

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

Designing platforms for digital object-based learning

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Over the last decade, object-based learning programs have become a staple of museum collections. These programs encourage and allow patrons to engage with a series of curated objects, offering educational experiences through tactile exploration. Naturally, they are focused on having their audience engage with the physical objects themselves (Chatterjee & Hannan 2016). Applying museological practice and object-based learning in the digital context requires not just presenting digital replica of physical objects, but scaffolding their presentation and platform with purpose, intent, and understanding of the strengths and pitfalls of digital delivery (Beetham & Sharpe 2013; De Kluis, Romp, & Land-Zandstra 2024). As such, digital object-based learning platforms and programs purposefully designed for remote learning and online delivery fill a unique niche in the higher education space and are beginning to come into their own.

At Macquarie University, objectbasedlearning.com (an initiative of the Faculty of Arts and stewarded by its Learning Design and Production team) was relaunched in late 2023 following an extensive redesign, with learning designers, academics, and students now working together to provide new remote learning opportunities and experiences for the classroom. This presentation introduces the audience to the refurbished website, explains the ethos behind its redesign with an eye to evolving learning spaces and remote learning, and explores the site's current and future applications and projects as a case study for designing digital object-based learning.

The site was designed with future utility and outreach at its core, offering flexibility in how it presents and categorizes digital objects, and a site layout which reflects the needs of its target audience – schoolteachers. The NSW Stages 5 and 6 Curriculum informs the website's design, determining how objects are grouped, how users navigate the site, and what information and metadata is prioritized, developed, and displayed. Since its relaunch, the website has been utilized in schools and faculties in NSW to deliver object-based learning experiences and classes. While it is too early to publish on outcomes of the project, early feedback has been positive, and new teaching initiatives have developed around the platform. In 2024, student interns at Macquarie were challenged to develop educational materials, lessons, and workshops which took advantage of the potential of technology-enabled object-based learning. These artefacts were designed to give students a unique object-based learning experience, removing the boundaries of physical distance, financial constraints, and fragility of objects. Moreover, student interns involved in the photogrammetric scanning of objects for the website were themselves enjoying an object-based learning experience, engaging with their materiality and learning how best to present the object in a digital environment.

Keywords: object-based learning, digital objects, remote learning, artefacts, photogrammetry

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