

Correlation Analysis of Digital Art Curriculum System based on Computer Assistance

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Abstract. Digital art is a newly developed art form based on digitally based computer-aided technology and contemporary medium based computer-aided technology, integrating human intellectual thinking and artistic sensual thought. It consists of the intersection of art, computer-assisted technology, media and application layers, including a wide range of business design and popular art. Digital media art is characterized by the digitization of creative tools, interactivity in the presentation of works, polymorphism in the presentation of works, and a wide range of expressive themes. It is characterized by the combination of computer computer-aided technology, movie and video art, composite art, and network art, which is rapidly and widely disseminated through the combination of network media and finally combined with intelligent software to create artworks. Technical advancement and conceptual innovation will be the guiding power for the evolution of electronic art, while innovative production and message design will be the dominant force in the development of electronic media art.

Keywords: digital art; computer-assisted; correlation; emergence.

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1 INTRODUCTION

For most people, "digital media" may no longer be an unfamiliar concept, although it is still a term with controversial connotations and vague extensions. However, an amazing fact has become more and more clear and irreversible, that is, human beings are entering an era of "digital survival". Digitalization become an essential player and fundamental feature of the construction, operation, and development of the new era, and "digital survival" has become a typical generalization and expression of individual and social survival mode and development model in the

digital era. Because of this, some people claim that "the digital age has arrived." Since the publication of "Digital Survival" by Negroponte, an American scholar, many Chinese scholars have all taken a strong interest in the digital process quietly occurring in social life in the era of economic globalization. From their academic backgrounds and research interests, they have made various analyses and explorations on the characteristics of digitalization and digital times. Digital media art, which developed in the 1990s and gradually matured, began to enter a brand-new stage at the end of the 1990s. Digital media art, based on computer computer-assisted technology and network computer-assisted technology, is a brand-new comprehensive art form that is highly integrated with human rational thinking and artistic inspiration. At present, digital media art has entered into almost all existing traditional art performances while developing itself, and these traditional arts have been extended to different degrees. Gilbert [1] considered the distinctive nature for modern digital age, the need for a global tribology of digital sociology, and the interconnected contemplative imaginaries of such propositions by constructing digital visual methodologies that analyze the artwork itself and use the medium of Digital Art. Oh [2] conducted active research on the relationship between digital arts and media literacy. It revealed the relationship between digital arts and media literacy, demonstrating the interactive nature of educational initiatives for the younger age group, from elementary school to college. On the contrary, Zhu [3] analyzed the impacts and issues in the Art of Digitally Media in modern art and design education, including inadequate teaching models and knowledge building systems and aging of course content, and the aging of curricular content. Hashimi et al. [4] promoted the integration of technology, design education and art, and advocated tools and altering the use of the media appliances to allow for innovative thought. The ways of interaction and communication between viewers and exhibition objects are studied based on the technology of computers and Internet media. It is confirmed that new media works can acknowledge the main characteristics of new media art through the integration of techniques with various experimental orientations [5]. Ma and Li [6] proposed a digital media hybrid a model of education based on the technology of movable network. With four components, the model has front-end analysis, online self-directed learning, offline teaching, and post-class online evaluation. Digital media technology is a discipline that is multidisciplinary and multi-disciplinary. The talents cultivated should be mainly applicable. Practice according to traditional teaching methods, these subjects are not fitted for this subject [7]. The reason why digital media art is appealing in modern society is its "interactivity", which makes viewers feel, for the first time, as if they can not only watch, but also indirectly participate in the production of the work of art [8]. Wu [9] sketched the connotation of the application of electronic media technology in the online learning resource system, as well as a detailed analysis of the design and realization approach of online teaching resources on the basis of electronic media technology. The innovation of animation technology has been driven by the advancement of digital media, and the emergence of various animation presentation methods and production programs has injected new vitality and vibrancy [10].

Digital art needs integration of multi-disciplines and multi-knowledge levels to learn from each other's strengths. Nowadays, in the research digital media art, on the one hand, due to the "all-encompassing and unpredictable" nature of digital media art, all kinds of theoretical discourses in the traditional artistic context have lost their ability to speak to a certain extent; on the other hand, technical analysis instead of aesthetic perception of "technical stereotyped writing" makes digital media art appear "aphasia" in the field of artistic expression. Therefore, knowing the basic principles of digitalization, mastering the skills of digital media creation, possessing the modeling ability and artistic accomplishment of artistic creation, and combining digital computer-assisted technology and artistic creation perfectly and wonderfully is the real presence of digital media art.

