Integrating Digital Libraries and Traditional Libraries: Collaborating for Sustainability

Charles R. Ward, Ronald Vetter, Daniel Pfohl
University of North Carolina at Wilmington
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iLumina Digital Library
- One of 356 collections of the National Science Digital Library (NSDL)
- Features 1600 digital learning objects for undergraduate education in science and mathematics
- Funded by the National Science Foundation Digital Library Initiative Phase II (NSF DLI-II)
- Created by scientists using IMS-compliant metadata in XML

Sustainability Issues
- 90-95% of NSDL projects are university-based
- Libraries’ traditional roles are adaptable to the digital environment
- Innovative use of technology
- Standards of bibliographic description
- Philosophy of open access

Integration Issues
- What is gained by integrating iLumina into a traditional library catalog?
- Wider dissemination
- Stable environment
- What is lost?
- Contribution form for new submissions not integrated into catalog
- Robust search form with multiple pull-down menus

Librarians’ Roles
- Provide expertise in bibliographic standards
- Analyze iLumina record fields
- Create metadata crosswalks
- Harvest the digital library’s metadata
- Convert metadata to MARC format
- Add records to local library catalog and WorldCat

Metadata Harvesting

Metadata: IMS to MARC

Cataloging Challenges
- iLumina record fields vs. MARC fields
  - Fields not in local system load table
  - Fields not indexed in local system
  - Lack of label for 5xx fields in MARC
- Limiting searches to iLumina
  - Advanced keyword search
  - Location scoping
- Determining publisher, distributor

iLumina’s Future
- Integration of submission, review, & cataloging processes within library
- Determination of usage trends by monitoring library holdings added to iLumina records in WorldCat
- Implementation of plans to increase size of the collection
- Creation of model for sustainability through documentation of the integration process

Collaboration & Teamwork
- Teamwork beneficial to scientists and librarians
- Scientists learn about record structure and bibliographic standards and conventions
- Librarians learn about NSF environment, grant writing, new resources for science instruction, and new XML/OAI applications
- Both groups explore ambiguous meanings of terminology: “library,” “cataloging,” “metadata”

Implications
- Sustainability is an important challenge for digital collections
- Integrating digital collections into an established university library catalog is a feasible model
- Non-librarians will be increasingly involved in creating digital collections
- Librarians can provide critical expertise in bibliographic standards and conventions