-oriented approaches, diverse teaching methods, and alignment with industry demands. Through high-quality teaching content, competent faculty, and practical opportunities, students' creative abilities and comprehensive skills in the field of digital media art and design can be cultivated, thereby nurturing outstanding talents for the industry.

5.5. Strengthen Faculty

The faculty teaching digital media art and design in higher education should possess rich theoretical knowledge and practical experience. This includes expertise in relevant disciplines such as art and design, digital media technology, and media communication. This ensures that instructors have a deep understanding of the theory and practice of digital media art and design. In terms of practical experience, faculty should have extensive experience in artistic creation, media application, and industry experience. This enables instructors to integrate theoretical knowledge with practical applications, providing students with practical guidance and case studies.

Faculty should also possess research capabilities, paying attention to the frontiers and hot topics in the field's development. This allows instructors to maintain close connections with academia and contribute to the advancement of the digital media art and design discipline.

5.6. Establish a Positive Teacher-Student Relationship

The establishment of a positive teacher-student relationship is beneficial for students' learning. The teacher-student relationship has a significant influence on student learning, as good relationships can foster students' interest in learning, while poor relationships can hinder their progress. During the university stage, students are eager for interpersonal communication and have a certain dependence on and admiration for their teachers. A good teacher-student relationship can create an environment where students love the subject, such as digital media art and design, and actively participate in class, thus enhancing teaching effectiveness. The establishment of a positive teacher-student relationship marks the beginning of a student's love for learning and the formation of good study habits. It makes students feel cared for and respected, creating an environment where students are not afraid to communicate with teachers and explore their unique ideas and perspectives.

For instance, when teaching, teachers should enhance their professional skills and knowledge to demonstrate their competence to students before actual teaching begins. This helps teachers establish a positive image and gain students' respect, admiration, and the role model effect. Once such emotional connections are formed, students will exhibit great enthusiasm and interest in learning. During the teaching process, each student may present different circumstances, with some showing exceptional talent and others struggling to grasp the principles and techniques. In such cases, teachers

should promptly recognize and praise students' outstanding performances. Both in the classroom and beyond, teachers should care for and respect students, offering them sufficient support and avoiding actions that could discourage or suppress them. Through care and respect, teachers can establish a positive teacher-student relationship that makes students feel valued and respected, thereby motivating them to actively engage in learning activities and explore independently. Additionally, university students are generally mature in their physical and mental development, possessing their own thoughts and personalities. In the context of the new

6. Conclusion

Through the practice and sharing of the research, innovative teaching in digital media art and design in higher education in the context of the new media era proves to be a beneficial reform in higher education. With continuous improvement and innovation in teaching, it not only stimulates students' thinking and creates an active classroom atmosphere but also enhances students' motivation, confidence, and learning outcomes. Additionally, it provides great convenience for teachers to conduct teaching activities, enriches teaching resources and methods, makes the study of professional courses diverse and interesting, improves teaching effectiveness, and implements the student-centered educational philosophy. The characteristics of the new media era, such as informatization, flexibility, and diversity, align with the mindset of contemporary university students. Therefore, incorporating innovation in the teaching of digital media art and design in higher education in the new media era is beneficial for achieving better teaching results.

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