

Research on the Construction of Digital Creative Courses from the Perspective of Artificial Intelligence

Kewang Cao^{1, a}, Qiupeng Yuan^{2, b}

¹ School of Art, Anhui University of Finance and Economics, Bengbu 233030, China

² School of Management Science and Engineering, Anhui University of Finance and Economics, Bengbu 233030, China

^atb18220001b0@cumt.edu.cn, ^byuanqp@aufe.edu.cn

Abstract

Digital creative education, as an emerging form of education, has received widespread attention and discussion. This study is based on the perspective of artificial intelligence and explores relevant issues in the construction of digital creative courses. Firstly, the article analyzes the definition, characteristics, and current development status of digital creative education, pointing out its important role in cultivating students' creativity, problem-solving ability, and information literacy. Secondly, this article introduces the application of artificial intelligence in digital creative education, including personalized learning, virtual reality technology, data-driven decision-making, and explores the promoting role of artificial intelligence technology in digital creative education. Finally, the article summarizes the problems and challenges in the current construction of digital creative courses, including technological dependence, privacy and security, digital divide, and proposes corresponding solutions and suggestions. This study aims to provide theoretical and practical references for the development of digital creative education, and to provide reference and inspiration for further promoting the construction of digital creative courses.

Keywords

Digital Creative, Artificial Intelligence, Courses.

1. Introduction

With the rapid development and widespread application of digital technology, the digital creative industry has become one of the most active and promising fields for global economic growth today [1-2]. The construction and implementation of digital creative courses are of great significance for enhancing the comprehensive quality of talents in the digital era and promoting innovation and development of the digital creative industry. The digital creative industry is a highly comprehensive industry, which not only includes traditional culture, art and other fields, but also covers cutting-edge fields such as computer science and information technology. The digital creative industry requires both artistic and design skills, as well as proficiency in modern tools and methods such as computer technology and data analysis. Therefore, digital creative education should be a composite education system that can cultivate talents who are both knowledgeable in art and design and proficient in computer technology, in order to meet the needs of the digital age society and industry. Meanwhile, with the rapid development and widespread application of artificial intelligence technology, digital creative education also needs to be constantly updated and improved. Artificial intelligence technology has penetrated into all aspects of the digital creative industry, such as image recognition, natural language processing, audio synthesis, etc., playing an important role in the design and creative process. Therefore, digital creative education should be based on the application of

artificial intelligence technology to better cultivate students' creativity and innovation ability. Based on the above background and motivation, this paper will explore the current situation, existing problems, and solutions of digital creative curriculum construction from the perspective of artificial intelligence. Meanwhile, this article will also propose some digital creative curriculum construction plans based on artificial intelligence technology, in order to provide reference for the future development of digital creative education.

With the advent of the digital age, digital creativity has become a very important part of modern society. Digital creativity encompasses many fields, such as music, painting, photography, video production, etc., all of which require people to possess corresponding skills and knowledge to carry out their work [6-8]. Therefore, in modern society, the construction of digital creative courses has become increasingly important. This article aims to explore the research purpose and significance of digital creative curriculum construction from the perspective of artificial intelligence. Firstly, artificial intelligence is one of the fastest developing fields in modern technology, as it can provide richer and more efficient teaching methods for digital creative courses. By utilizing artificial intelligence technology, complex problems in digital creative courses can be analyzed and solved, helping students better understand the course content. Secondly, the construction of digital creative courses is also of great significance for cultivating talents. The digital creative industry is a highly competitive industry, and only with sufficient professional knowledge and skills can one occupy a place in it. Therefore, the construction of digital creative courses can provide students with a more complete and comprehensive knowledge system, helping them better adapt to future career development. Finally, the construction of digital creative courses can also promote the development of the digital creative field. With the advent of the digital age, the digital creative industry has become a very important part of modern society. The construction of digital creative courses can provide more outstanding talents in this field and promote the development and growth of the digital creative industry. In summary, exploring the research objectives and significance of digital creative curriculum construction from the perspective of artificial intelligence is of great significance. It can not only provide more excellent talents for the digital creative industry, but also provide better teaching resources for students and promote the improvement of their professional skills. At the same time, the construction of digital creative courses can also leverage the power of artificial intelligence technology to inject new vitality into the development of the digital creative industry.

