Choosing a metadata standard for your digital project

DESCRIPTIVE METADATA

Dublin Core

Type of collection: Groups of materials whose organization is not a significant access point to the collection. Generally these materials will not be organized hierarchically. The collection may be in any format, or a mixture of formats. Collections for which item-level description is planned and none of the other metadata needs described in this document apply.

Appropriate metadata standard: Dublin Core Metadata Element Set 1.1

Example collection: Worthington Memory <http://www.worthingtonmemory.org/>

Resources to consult: Dublin Core Metadata Element Set, Version 1.1: Reference Description <http://www.dublincore.org/documents/dces/>; Dublin Core Usage Guide <http://www.dublincore.org/documents/usageguide/>; DCMI Metadata Terms <http://www.dublincore.org/documents/dcmi-terms/>

Usage notes: Simple Dublin Core, consisting of only the 15 core elements, can be used, although much desired robustness (e.g., distinguishing between roles of the creator of a resource, specifying the name of the controlled vocabulary from which a value is selected) is not possible. Qualified Dublin Core, using the DCMI "Other Elements and Element Refinements" as specified in <http://www.dublincore.org/documents/dcmi-terms/#H3> can be used to slightly increase robustness, although the refinements available may not be appropriate for many uses. Creating local qualifiers for Dublin Core elements is another option, however this practice reduces the interoperability of the metadata created. The emerging Dublin Core Library Application Profile <http://dublincore.org/documents/2002/04/16/library-application-profile/index.shtml>, still in Working Draft status, attempts to address these issues.

EAD

Type of collection: Archivally-processed groups of materials whose organization and/or provenance is significant. These materials will generally be hierarchically arranged natural groupings assembled by a collector or creator (e.g., the papers or correspondence of a certain individual) rather than less-tightly related groups of materials assembled by a holding institution. A Finding Aid or inventory may or may not already exist. Materials will often be unpublished. Description at the collection level is necessary, lower levels of description may or may not be appropriate. Materials described may or may not be available in digital form.

Appropriate metadata standard: EAD 2002

Example collection: Finding Aids in the Online Archive of California <http://www.oac.cdlib.org/>

Resources to consult: Official EAD Version 2002 Web Site <http://www.loc.gov/ead/>; EAD Help Pages, especially the EAD 2002 Cookbook <http://www.iath.virginia.edu/ead/>

Usage notes: EAD 2002 can be used to describe the collection at the item, folder-only, or collection-only level. One EAD document should be created for each collection.

TEI
Type of collection: Text collections intended for full-text searching in an online environment. Full text may or may not be intended to be used together with page images of the original document.
Appropriate metadata standard: TEI P4
Example collection: Indiana University, Wright American Fiction, 1851-1875 <http://www.letrs.indiana.edu/web/w/wright2/>
Resources to consult: TEI Text Encoding in Libraries Guidelines for Best Encoding Practices <http://www.indiana.edu/~letrs/tei/>; TEI Guidelines <http://www.tei-c.org/Guidelines2/index.htm/>
Usage notes: Choose an Encoding Level as described in the TEI Text Encoding in Libraries Guidelines for Best Encoding Practices. Bibliographic information for resource discovery is encoded in the TEI Header. The entire full text of the resource is marked up structurally in the bulk of the TEI document, and this markup is used for powerful full-text searching.

MODS
Type of collection: Materials with existing item-level MARC cataloging
Appropriate metadata standard: MODS 3.0
Example collection: University of Chicago Chopin Early Editions Project <http://chopin.lib.uchicago.edu/>
Resources to consult: MODS official Web site <http://www.loc.gov/standards/mods/>; MODS User Guidelines <http://www.loc.gov/standards/mods/v3/mods-userguide.html>
Usage notes: Items for which MARC cataloging already exists can be transformed into MODS records for use in digital library applications.

VRA Core
Type of collection: Art images whose users require in-depth indexing and retrieval using expert terms for genre, culture, style, period, etc.
Appropriate metadata standard: VRA Core Categories 3.0
Example collection: Cleveland Museum of Art Collections <http://www.clevelandart.org/Explore/> (From each item view, click "More Information" to see VRA image metadata.)
Resources to consult: VRA Core version 3 home page <http://www.vraweb.org/vracore3.htm>; CC:DA Task Force on VRA Core Categories Summary Report <http://www.libraries.psu.edu/tas/jca/ccda/docs/tf-vra1.pdf>
Usage notes: VRA Core is more robust than Dublin Core for describing art images and metadata in this format is consequently more powerful but more expensive to create.

VRA Core contains both "work" records describing an actual art object, and "image" records describing representations of views of that object (slides, digital images, etc.) held by an institution. Best practice in creating VRA Core records is to populate fields using appropriate controlled vocabularies such as ULAN and TGM, and the rules described in Cataloging Cultural Objects <http://www.vraweb.org/CCOweb/>.

GEM

Type of collection: Learning objects that serve education communities (pre-school, K-12, higher education, vocational and technical training, and lifelong learning). These materials require classification criteria special to the education community, such as education level of the target audience, pedagogical methodology, and standards alignment.

Appropriate metadata standard: Dublin Core Metadata Element Set 1.1 as extended in GEM profile

Example collection: NASA Space Science Education Resource Directory <http://teachspacescience.org/> (From each item view, click "More Information" to see GEM metadata.)

Resources to consult: GEM 2.0 Elements and Semantics <http://www.geminfo.org/Workbench/GEM2_elements.html>; Indiana Humanities Council Smart Desktop metadata profile < http://www.ihc4u.org/sd_metadata.htm>.

Usage notes: Both GEM metadata element set and SDI metadata profile are based on Qualified Dublin Core. GEM element set and profile includes 7 additional elements with detailed qualifiers. Local institute can create qualifiers or metadata elements to meet special request of the local audience and collection, although this practice reduces the interoperability of the metadata created. However, dropping elements from the GEM element set is usually less a problem. One-on-one assistance for those who want to create GEM metadata is available at <http://www.geminfo.org/decision.html>; emerging SDI Application Profile < http://www.ihc4u.org/sd_metadata.htm>, still in working draft status, suggests best practices with respect to the usage of GEM element set.

OTHER TYPES OF METADATA

METS <http://www.loc.gov/standards/mets/>. METS is an XML schema allowing users to "wrap" existing descriptive metadata in any format with structural, technical, administrative, preservation, and meta-metadata to create a single metadata object for a resource. METS provides extension schemas with recommended technical metadata for still images, audio, and video.

MIX <http://www.loc.gov/standards/mix/>. MIX is an XML schema implementation of the NISO draft standard Z39.87-2002, *Data Dictionary – Technical Metadata for Digital Still Images*.

PREMIS <http://www.oclc.org/research/projects/pmwg/>. PREMIS is not a metadata element set, rather it is an initiative to develop a set of core elements for preservation metadata for the purpose of long-term preservation of digital objects. Some preliminary recommendations of this group which include some metadata element proposals may be found in the report *Preservation Metadata and the OAIS Information Model: A Metadata Framework to Support the Preservation of Digital Objects* <http://www.oclc.org/research/projects/pmwg/pm_framework.pdf>.

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