

AIMS OF GOOGLE CARDBOARD

Google Cardboard was created with the primary aim of making virtual reality (VR) accessible to more people. It is a low-cost VR platform that uses a simple cardboard viewer to transform a smartphone into a VR device. This initiative was part of Google's broader effort to stimulate interest and development in VR applications. Google made the platform's software development kit (SDK) open-source, enabling developers to create and distribute VR content easily. Additionally, Google aimed to integrate this technology into educational settings through initiatives like the Expeditions program, which provided VR experiences to school classrooms, allowing educators to take their students on virtual field trips.

Google Cardboard's simple, cost-effective design was intended to encourage a wide range of users to explore VR technology, from developers and students to everyday consumers looking for new experiences. By democratizing VR, Google hoped to foster a more vibrant ecosystem of VR content and applications, making immersive digital experiences more mainstream.

<https://blog.google/products/google-ar-vr/unfolding-virtual-journey-cardboard/>
<https://support.google.com/cardboard/manufacturers/answer/6321454?hl=en>

EVALUATION OF GOOGLE CARDBOARD FOR EDUCATIONAL PURPOSES

PRACTICING QUANTITATIVE AND QUALITATIVE XR SYSTEM EVALUATION

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Module 7: Practicing Quantitative and Qualitative XR System Evaluation



xPRO





USABILITY RESULTS

The usability evaluations of Google Cardboard, measured using the System Usability Scale (SUS), yielded just above average scores from both teachers. These scores confirm that while the setup and initial use are straightforward, supporting Google's goal for accessible VR technology, there are areas needing enhancement. Specific concerns included the device's durability and ergonomic fit, which affected the overall usability ratings. Teachers remarked on the challenges related to accommodating different smartphone models, which suggests that improvements in this area could enhance the SUS score. Nonetheless, the device was deemed sufficiently usable for educational purposes, fitting well within classroom logistics.

USER EXPERIENCE RESULTS

The user experience with Google Cardboard, as shared in the interviews, was positively received, particularly regarding student engagement. The immersive experiences, like virtual field trips, captivated students more effectively than more conventional methods.

Both teachers noted increased student enthusiasm and participation during VR sessions. Although there were some calls for better visual quality and interactivity, the fundamental immersive qualities of Google Cardboard were praised for enhancing educational engagement. The positive impact on keeping student interest suggests beneficial prospects for continued educational use.

