

Planning the Future: Keeping Users Central When Integrating Emerging Technologies

Introduction

There is an ever-expanding range of emerging technologies being introduced to libraries and learning spaces. Planning for data and multimedia visualization spaces, 3D printers and laser cutters in makerspaces, and augmented reality via mobile technologies are just some of the innovations being integrated into today's information environments. Making research-informed decisions for effectively selecting and integrating such new technologies in information settings is a critical yet challenging task. This challenge is often further compounded by gaps around loosely defined user needs. How can librarians, information professionals, and educational experts make evidence-based decisions about the design and integration of new and emerging technologies in their spaces when, due to their newness, there is often a lack up-to-the-minute research on tech trends and user-adoption of such tools? This paper connects research, best practices, and professional experience by presenting well-tested strategies to employ when facing a perceived lack of up-to-date evidence for emerging technologies.

Methodology

This paper addresses the theme of bridging information research and practice from theoretical and practical perspectives by drawing on research and practice-based literature. Informed by a conceptual literature review related to themes of digital convergence and evidence based practice, and drawing on the authors' experiences in planning and designing new digital learning spaces, this paper presents an analysis of approaches and strategies for adoption of user-driven technologies in situations where user needs may be undefined.

Background

Authors will share lessons learned in the planning and delivery of marquee, technology-rich spaces included in a new library and information commons launching in early 2017 at a medium-sized university. Such spaces include innovations via a large-scale visualization wall, makerspace, and active learning classrooms. The authors play leadership roles in establishing technology needs, informing planning strategies, and developing sustainable programming. This presentation will outline the unique challenges and opportunities of such projects, including ways to leverage use-cases in technology planning when user needs and expectations are evolving or undefined.

Digital convergence

Effective planning and delivery of emerging technologies typically involves identifying user needs, then matching qualities and features of technologies to best meet those needs. Related to examples from new library and learning spaces, the authors will discuss strategies for adopting emerging technologies for beneficial outcomes while keeping user needs central. Recognizing forms of digital convergence here becomes key, since many technologies we use have evolved and been synergized in a unifying way (Kaldis, 2010). Understanding this synergy, unification, or merging of technologies can be a critical point of consideration when searching

for evidence to support decision-making, particularly for those who use technology in their own information practice.

Summary

In this paper, the authors aim to bridge research and practice through examples from new library spaces by discussing how emerging technology planning strategies can be understood in information practice. By outlining how identifying convergences and developing use-cases can be effective in planning, the authors describe approaches for mitigating potential research gaps when considering use of emerging technologies within current and future library and information settings.

References

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