Chapter XXII

Integral ePortfolio Interoperability with the IMS ePortfolio Specification

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ABSTRACT

Interoperability that enables the distribution and migration of portfolios as integral wholes between venues requires the ability to describe, encode, and transmit the relationships between assets within the portfolio, and its information architecture and visual design in a format that both human and computer audiences can understand. This chapter will discern interoperability challenges fundamental to ePortfolios. It will explain how fundamental issues begin to be addressed by the IMS ePortfolio specification and will consider the challenges that lie ahead as adoption of this specification grows.

INTRODUCTION

Electronic portfolios are integrative in every sense. Rhetorically, they provide an integrated representation of what a person knows, believes, values, and can accomplish. Pedagogically, they integrate diverse learning experiences and sources of evidence. Technically, supporting their development and use requires integrating numerous systems and applications. Because of this integrative nature, an exhaustive account of the interoperability issues that confront the developers of ePortfolio technology would be impossible. This chapter, therefore, will discern interoperability challenges fundamental to ePortfolios. It will explain how these fundamental issues begin to be addressed by the IMS ePortfolio specification and will consider the challenges that lie ahead as adoption of this specification grows.
PORTFOLIO AS DIGITAL COMPOSITION WITHIN A VENUE

Focusing on fundamental interoperability issues for ePortfolio software requires identifying some defining features of an ePortfolio. Most definitions maintain that an “ePortfolio” contains a collection of evidence about the learning and performance of an individual, group, or organization. Some definitions go on to imply that an electronic portfolio is a software application in and through which this collection is developed and used. However, a genuine portfolio is conceptually distinct from, if technically related to, the software through which it is composed and read.

More than a collection of information about learning, an electronic portfolio is a digital composition within a rhetorical venue. As a composition, a portfolio is a message about what a person or group has learned and can do, composed by an author and delivered to an audience. Not just a repository of learning-related information, it is an argument that explains past learning and performance, and predicts future capabilities. As a digital composition, an ePortfolio uses the affordances of the digital, networked medium to make this argument; therefore, the hypertextual arrangement and the visual design of the portfolio are important to its success.

Because a portfolio is a message within a rhetorical situation, a venue must be available through which portfolio authors and audiences can connect. Although this portfolio venue is not the portfolio itself, it is essential as the “place” where the portfolio is read. A primary advantage of electronic media for portfolios is the availability of powerful venues, such as the Web. As part of a venue, ePortfolio software can provide important services to portfolio authors and audiences. Venues can enable the provision of evidence for use in the portfolio, guidance during portfolio composition, feedback on the results, tools for analysis, and connections to new audiences. Within a given venue, a portfolio author is likely to have multiple portfolios, composed using overlapping collections of assets, targeted at multiple and overlapping audiences.

Portfolio learning occurs within this venue through the process of composition. The portfolio does not simply record past and inform future learning. The composition of the portfolio itself is a central learning activity. Rather than a collection of reflections on other learning experience or learning in general, the portfolio is composed through reflection on the assets, or artifacts, collected for use within the portfolio. Through this reflective process, the portfolio author articulates the relationships between assets to convey what they mean. In reflectively composing the portfolio, the author makes meaning through relating different assets within the context of a larger narrative about his or her learning. This making of meaning through synthesizing a network of relationships is at the heart of portfolio practice.

When portfolio information is moved between venues, it must travel with sufficient structure to represent information within the context of this synthesized whole. It must maintain its integrity as portfolio information, rather than simply reverting to atomized data that happened to have been part of a portfolio. While assets like goals, samples of work, and competencies may be important components of a portfolio, they cease to be portfolio information if they lose their place within the network of relationships that join them into an integrative portfolio argument.

Portfolio venues can powerfully shape both the ways in which portfolios can be arranged and delivered to audiences and the range of options readers have when experiencing portfolios. Much of this capacity is dependent on