2. The Definition and Characteristics of Digital Creative Courses

Digital creativity course is a course based on digital technology, with creative design and practical teaching as the main content. Digital creativity covers multiple fields such as music, painting, photography, and video, aiming to cultivate students' innovative and practical abilities through the use of digital technology tools for creative design and practice. The digital creative course is based on digital technology, and the core of the digital creative course is creative design. Creative design is the most important part of the digital creative course, which involves creative thinking, artistic expression, design concepts, and other aspects. The digital creative course aims to achieve personalized and diversified expression through creative design.

Practical teaching is the main focus, and digital creative courses emphasize practicality. Unlike traditional theoretical courses, digital creative courses focus more on students mastering knowledge and skills through practical operations and activities. Practical teaching enables students to have a deeper understanding of the field of digital creativity and gain richer experience and skills. The digital creative course has the following characteristics: it emphasizes practicality and emphasizes that students can master knowledge and skills through practical operations and activities. Practicality is the most fundamental characteristic of digital

creative courses. Integrating multiple disciplines: Digital creative courses integrate knowledge and skills from multiple disciplines, including computer science, art and design, music, and more. The advantage of integrating multiple disciplines is that it enables students to acquire a more comprehensive knowledge system. The digital creative course is oriented towards the future, focusing on leading the trend of the times in teaching content and methods, and meeting future market demands. This also makes digital creative courses have broader development prospects. The digital creative course adopts diversified teaching methods, including online teaching, laboratory practice, graduation project, etc., to fully meet the needs of students. Diversified teaching methods can not only cultivate students' comprehensive abilities, but also enhance their interest and enthusiasm in learning. Emphasis on innovation and creativity: Digital creativity courses focus on cultivating students' innovation and creative abilities, encouraging them to explore new design ideas and ways of expression.

3. The Application of Artificial Intelligence Technology in Digital Creative Education

Artificial intelligence technology has become a hot topic in the field of digital creative education. With the continuous progress of artificial intelligence technology, digital creative education will also be affected, bringing more innovation and development to digital creative education. At present, the application of artificial intelligence technology in digital creative education mainly focuses on the following aspects: (1) Image recognition: Artificial intelligence technology can recognize the content in images through image recognition technology and automatically label images, thereby providing a faster and more accurate processing method for digital creative education. (2) Art creation: Artificial intelligence technology can use algorithms such as Generative Adversarial Networks (GANs) to create art, such as generating virtual characters, scenes, etc. This method can assist creators in generating more diverse creative materials, providing more possibilities for digital creative education. (3) Speech recognition: Artificial intelligence technology can use speech recognition technology to convert students' oral content into text, thereby reducing learning costs and enabling students to grasp knowledge more quickly. Knowledge recommendation: Artificial intelligence technology can use recommendation algorithms to recommend suitable learning courses and textbooks for students based on their learning situation and ability level, thereby helping them learn more efficiently. (4) Chatbots: Artificial intelligence technology can provide consultation services to students through chatbots, such as answering questions, solving doubts, etc., playing a good auxiliary role in digital creative education.

With the continuous development of artificial intelligence technology in the future, digital creative education will also face more changes and challenges. The application direction of artificial intelligence technology in digital creative education may involve the following aspects: (1) Personalized education: Based on students' learning behavior and data analysis, artificial intelligence technology can provide personalized learning experiences and course recommendations for students, thereby better meeting their needs and requirements. (2) Cross disciplinary Integration: Artificial intelligence technology can help digital creative education integrate with other disciplines, such as the integration of digital art with finance, medicine, environment, and other fields, bringing more possibilities to digital creative education. (3) Intelligent evaluation: Artificial intelligence technology can provide students with more accurate learning evaluation and feedback through automatic evaluation and adaptive evaluation, thereby helping them improve their learning outcomes.

