

XR-Enhanced Digital Narratives: Creating Inclusive Learning Archives for Humanities Distance Education in the DX Era

Hiroko Oe

Josai International University, Togane, Japan

Emi Morishita

Josai International University, Togane, Japan

Yasuyuki Yamaoka

The Open University of Japan, Chiba, Japan

Abstract

This paper examines how Extended Reality (XR) technologies can transform inclusive theatrical experiences into valuable digital learning resources for humanities students in distance education environments. By documenting and archiving XR-enhanced theatrical narratives, we create accessible digital learning materials that provide immersive, multi-sensory educational experiences for students with diverse sensory abilities. Our research demonstrates that XR technologies—encompassing Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR)—offer unprecedented opportunities to develop learning resources that engage students through multiple sensory channels. Building on previous work on digital narratives and storytelling [1], the implementation framework we propose serves both as a guide for creating accessible theatrical experiences and as a methodology for transforming these experiences into archived digital learning materials. This approach aligns with digital transformation (DX) initiatives in higher education, particularly in humanities disciplines where embodied learning experiences have traditionally been challenging to deliver in distance education contexts.

Keywords

Accessibility, digital transformation, distance education, digital narratives, extended reality, humanities education, inclusive design, learning archives.