When definitions in practice don't always align with the literature: Defining "emerging technology" in academic libraries in order to support learning.

During the course of a larger doctoral study investigating how library staff keep up to date with emerging technology an interesting disconnect emerged. The literature in the computer science field cites specific factors that identify "emerging technologies" irrespective of context. These factors include radical novelty, speed of growth, coherence, potential impact and uncertainty (Rotolo, Hicks & Martin 2015; Adner & Levinthal 2002). In the field of librarianship and information management definitions of "emerging technologies" are more often context specific and identified more generally as "something we haven't done before" or using a technology in a new way (Cervone 2013). Participants in the study to be reported in this paper have an even more pragmatic approach, often referring to emerging technologies in terms of technologies new to themselves or their library, or in terms of how long the technology has been available to them.

The purpose of this paper is thus to explore the potential disconnect between definitions in the literature of emerging technology, and how librarians, working in academic libraries understand emerging technologies. The understanding generated by this exploration will better enable professionals and their employers to identify, support and encourage continuous professional learning about emerging technologies, important for professional librarians who work in an environment of constantly changing technologies.

The exploration of this topic occurs within the context of a broader, longitudinal action research study exploring current learning practices of librarians and their relationship with emerging technologies. Conducted in conjunction with librarians in three university libraries, participants and the researcher explore learning about technology through a series of focus groups and ongoing diaries which record participant learning experiences about technology as the learning is occurring.

In seeking to identify current practice in terms of what prompted learning episodes, how learning is done, the methods used to learn, and the practice architectures impacting on the learning, interesting findings about perceptions of emerging technologies emerged. Early analysis reveals that current practice is highly reactive with most learning occurring as a direct result of external influences such as a question from academic users or prompts from colleagues. Thus definitions of "emerging technology" are based on usefulness or relevance to work or the understanding of emerging technologies as those shifting from "just for specialists" to "common knowledge" technologies. This highly contextualised understanding highlights that there is not even agreement at a particular site as to the nature of an emerging technology.

The contextual nature of librarians' understanding of the term "emerging technologies" raises many questions about how librarians and others learn about technology in their ongoing practice. Understanding the library contextual view and practitioners' perceptions of emerging technologies will enable librarians and their employers to better identify understandings of technology that enable and constrain library staff undertaking ongoing learning about "emerging technologies".

References

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