Chapter X

Values-Based Design of Learning Portals as New Academic Spaces

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ABSTRACT

Many guidelines for portal design tend to focus on the technical aspects of a portal or a network. However, as we continue to define portals as gateways for learning, we need to consider issues related to the social and cultural context in which portals are used. In this chapter we examine learning portals from both the instructors’ and the learners’ perspectives by synthesizing existing research and proposing a framework for quality guidelines.

The Collaborative of Online Higher Education Research (COHERE), consisting of eight large research-intensive universities in Canada involved in Internet-based learning, was created to enhance learning and teaching through technology and to move toward a stronger culture of professional collaboration and scholarship in our educational practices (Carey, 2000). Based on our experience with COHERE, we have developed tools for the formative and summative evaluations of learning portals generally. These tools include usability studies, questionnaires and focus groups.
According to Boettcher and Strauss (2000), the portal concept dates from the advent of Internet Service Providers (ISPs) like Prodigy and AOL and, later, search engines and interfaces such as Yahoo! and Netscape. Since then the concept of information portals has expanded to include consumer portals, community portals, corporate portals and vertical portals, all of which provide a more customized information experience (Looney & Lyman, 2000). That is, the interaction of the user with the portal’s information offerings can be personalized based on previous and current user choices which, taken together, form a dynamic user profile. This attribute of portals, among many others, exemplifies the potential for portals as learning environments.

Portals have been described as “a single integrated point for useful and comprehensive access” (Eisler, 2001); “a new umbrella Webpage array…that encompasses many or all of the current homepages for departments and individuals” (Batson, 2000); “an internal consolidation of online services to be provided via the Web for faculty, staff and students” (University of Montana); “an integrated platform that lets people interact in real-time with a company’s systems and information” (Copeland, 2001); “(having) the capability to aggregate content and integrate workflow from multiple sources, access role-based analytical information and facilitate transaction” (Norman, 1999); a hub (Boettcher & Strauss, 2000) and as a user-created, one-stop Webpage of collected information (Looney & Lyman, 2000).

These are functional definitions of a portal as an integrated system providing a gateway to organized data. They hold in common a set of functions and outcomes that enhance and democratize access to information. However, a learning portal may go beyond the information management function to create new learning communities and academic spaces that enable profoundly redefined relationships among teachers, learners, and the institution and its external communities. Portals provide important mechanisms for reaching out to new populations of learners and engaging them in new ways to facilitate learning and development. Beyond serving as a gateway and an organizer, a portal can provide access to a broader range of contemporary information and learning resources (experts, teachers, researchers, mentors), encourage enriched interaction with those resources and with other learners, wherever they may be in the world, and support new models of teaching, learning and research.

In this chapter we attempt to describe these new spaces and relationships in a context of cultural change in higher education. We discuss the common attributes of a well-designed portal and, using evaluation criteria developed by research in human-computer interfaces and related fields, we suggest components of a framework for portal design and evaluation that empower faculty and learners to be both participatory designers and critical users of portals. Finally we ask, “What
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