2 COMPUTER-AIDED TEACHING EXPLORATION OF DIGITAL MEDIA ART

2.1 Establish a Hierarchical and Classified Teaching Mode

To realize the teaching of the digital medium art in the context of informatization objective: First of all, colleges and universities must innovate the training methods of professional talents, based on learning about Students' cultural foundation, habits, and complex diversity, carry out hierarchical and classified teaching. Education, pay attention to individual differences, innovate curriculum system and improve training quality. Second, we must constantly encourage students and mobilize their enthusiasm for professional learning. Sex, but also the use of emerging information technology to make boring knowledge easier to learn. Students are accepted so that they are interested in the study of the design of electronic medium art major, and learn and apply relevant teaching software independently, so that the study can be substantial. Progress. Figure 1 shows the content of digital teaching. Digital art teaching is mainly based on computer tools. At the same time, you can also use mobile applications for teaching, not only convenient and fast, but information dissemination is extensive, overcoming the traditional information dissemination time. And space constraints, changing the traditional single teaching method, but also strengthening Interaction between teachers and students. Finally, through various mobile applications, teachers can Transfer professional knowledge and skills to students more quickly and accurately, and students also can feedback on their problems and doubts to teachers in time, so teachers can grasp the learning situation, and to better plan and improve classes. The effectiveness of education enables students to acquire more comprehensive knowledge of digital media. The major of physical design cultivates high-quality talents.

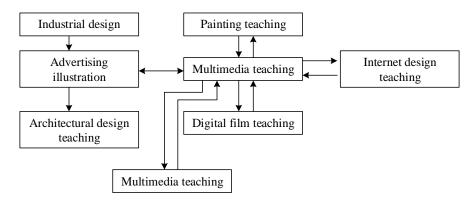


Figure 1: Types of digital art teaching.

2.2 Optimize the Teacher Structure of Digital Media

The comparison of digital education teachers in different countries is shown in Figure 2. Universities must optimize faculty structure, so that the sources of teachers are diverse. The main purpose of optimizing the teacher structure is not only to enhance the education quality. Quantity, but also to promote development of art and digital media. To strengthen teachers' Strengths can select outstanding graduates in society or company, these graduates Students have good information technology ability, and can constantly enrich and improve the numbers. Teaching ability of media professional teachers. In addition, college teachers can Cooperate with experienced professionals with outstanding academic achievements at home and abroad, pay Experience, and jointly boost digital media art teaching. Universities must conform to the development needs of the times and strengthen teaching. Teachers' training, to cultivate students' professional skills and practical skills. Social development needs. Teachers' training mechanisms

can be established to promote teachers' continuing. Education, to promote teachers' careers while improving teachers' professional level, and the development of digital media art design specialty.

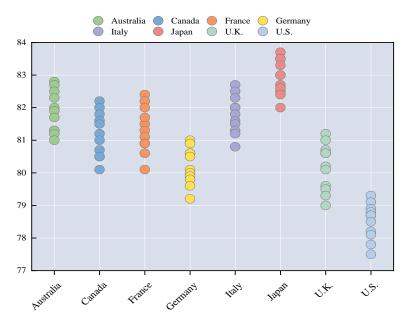


Figure 2: Comparison of digital teachers' strength.

2.3 Enhancing the Innovation and Practice of Students

As shown in Figure 3, the ways to improve the innovation of digital art mainly include computer drawing art, video processing, painting art and image processing ability. Innovation is the soul of a country's progress. Digital media art design. The profession also needs constant innovation, and only constant innovation can catch up to age. Generation adapts to the development of society. Innovation ability and practice ability complement each other, Students keep innovating in practice, and innovation is to improve students' skills and majors. An effective means of knowledge. Innovation is not a single changed, it must be committed to the faith. The integration of technology and art design should adopt a better teaching model. Trinity's study ensures the stability of traditional design to modern culture. Transition, and effectively enhance students' practical ability and innovative ability. First, improve students' artistic accomplishments. Art is digital media art. The core of art design specialty can be created only by continuous innovation on this basis. A more perfect work. Secondly, the major of the digital media art design is art. Combining with information technology, art is the foundation, and information technology is the foundation. Effective means of high professional skills. Among them, the digital media art design major Its technical principle covers a wide range, including graphic design, PS technology, etc. most After that, to develop packages through information technology. Works with different elements and cultures are embodied by different elements. Different styles, to realize the basic ideas that developers want to express, and Viewpoint, which is the key to educational innovation of design of art for digitally media major. First of all, in the early development of China's advertising industry, limited by shooting technology and post-production of advertising short films. Limited by technical factors, advertising video clips often lack innovation. And sense of substitution, so there are a lot of brands between advertisements. There is a high similarity, which leads to the propaganda of advertising short films. There is a big deviation from the actual effect of propaganda. However, in calculation the popularity of digital media art in advertising industry

