

Poster: Contribution and Collaboration Strategies for the National Science Digital Library (nsdl.org): Investigating Technological Solutions to Facilitate Social Evolution of a Collaborative Infrastructure

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Abstract

The NSDL community consists of large, discipline diverse, and decentralized user groups made up of collaborator communities who create, aggregate, and contribute digital resources to the NSDL. NSDL Core Integration provides "wholesale" services to NSDL collaborator communities who may "retail" those services through their own portals, perhaps packaged with additional content selected to meet their specialized users' needs. NSDL "wholesale" services will support rich representations of complex data relationships. NSDL will distribute access to aggregations and annotations stored in the NSDL metadata repository that have been harvested, normalized (based on the scaleable library production model in use at nsdl.org), and exposed for re-harvest. "Retailers" may use the Open Archives Initiative (OAI) for Metadata Harvesting Protocol to harvest these structured data relationships and make them available for use in other library services.

Investigations into establishing an environment where end users can be contributors to encourage the development of communities of practice and knowledge sharing is the focus of the NSDL Core Integration teams' current development cycle. A key factor in "wholesaling information to retailers" is to offer core services that allow other services, agents, and users the opportunity to

build on a broad base of information, and to expose characterizations of resources and discipline-specific aggregations to portals and end users. The usefulness of a resource for an individual user will be determined by a number of factors; among them might be access to a collaborative evaluation and selection process both as a consumer and a contributor.

The NSDL Core Integration technical team's prototype annotation, exhibits and news services are all based on a Simple Metadata Based Services (SIMBAS) model designed to provide access to several kinds of relationship links. An experimental SIMBAS service now in early stages of development will provide rapid availability of this functionality. This model may later be subsumed or augmented by more advanced collaborative service models developed through work on "retail" portals.

The NSDL Exhibits service offers a customized view of the library resources by providing timely and/or topically related resources for educational or display purposes. The NSDL prototype Exhibits Service will encourage distributed development and contribution of several types of exhibits based on the following content models:

1. "Current Awareness," News, New and Featured Collections, Featured Services
2. Content assembly associated with one or more collections and resources
3. Exhibits directory service