

Applications of Extended Reality in Virtual Exhibitions and its Use to Display the Artwork for Art College Students

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Abstract:

The emergence of digital reality applications in recent years, which attract users to an immersive, interactive virtual reality world, as well as the technologies and solutions provided by digital reality in various fields, especially in the field of education, have significantly enhanced communication and student support while transferring educational reality to a virtual reality through interactive environments and distant access.

This research study provided an extended reality application that was used to showcase some of the works created by students in art faculties and programs. The study examines the relationship between the learning environment and extended reality, an expression that has just been added to the vocabulary of technical and technology terms. The study aims to employ novel techniques to present student work in a novel way. We discuss the future of extended reality in learning art materials and the most significant uses of digital reality in the fields of arts education, leading to virtual art exhibitions, as well as the investment in modern technologies and the ease of communication and vision they provide for all beneficiaries of students and professors who are not present at the exhibition venue. The study employs virtual reality (VR), one of the applications of extended reality, and studies the possibility of using it to provide alternatives to traditional exhibitions. This research follows to the descriptive methodology by taking on the study of extended reality techniques and their application in some models of virtual exhibitions to display the work of students in various art faculties and programs. We conclude from the analytical study that the use of virtual reality technology as one of the extended reality applications has successfully helped to facilitate availability and digital access, as anyone can access virtual exhibitions via the World Wide Web, with no spatial and temporal restrictions. This provides genuine exhibition spaces, validates the physical possibilities of publishing student works in printed form, and enables students to access artworks and cultural experiences regardless of their location or financial situation.

The study urges to look further to the most efficient methods of including extended reality (XR) to the preparation of art exhibitions, to keep looking into the way this technology could enhance the educational process, and to motivate educational institutions to use virtual exhibitions to present students' work in a more creative and effective way. It additionally suggests teaching students to use XR applications to display their work.

Problem: By responding to the following query, the research issue is summarized:

What are the several ways that Extended Reality (XR) technology and its applications can be utilized for displaying artwork for students in art colleges?

Objectives: The research aims to: 1. Using innovative techniques to present students' work in the colleges of art in a distinctive and modern way. 2. Investing in contemporary technologies and the accessibility to knowledge and exposure they provide for all stakeholders, including students and professor who are not physically present at the exhibition spot.

Significance: 1. Finding creative ways to offer unconventional exhibition spaces and optimizing the material requirements for printing student artwork on paper form. 2. Supporting remote participation and learning among students, as well as their use of technology to study and communicate.

Methodology: The research adopts the descriptive methodology followed by an analytical evaluation of some virtual exhibit models employed in various art programs.

Results and Discussions: Based on the foregoing findings from the analytical study, the researcher is of the opinion that using virtual exhibitions to display artwork for students in art faculties and programs has significantly helped to provide students with a unique and different educational experience. From that, we draw the following conclusions:

1. Students were able to invest in contemporary technology and the simplicity of communication and visibility they offer to all beneficiaries, whether students or professors, who are not present at the exhibition spot.

2. Students used innovative techniques to present their artwork in a unique and contemporary way. As compared to traditional exhibits, interactive virtual ones offer a number of advantages, including the accessibility of genuine exhibition spaces and a rationalization of printing materials to display student artwork.

Results: 1. Giving students an immersive and engaging experience that promotes learning outcomes is one of the main advantages of using Extended Reality (XR) applications for creating virtual galleries to display their work. 2. it provides students a sense of presence, leading them to believe they are in the same real-world setting as the exhibition, allowing them to participate dynamically and interactively with the art. 3. Accessibility and online access, which allows individual to access virtual exhibitions on the Internet at anytime and anywhere without geographical or conceptual limitations. allowing students, regardless of the place they reside or their financial situation, to access art and cultural events. 4. According to the participants in the virtual exhibitions, it proved to be a successful experience in providing a variety of exhibition spaces while rationalizing the material abilities of printing students' artworks on paper. 5. Extended reality approaches enable students communicate with their audience, improve their aesthetic presenting skills, and increase their ability for lucid communication. 6. The use of extended reality technology can aid in the development of students' design and imaginative thinking skills as well as their ability to express artistic ideas in novel and inventive ways.

Keywords:

Virtual Exhibitions - Extended Reality - Virtual Reality - Art College

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