Application has significantly improved the creativity and artistry of advertising short films. Operation, and give the promotion group a strong sense of substitution and intuition. Among them, computer digital media art is in the advertising line. In the application process of the industry, the main professional fields involved Yes, the shooting of film and television advertisements, the production of later video clips, Special effects. Secondly, computer digital art is in the present situation of application practice in Chinese industry is as follows: on the one hand, Digital art is a new achievement in China's education industry. The main way to achieving transformation in educational policy. concept. Such as the author as mentioned above, the number of computers used by teachers. In the teaching process e-teaching plans made by media art are used to carry out teaching work, in order to improve students' learning interest and learning autonomy. Sex; On the other hand, computer digital art is in education. Application in the field of online teaching in industry. In this collar Domain, the main application direction of computer digital media art. Design and maintenance of online teaching video content and teaching platform for education.

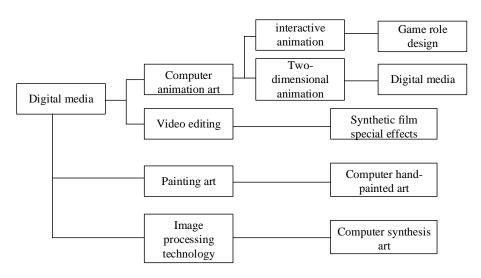


Figure 3: Ways to improve the innovation of digital art.

3 APPLICATION OF DIGITAL ART ON THE INTERNET, COMPUTER, AND MEDIA

Figure 4 shows the relationship between digital art and network, computer and media. The Introduction of Digital Art in the Design of Interactive Media with Interactive Media as the Carrier Use. For Example, web design, online game design, MMS design with a mobile phone, WAP design, game design, etc. Through digital art design, the interface of products and Their users build a relationship with organic, which can achieve user targets in effective ways, which is design goals. Through the design of digital art, we can be more considerate. To consider a more humanized interactive experience, give users something different or an unexpected feeling. While ensuring product usability and complete and convenient basic functions When, give customers a surprise and gain, so that users can experience it when using and operating the interface. The ease of use of the product.

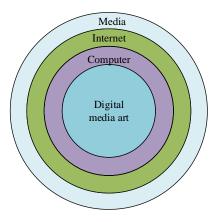


Figure 4: The degree of correlation between digital art and the three parts.

Virtual reality is a computer simulation of the so-called virtual world. To create a three-dimensional space. It offers users sense of sight and other sensory simulations, hearing, and touch, and makes users feel as if they were there. Its condition in general, and it can see something in dimensional space without limitation in both time and space. Such as the number of Word museums, digital malls, virtual products, etc. Digital art design can enhance the presence of virtual reality, and users feel like the master. The true degree of the angle existing in the simulated environment. The optimal modeling environment would make it difficult for the user to discern the real from the fake, thus allowing the user to be fully engaged in the computer-created 3D virtual ring. Hypermedia is a new business thinking: first, whether you have media awareness; The second is whether the products you provide have media services for users. Hypermedia can not only contain words, and can also contain graphics, images, sounds, animations or movie clips, etc. Media to represent information. These media are also organized by hyperlinks, and it links between them are also complicated. Hypermedia broke the traditional media, physical boundaries and traditional thought put graphic media, television media, and network media integration into energy. A superpower that can control a region or even the whole country. Since it is necessary to communicate in hypermedia There are various media such as graphics, images, sounds, animations, or movie clips to express information. It cannot be separated from the design of the figure, animation design, and sound design of digital art. It can Realistically simulate the real environment, and intuitively reflect the visual effect of space and material muscle. Management effect, lighting effect, etc., provide a more credible basis for customers' expected judgment.