In short, the application of artificial intelligence technology in the field of digital creative education has begun to emerge. In the future, with the continuous progress of technology and

the expansion of application scenarios, artificial intelligence technology will become an important support and driving force in the field of digital creative education.

4. Digital Creative Course Design

The design and development of digital creative courses is an important discipline that covers the application of various creativity and technologies. Digital creativity can include game design, animation production, virtual reality, and augmented reality. This course aims to equip students with the core concepts and skills of digital creativity, cultivate their imagination and creativity, and prepare them for their future careers. The main goal of digital creativity courses is to cultivate students' digital technology skills and innovation abilities. Specifically, it can help students master the basic knowledge and skills of digital art and design, including graphics, animation production, 3D modeling, visual design, and other related knowledge; Familiar with the use of digital creative tools and software, such as Photoshop, Maya, Unity, Unreal Engine, etc; Cultivate students' imagination and creativity, encourage them to propose unique ideas and design solutions; Strengthen students' teamwork and communication skills to better complete digital creative projects; Help students understand the current situation and future trends of the digital creative industry, and provide reference for their future career planning. The content of digital creativity courses should include basic knowledge of digital art and design, including graphics, animation production, 3D modeling, visual design, and other aspects. These knowledge are the foundation of the field of digital creativity, and students need to have a certain mastery of them. The use of related tools and software such as Photoshop, Maya, Unity, Unreal Engine, etc. Students need to learn how to use these tools and software to create digital creativity. Project practice enables students to apply their learned knowledge to practical situations through the development of actual projects, while also enhancing their teamwork and communication skills. Digital Creative Industry Analysis: Help students understand the current situation and future trends of the digital creative industry, and provide reference for their career planning. The teaching methods of digital creative courses should focus on practice and project driven approaches. Specifically, project-based teaching methods can be adopted to develop practical projects, allowing students to apply the knowledge they have learned in practice, while also enhancing their teamwork and communication skills. Encourage students to explore, practice, and innovate independently, and cultivate their self-learning and innovation abilities. Utilize multimedia technology to assist teaching, including demonstrations, videos, images, etc. Explain theoretical knowledge in class and complete practical operations outside of class, deepening students' understanding of theoretical knowledge and operations through discussion and interaction.

5. The Development Trends in Intelligent Digital Creative Education

Intelligent digital creative education refers to the use of modern technologies such as artificial intelligence, big data, and virtual reality, combined with creative thinking and educational concepts, to provide students with more personalized, flexible, and diverse learning experiences, cultivate their creativity, problem-solving abilities, and information literacy. With the continuous development of technology and the updating of educational concepts, intelligent digital creative education is also constantly evolving. Through artificial intelligence technology, intelligent digital creative education can provide personalized learning content and paths based on students' interests, abilities, and learning habits. By analyzing the learning data of students, the system can customize a learning plan tailored to their developmental needs, thereby improving learning efficiency. Virtual reality technology can provide students with a more immersive learning experience, allowing them to experience various scenarios and situations firsthand, thereby better understanding and mastering knowledge. In digital creative education,

virtual reality technology can be applied to artistic creation, design thinking, and other aspects, providing students with broader creative space and creative stimulation. Intelligent digital creative education emphasizes interdisciplinary integration, organically combining knowledge and skills from different disciplines, and cultivating students' comprehensive literacy and innovation ability. Through interdisciplinary learning and project practice, students can better understand the connections between knowledge, cultivate systematic thinking and comprehensive problem-solving abilities. Intelligent digital creative education focuses on cultivating students' creativity and problem-solving abilities through practical projects. By participating in real projects or simulated scenarios, students can apply the knowledge they have learned to practical situations, thereby gaining a deeper understanding and mastery of the knowledge, cultivating practical skills and teamwork spirit. Intelligent digital creative education advocates the open sharing of educational resources. Through the Internet and open educational resource platform, students can access a variety of learning resources and educational tools. Teachers and students can jointly participate in the creation and sharing of educational resources, promoting the updating and optimization of educational resources. Intelligent digital creative education can help educators better understand the learning status and needs of students through the collection and analysis of student learning data, thus providing targeted teaching design and personalized tutoring. Through data-driven teaching methods, teaching efficiency can be improved, and refined management and personalized services of education can be achieved.

