CultureCase

How augmented reality helps museum visitors appreciate paintings

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This research was conducted by **Kuo-En Chang and five other people** at **National Taiwan Normal University and National Taiwan University of Science and Technology**

Summary

This paper reports an experiment where 135 college students were observed in the Taipei Fine Arts Museum. The students were divided into three groups. One group was not given any guide, another used the audio tour commonly offered in the museum, and the third group used an augmented reality (AR) guide. The study showed that members of the AR-guided group spent more time in front of each painting and retained the most information about the paintings according to the results of pre- and post-visit tests.

Augmented reality allows for the integration of physical and virtual elements in a gallery

To use the AR museum guide, visitors were given a 10-inch tablet and directed to point the tablet's camera lens at a painting they wished to examine. Once the tablet recognised the painting a series of interactive, audio-visual, and text-based commentaries appeared on the screen, overlaid onto the painting's image. The AR guide commentaries were developed to lead users through four stages of painting appreciation: noting background information and basic impressions; analysing formal elements and artistic techniques, interpreting the artist's intention and meaning, and finally, making an informed judgment. A significant benefit of the AR-guide platform is the ability for a user to easily shift focus between the painting's image on the tablet screen and the actual painting on the wall.

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Despite its strengths, AR has some drawbacks in a museum setting

In this experiment, the AR guide had occasional technical difficulty recognising paintings, and some users felt the text commentaries were not long enough. Additionally, it was observed that AR-guide users interacted less with other visitors during their time in the gallery.

Adapted from a summary by Michael K. O'Malley that first appeared in Issue 4 of *The Digest* from the Cultural Policy Center at the University of Chicago

Keywords

Taiwan museum experiment interpretation art

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