The classification of art is shown in Figure 5, and it can be seen that it mainly includes design, classification, and scope. The large-scale production of machines is not worshipped by everyone from the beginning, especially the most critical and sensitive artists in every era are always in a contradiction between positive reflection and extreme rejection. Artists are always good at fully criticizing certain artistic language with the characteristics of the times. This is not a strategy, but an artistic expression. It is necessary to look for critical elements in the characteristics of the times, such as machines and gears, which have created human beings. I have never felt a sense of rhythm, speed, and sequence. Artists transform this feature into an art form and appear in their works of art, but what artists find from it is not the machine efficiency felt by workers, but a meaningless madness and the nervous mental state of modern people.

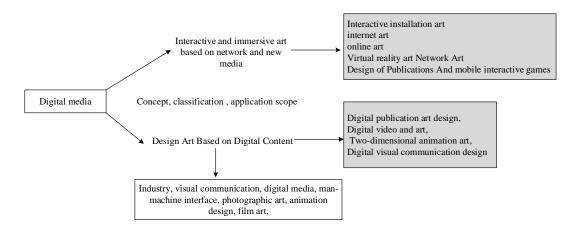


Figure 5: Classification of digital art.

4 DIGITAL ART MAINLY INVOLVES FIELDS AND CONTENTS

Digital art is intersected in many aspects. Application of relationships, such as animation, in film and television, environmental art design, industrial models, and other aspects are widely used, so can't be treated in isolation. The development promotion of digital art Family integration. The application of computer-aided design is earlier, and it is relatively Cooked. Such as visual communication design, computers have been firmly occupied. The high-grade color output, printing, and other fields. Environmental art design, Auto CAD, and 3Ds Max have become buildings. Synonymous with computer-aided design in other industries, based on There are so many software developed by CAD. Industrial design has the function of simulating solid modeling and can shorten the time of product development and simplify the development process. Its threedimensional creation process is to determine the properties of related objects. Specifically, the computer displays the data on the screen in real-time and accurately. Now the three-dimensional effect of the object can finally transmit the data to CNC machine tools, making solid models and finished molds. count the intervention of computer has changed the traditional production model. Computer painting is a relatively new and popular art. Surgical category. The pressure-sensitive digital pen is close to using. In the traditional brush, on the electronic canvas, you can choose a "Brush" of any kind, shape, and size, stained with "Ink" or "pigment" in different textures of "paper" Painting, and handwriting shows the color and different texture of the paper. The texture effect, "brush stroke" will be with the pressure. And make thickness, depth, virtual and real, and flying white according to moving speed and speed. Change, etc., simulate the effects of reality and change the traditional Art is liberated from paper and pen and meets the needs. The artistic effect. Oil paintings, sculptures, prints, etc. are also created by computers. Advantages such as timely interaction make computers have surpassed the passive position of traditional tools, 2D Illustration and conceptual art are widely used in commercial advertisements. Painting, publication illustration, game art. Computer multimedia animation is currently used very much. A wide range of art forms with a wide range of categories. Press production methods can be divided into two-dimensional animation and three-dimensional animation; According to length and short, can be divided into animated short films, and animated films. The type of drama can be divided into feature films, children's dramas, Science and education films, etc. In a word, the above main contents about digital art are shown in Figure 6.

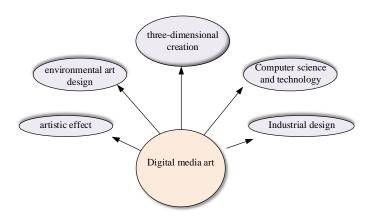


Figure 6: The main contents of digital art.

