How to Create a Descriptive Metadata Plan

This workflow provides steps for writing your own descriptive metadata plan. A descriptive metadata plan is a document that specifies: 1) the metadata fields used to describe your collection, 2) the terms and vocabularies that will be used to describe items within those fields, 3) the standards used to identify those terms, and 4) who is responsible both for creating the descriptive metadata and for conducting quality control of the metadata.

Creating consistent metadata improves access to documents (photos, books, videos, etc.) by standardizing the creation and application of keywords and other descriptive terms at the item level. Metadata plans help you access and make sense of digital files more effectively by ensuring that key features are described according to consistent rules. This consistency helps users understand where to find specific pieces of information in an item record and what terms to use when searching for specific digital files. In addition, consistent descriptive metadata allows one to accurately sort and retrieve digital files when the metadata exists within a database or online system. Metadata plans are often useful for large projects, particularly if many people are involved in metadata creation.

Follow the steps below as a guide to create your institution’s descriptive metadata plan.

1. Decide what aspects of an item to describe

This step involves identifying what metadata fields (e.g., title, creator, format) you will want to create for each item. Collectively, a set of metadata fields used to describe documents and items is called a metadata schema (for example, Dublin Core metadata schema). These fields may be part of a schema you currently use or, if your metadata creation process has never been formalized, the fields you define for this step may form a prototype for future collections. Regardless, by the end of this process, you will have a schema selected and a set of requirements defining those fields that must be completed for each item.
a. **Review your current metadata and adapt as needed**
   Review descriptions already created, including descriptions of physical collections, and any rules that have been consistently used. After gathering all relevant documentation and examples, decide what fields are most relevant for describing your collections.

b. **Identify metadata unique to your collections**
   List all types of digital objects encompassed by your collections and how you want to provide access to them. You may find that some documents have unique requirements. For example, a collection of oral histories with full transcripts may benefit from an added field to enable full-text searching of the transcripts. Figure out where in your schema to accommodate this information or if you will need to modify your schema.

c. **List all the fields in your schema and define required metadata fields**
   Once you have made any modifications to the basic metadata schema used by you or your institution, state which fields you are required to complete for each digital object, which fields should be completed only in case you have the information and which fields are optional (for example, title, creator, date of creation, description, etc.).

2. **Decide how metadata will be created and who will be responsible for creating it**
   This step involves creating rules for each metadata field and how to include those rules into your project workflow.

a. **Decide what information belongs in each field**
   If you are using a standardized schema, like **Dublin Core**, much of this may be defined by the organization responsible for maintaining the schema. Even so, there are likely to be gray areas. If you use a schema with primary and secondary creators (or creators and contributors), where do, for instance, illustrators of books or interviewers fit? It is important to clarify where information should go ahead of time to ensure consistency. For some metadata fields you also want to define where to find relevant information. If you are digitizing a collection of photographs that have been inventoried, you may want to use the inventory to create your titles to help maintain the connection between the digitized photograph and the physical original.
b. **Identify any relevant vocabularies for specific fields**
   Decide which metadata fields are subject to a controlled set of terms and names. For example, you may decide that the creator field should be completed from a list of names you have approved to assure that a person that has multiple names is identified uniformly in this field. You may also want to consider using an externally created vocabulary, such as the *Thesaurus for Graphic Materials* (images, paintings, etc.), or the *Thesaurus for Library and Archival Materials* (great for describing multiple media types).

c. **Decide how to format each field**
   Create a set of rules describing how to enter information in each field. For example, decide whether names in a creator field will be first name - last name or vice versa. This decision will impact how names are sorted.

d. **Decide when will metadata be created in the workflow of a project**
   You will need to create some metadata as you digitize. Identifying information such as identifiers and file names (if your file names are not the same as your identifiers) should be applied immediately to ensure metadata can always be linked to the objects they describe. Some metadata may be created later in the process depending upon the expertise of the person performing digitization. Depending upon the goals of your project, descriptions and subject fields may be expanded by a volunteer or staff member with more knowledge. For examples of where metadata creation can fit into a workflow, look for our SHN resource *Audio Cassette Digitization Workflow* and *VHS Digitization Workflow*.

e. **Decide who is responsible for metadata creation and quality control**
   Following a quality control (QC) process ensures metadata is checked for consistency and accuracy. QC consists of steps built into the digitization workflow where metadata is checked by a project manager or other staff involved in the project (for more information on QC look for our SHN resource *Guide to Quality Control and Quality Checklists*). For example, the individual responsible for capturing a digital image may be responsible for drafting the initial metadata. An employee with more knowledge of the institution’s collections and practices should review the metadata to ensure that it follows the standards for the project and add metadata if necessary. If the digital materials are going to be posted online through a content management system (CMS), there may be a final layer of approval before the metadata and digital objects are added to the CMS.
3. Create a data dictionary

After you have identified all the metadata fields you will use and how to create content within those fields, document these decisions in a data dictionary. A data dictionary is a chart listing a set of metadata fields and the rules for completing them. Data dictionaries help ensure that metadata is consistent, which improves the ability of users to search for materials according to different elements (e.g., title, creator). One useful way to format a data dictionary is to list the field names in the left-hand column, any definitions and rules in the middle column, and examples in the right-hand column.

<table>
<thead>
<tr>
<th>Title</th>
<th>Obtain title from title page. Omit articles appearing at the beginning of the title. Capitalize only the proper nouns and the first word of the title.</th>
<th>Great expectations</th>
</tr>
</thead>
</table>

You may also want to include technical information about the field, including whether a field is required and whether it will be indexed, searchable, or viewable to users (assuming the metadata is published online). Any applicable vocabularies or authorities should also be listed. Once you have your data dictionary in place along with your workflow for metadata creation and quality control, you will want to revisit these after an initial batch of metadata has been created to revise as needed. Taking these steps should help ensure that the metadata created for your project is consistent and provides users with information needed for access.

Related Resources

Examples of data dictionaries:
To see a wide variety of data dictionaries, visit the University of Washington Library Metadata Services website to see the challenges presented by different projects. http://www.lib.washington.edu/msd/pubcat/mig/datadicts

Other sources: