

Finding a Metaphor for Collecting and Disseminating Distributed NSDL Content and Communications

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ABSTRACT

The National Science Digital Library (NSDL) dramatically broadens the information about STEM resources that it can accept and make available to its users with the introduction of the NSDL Data Repository (NDR) architecture. [1]

To transform information into knowledge NSDL's community of collaborators who are engaged in using, building, and promoting the digital library must see themselves as contributors to, and beneficiaries of a rich exchange of information among diverse stakeholders reflected in inclusive NSDL community-created policies. [2] Flexible content of many varieties that is small, modular, and adaptable is favored to promote this type of distributed reusable and multilayered information in an educational digital library such as NSDL.

In this poster we trace the process used to determine a metaphor for the NSDL On Ramp (ONR) content and communications system [3] by exhibiting iterative designs for a user interface derived from ONR User Survey results. On Ramp is a platform for managing workflow, and creating, editing, distributing and storing content from multiple users and groups in a variety of formats.

THE ON RAMP USER SURVEY

Understanding and adoption of On Ramp by users is a key to finding ways to grow collaborative knowledge. NSDL Pathway projects represent significant NSDL audiences and provide focused views of selected NSDL resources. Pathway projects work with large communities of learners, and act as reference librarians for their users. A survey developed by the Human Computer Interaction Lab at Cornell was designed to discover how NSDL Pathway Projects managed content within their distributed systems, and to engage them in the design of ONR.

The On Ramp User Survey provided data for the design of the ONR prototype. The survey also gauged the diversity of need, content, and experience of the initial user group.

1.1 Survey Description

Potential respondents were invited to participate from a pool of candidates who attended a presentation about On Ramp, at

the NSDL's Pathway Projects meeting in August 2005. Those who indicated an interest were subsequently contacted via email. A total of 20 participants were solicited, 9 completed the survey. Some survey questions were posed in an NSDL Annual Meeting Workshop (Nov. 2005) interactive blog. Responses were added to the analysis of the original respondents' information.

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1.2 Results Summary

Requirements for basic functionality such as being able to edit distributed content in multiple media and file formats were expressed in results.

Further, users commented that overall usability, navigation and transparency were essential elements, and that the final product would have to increase efficiency if they were to adopt its use. Though users described inefficient means of handling distributed content they were still likely to retreat to any of their already familiar systems rather than replace them with something new and even more unwieldy.

Perhaps the most interesting finding of the survey came from responses to a request for descriptions of the ideal workspace configuration between content managers and far-flung content developers. It was anticipated that physical space concepts might reflect how they hoped to "feel," as if they were present, when working in the virtual world. [3]

When respondents were asked to reflect on a type of metaphor that might be useful for helping users understand On Ramp, most responses suggested a publishing metaphor. This conclusion is also reflected in responses about the intuitiveness of some of ONR terminology used in the prototype design. Easily understood terms were related to publishing terminology (e.g., publish, released work, contributor). Those terms least understood were

least related to a publishing metaphor (e.g., super formats, post processing).

2. REFERENCES

[1] Lagoze C., Krafft D., Payette S., Jesuroga S., "What is a Digital Library Anymore, Anyway? Beyond Search and Access in the NSDL." *D-Lib Magazine*, Nov. 2005.

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[3] Schneiderman, B., *Leonardo's Laptop*. The MIT Press. Cambridge, MA. 2003. P 54-55. 76-108