6. The Problems in Intelligent Digital Creative Education

Intelligent digital creative education relies on advanced technologies such as artificial intelligence, big data analysis, and virtual reality, which may themselves be affected by limitations, malfunctions, or vulnerabilities. Once there are technical issues, it may have a serious impact on teaching activities, and even lead to teaching being unable to proceed. Intelligent digital creative education requires the collection of a large amount of student data for personalized learning and teaching analysis, but this also brings privacy and security concerns. If these data are improperly managed or accessed by unauthorized personnel, it may leak personal privacy information of students and even be used for improper purposes. Intelligent digital creative education requires students to have certain technical abilities and equipment conditions in order to participate, and some regions or families may not be able to provide these conditions due to economic, technological or other reasons, leading to the exacerbation of the digital divide, making it difficult for these students to enjoy equal educational resources and opportunities. Intelligent digital creative education has introduced a large number of intelligent technologies and automation systems, but education itself is an activity that involves human emotions, thinking, and creativity. Overreliance on technology may disrupt communication and interaction between people, as well as emotional connections between teachers and students, thereby affecting the effectiveness and quality of education. With the development of information technology, various forms of information content are flooding on the Internet, including high-quality educational resources, low-quality and even wrong content. Students need to screen and discern the authenticity and credibility of information when using intelligent digital creative education, but their abilities and awareness may not be sufficient to cope with this challenge, leading to incorrect knowledge dissemination and cognitive biases. Intelligent digital creative education requires teachers with corresponding skills and knowledge to guide and guide students, but currently there are deficiencies in digital skills and educational concepts in the teaching staff. Therefore, it is necessary to strengthen the training and professional development of teachers, and enhance their digital education abilities and literacy.

In summary, although intelligent digital creative education has brought many innovations and opportunities, it also faces many problems and challenges that require joint efforts from all sectors of society to take effective measures to solve. Only by fully understanding and addressing these issues can intelligent digital creative education better play its role and provide students with high-quality educational resources and learning experiences.

7. Conclusion

This study provides an in-depth exploration and analysis of the construction of digital creative courses from the perspective of artificial intelligence. By sorting out the definition, characteristics, and current development status of digital creative education, we can clearly recognize the important role of digital creative education in cultivating students' creativity, problem-solving ability, and information literacy. The application of artificial intelligence technology has brought new development opportunities for digital creative education, such as personalized learning, virtual reality technology, and data-driven decision-making, further improving the effectiveness and quality of education. However, there are still some problems and challenges in the construction of digital creative courses. Challenges such as strong technological dependence, privacy and security issues, and digital divide require us to think deeply and solve them. We need to take effective measures to strengthen technological research and application, ensure the security and privacy of student data, narrow the digital divide, and provide equal opportunities for digital creative education for all students. In order to better promote the construction of digital creative courses, we suggest starting from the following aspects: firstly, strengthening teacher training and professional development, enhancing their digital education ability and literacy; Secondly, actively promote the open sharing of educational resources and promote the updating and optimization of educational resources; Thirdly, promote interdisciplinary integration and cultivate students' comprehensive literacy and innovation ability; The fourth is to focus on project driven practice, providing students with more practical opportunities and project practical experience.

In summary, the construction of digital creative courses requires joint efforts from multiple parties, combined with the development of artificial intelligence technology, to promote innovation and reform in education, and make positive contributions to cultivating more creative and innovative talents.

Acknowledgments

Exploration of Digital Creativity Curriculum Teaching System from the Perspective of Artificial Intelligence (PX-308225091).

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