5 APPLICATION STRATEGY OF COMPUTER TECHNOLOGY

Behind the phenomenon that productivity and art support each other and reflect each other are those businesses that have absolute domination rights. They represent the economic relationship of this society. On the one hand, invisible capital forces influence the expression of art; on the other hand, art actively chooses emerging technologies by using its unique sensitivity. For example, in the era of the emergence of a large number of televisions, the commercial trend of increasingly simplified means of video recording and cheap equipment provides the art with the conditions for further development of media evolution. In turn, the power of capital needs to gain cultural color through art sponsorship and collection. Many cultural and artistic activities in contemporary society are supported by donations from manufacturers to survive. In this somewhat forced and helpless situation, artists show their concern and criticism through constantly changing artistic media. If you want to better integrate into the scope of contemporary artistic creation, artists need to know how to find the balance between the renewal of artistic forms and the height of artistic ideals. The impact of different strategies is shown in Figure 7. Digital media art has experienced several times in the development of our society. Times of change, especially with China's Internet technology and computer in recent years as technology gradually develops and becomes mature, digital media art is coming. New opportunities for development. However, judging from the process of artistic development in recent years, the usage of computing technology in the domain of digital media art is unreasonable, to some extent, it hinders the development of digital media art. On the one hand, there are few computer technologies dedicated to the design and display. At present, most common computer technologies are general technologies, and their pertinence is weak. The actual effect of the design and display of digital art is not obvious. For the second time, the use of technology of calculators in the field of digital media art exists. The Creators of digital art don't agree with each other in misuse and abuse. The use of computer technology, resulting in the creation of works lack of new ideas, the low quality hinders the development of digital media art. With the continuous development and wide application of computer technology, its relationship with number the combination of word media art is getting closer and closer, which has promoted to an extent. The fast growth of electronic medium of arts. As social and economic growth is constantly increasing, the living standards of citizens are improved and the demand for art is greater, the traditional media art form is too single, has been unable to Meet the needs, and the rise of computer technology gives digital art. It introduces new growth possibilities. Traditional media art is more about words. Or audio, etc., while the display form of digital media art More diverse. Especially as computer technology evolves text processing is soft Software, multimedia

software, etc. have been successively applied to digital media works of art, it accurately combines picture and sound, effectively solving the previous tradition. The problem of artistic oneness enriches the presentation forms of his works, such as Common digital audio and digital video are popular digital media. Works of art. In the ongoing efforts to compose digital masterworks, when Image processing technology, multimedia software technology, etc. are often used to enhance art. Intuition and vividness of art works.

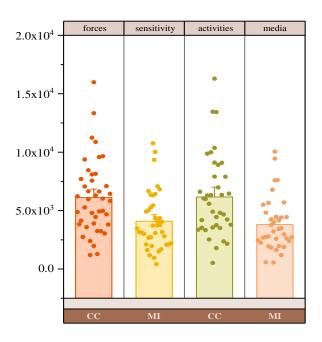


Figure 7: A comparison chart of different strategies.

The artistic expression of digital media is shown in Figure 8. The mastery of art media in the works is the key to the success or failure of artists' works. However, due to blind pursuit of the characteristics of the productive forces of the times, the performance materials and contents of works of art are often out of touch. The more scientific and technological the works of art are, the easier it is to lose balance in artistry. In western culture, computer-assisted technology and art are inseparable, and the creation of modern art needs to strive to achieve the state of integration and homogeneity in the application of modern computer-assisted technology. The productivity of the times is that the appearance of every new thing that can be displayed through the media has caused artistic changes and then caused new thinking in culture and philosophy. Mike Luhan once lamented that "everyone can be an artist" because of the appearance of photocopiers. Nowadays, digitalization makes it possible for everyone to use computers to process images and sounds. Therefore, the artistic aesthetics of digitalization is placed in front of everyone engaged in artistic creation. Artists should have a good grasp of the role of the productive forces of the times in the performance of artistic works while engaging in artistic creation so that the techniques presented by art are consistent with the connotations that art needs to express.

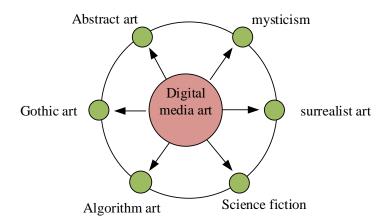


Figure 8: Digital artistic expression.

6 CONCLUSION

As the advance of market economy and computer technology has brought significant changes to all walks of life in China, especially in the area of electronic media art, to be sufficiently integrated with computer technology. The new trend of the advancement of digital medium art. As can be seen from the previous analysis, computer technology has brought new development opportunities to digital media art. opportunity to make digital media art more diversified. However, from the use of computing technologies in recent years, digital media artists still have some problems when applying computing technologies, such as the over-reliance of creators on computing technologies, which reduces the level of professional skills. Therefore, China should combine the current application problems of computer technology in computer medium art, and start from universities, institutions and government agencies to carry out in-depth reform and further reform and expansion of the computer technique, so as to ensure the reasonable application and long-term development of digital media art field with technology of computer. Multimedia teaching is an inevitable trend in the education reform of universities in China. As information advances at a rapid pace, the construction of information should follow the trend. Building a comprehensive teaching platform of networked digital resources is not a simple list of hardware and software, but an effective use of digital resources, not only to make good use of these, resources, but also have a long-term vision to combine the huge resources organically to form a mature system structure.

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