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FEATURES OF THE VIRTUAL REALITY USING IN THE PROCESS OF ART STUDENTS' TRAINING

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ОСОБЕННОСТИ ИСПОЛЬЗОВАНИЯ ВИРТУАЛЬНОЙ РЕАЛЬНОСТИ В ПРОЦЕССЕ ОБУЧЕНИЯ СТУДЕНТОВ ХУДОЖЕСТВЕННЫХ СПЕЦИАЛЬНОСТЕЙ

This article explores the advantages, characteristics, challenges, and future trends of virtual reality (VR) technology in art student training. As an emerging educational tool, virtual reality technology is gradually changing the traditional art education model. In the training of art students, virtual reality technology not only provides a richer and more vivid learning experience, but also expands students' artistic creation space. However, virtual reality applications also face many challenges, such as technology costs, changes in content design and teaching methods.

Virtual Reality (VR) technology is a simulated environment that allows users to immerse themselves and interact with the digital world. It employs computer graphics, sensory devices, and interactive technologies to create experiences that feel real.

VR technology utilizes computer-generated visuals, sounds, and tactile sensations to place users in a simulated environment, providing an immersive and realistic experience. Its basic principles involve computer graphics, sensor technology, display technology, and interaction methods, allowing users to interact with the virtual world through various means.

VR technology has evolved from experimental stages in the 1960s to commercialization in the 1990s and rapid development in recent years. It is widely applied across diverse fields such as entertainment, education, healthcare, architecture, engineering, and military training. VR offers immersive experiences, enhances understanding of complex concepts, improves efficiency, and develops skills.

Virtual reality technology creates a vivid and real learning environment, stimulating students' interest and curiosity, allowing them to participate in artistic creation and learning immersively. Students can communicate directly with works of art through interaction, deepening their understanding and mastery of art knowledge.

Students can carry out artistic practice activities such as painting, sculpture, and music creation in a virtual environment, and practice repeatedly and practice anytime and anywhere without being restricted by time and space [2].

Virtual reality technology provides students with unlimited artistic creation possibilities and stimulates students' creativity and innovative thinking by simulating scenes that are impossible to achieve in the real world.

These advantages will have a positive impact on students' art education and promote their all-round development.

1. Personalized learning and customized experience:

Virtual reality technology allows students to tailor their learning experience to their own learning needs and interests. Through personalized settings and customized content, students can learn at their own pace and way, improving learning efficiency and outcomes.

2. Real-time feedback and guidance:

The virtual reality environment can provide real-time feedback and guidance, helping students find problems in time and improve them during the artistic creation process. Through the guidance of simulation teachers, students can obtain targeted suggestions and techniques to improve their artistic skills and level.

3. Diverse art creation tools and resources:

The virtual reality platform provides a rich variety of art creation tools and resources, including painting, sculpture, music, dance and other art forms. Students can try various artistic creations in the virtual environment, explore their potential and interests, and expand the possibilities of artistic expression [3].

These characteristics make virtual reality very attractive and application potential in the training of art students, providing students with a richer and more personalized learning experience and creative space.

1. Technical costs:

VR technology requires significant investment in hardware and software, including head-mounted displays and sensors. High expenses may limit its adoption in schools.

2. Content design and teaching methods:

Creating effective VR content requires skilled teams and artistic guidance. Teachers need specialized training to utilize VR effectively [1].

3. Staff and management requirements:

Implementing VR technology demands technical support, maintenance, and teacher training. Effective management systems are essential for its successful application.

These challenges highlight the need for collaborative efforts to address cost barriers, improve teacher training, and promote wider adoption of VR in art student training.

1. Deep integration of VR and art education:

As VR technology advances, it will be more deeply integrated into art education through dedicated labs and studios.

2. Innovative VR applications:

Future VR applications for art students will focus on real-time display and demonstration of artworks, enhancing students' understanding of artistic techniques.

3. Multidisciplinary collaboration:

VR's multidisciplinary nature will drive collaboration between art education and fields like computer science and engineering, fostering innovation.

Overall, VR's future in art student training will be diverse, innovative, and collaborative, enriching students' learning experiences and advancing art education.

Virtual reality (VR) technology holds promise in art student training, enriching learning experiences and fostering creativity. However, challenges like technology costs, content design, and faculty needs persist. In the future, VR will integrate further into art education, spawning innovative applications and interdisciplinary collaborations. With ongoing efforts, VR will offer students richer learning experiences and advance art education.

Literature

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