Metadata Standards DC, METS, MODES, EAD

Dr. Nanaji Shewale

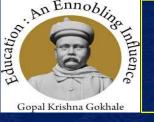
Librarian

Gokhale Institute of Politics and Economics (GIPE)

B M C C Rd, Pune (India)

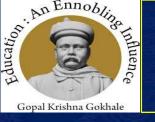
nanamani@gmail.com

https://dspace.gipe.ac.in; http://gipe.ac.in



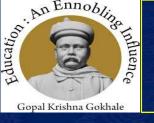
Metadata Standards

- Metadata is structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource.
- Metadata is often called data about data or information about information.
- Metadata is key to ensuring that resources will survive and continue to be accessible into the future.



Types of Metadata

- Descriptive metadata describes a resource for purposes such as discovery and identification. It can include elements such as title, abstract, author, and keywords.
- Structural metadata indicates how compound objects are put together, for example, how pages are ordered to form chapters.
- Administrative metadata provides information to help manage a resource, such as when and how it was created, file type and other technical information, and who can access it.
 - Rights management metadata, which deals with intellectual property rights,
 - Preservation metadata, which contains information needed to archive and preserve a resource



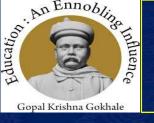
What Does Metadata Do?

- Resource Discovery
 - Allowing resources to be found by relevant criteria;
 - Identifying resources;
 - Bringing similar resources together;
 - Distinguishing dissimilar resources; and
 - Giving location information
- Organizing Electronic Resources
- Interoperability
- Digital Identification
- Archiving and Preservation



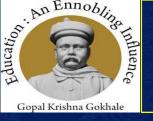
Metadata Schemes and Element Sets

- Metadata schemes (also called schema) are sets of metadata elements designed for a specific purpose, such as describing a particular type of information resource.
 - Dublin Core
 - The Text Encoding Initiative (TEI)
 - Metadata Encoding and Transmission Standard (METS)
 - Metadata Object Description Schema (MODS)
 - The Encoded Archival Description (EAD)
 - Learning Object Metadata
 - E-Commerce and ONIX
 - Visual Objects CDWA and VRA
 - MPEG Multimedia Metadata



Dublin Core

- Discussions at a 1995 workshop sponsored by OCLC and the National Center for Supercomputing Applications (NCSA).
- As the workshop was held in Dublin, Ohio, the element set was named the Dublin Core.
- Dublin Core and related specifications is managed by the Dublin Core Metadata Initiative (DCMI).
- Original objective to define a set of elements that could be used by authors to describe their own Web resources.
- Goal was to define a few elements and some simple rules that could be applied by noncatalogers.
- Original 13 core elements were later increased to 15



Dublin Core Elements



Dublin Core Elements

Rights Contributor Creator

Subject Coverage Title

Publisher Identifier Description

Type Date Source

Relation Format Language



Dublin Core Example

```
Title="Metadata Demystified"
```

Creator="Brand, Amy"

Creator="Daly, Frank"

Creator="Meyers, Barbara"

Subject="metadata"

Description="Presents an overview of metadata conventions in publishing."

Publisher="NISO Press"

Publisher="The Sheridan Press"

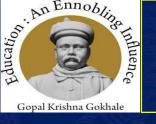
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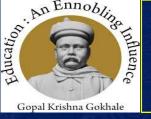
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Language="en"



Metadata Encoding and Transmission Standard (METS)

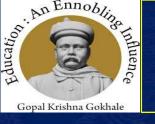
- Metadata standard for encoding Descriptive, Administrative, and Structural metadata regarding objects within a Digital Library.
- Expressed using the XML schema language of the World Wide Web Consortium (W3C).
- The standard is maintained as part of the MARC standards of the Library of Congress
- It is being developed as an initiative of the Digital Library Federation (DLF).
- The 7 sections of a METS document
 - METS header, Descriptive Metadata, Administrative Metadata,
 - File Section, Structural Map, Structural Links, Behavioral Section



METS Sections

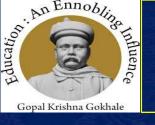
- 1. Header section. This section can contain condensed descriptive metadata about the resource. <metsHdr/>
- 2. Descriptive Metadata section. This section contains metadata that describes the resource itself, such as the title and author. <dmdSec/>
- 3. Administrative Metadata section. This section contains four types of administrative metadata: technical metadata, intellectual property rights metadata, source metadata, and digital provenance metadata. amdSec/>
- 4. File Section. This section contains a list of the files that make up the electronic version of the resource. <fileSec/>
- 5. Structural Map section. This section contains a description of the hierarchical organization of the source document. <structMap/>
- 6. Structural Link section. This section describes links within the structural map. structLink
- 7. Behavior Section. This section associates executable behaviors with the resource content.

 behaviorec/>



Metadata Object Description Schema (MODS)

- Library of Congress developed MODS to capture more data than Dublin Core and be less complex and more user-friendly than MARC format.
- MODS was first announced in June 2002.
- A descriptive metadata schema that is a derivative of MARC21 and intended to either carry selected data from existing MARC21 records or enable the creation of original resource description records.
- Includes a subset of MARC fields and uses language based tags rather than the numeric ones used in MARC 21 records.
- In some cases, it regroups elements from the MARC 21 bibliographic format.
- Like METS, MODS is expressed using the XML schema language.



Encoded Archival Description (EAD)

- A nonproprietary encoding standard for machine-readable finding aids such as inventories, registers, indexes, and other documents created by archives, libraries, museums, and manuscript repositories to support the use of their holdings LOC
- Finding aids are used not only to store metadata, but to help find resources.

Courtesy: http://pages.cs.wisc.edu/~caden/projects/Choosing%20a%20Metadata%20Type--Partial%20Draft.pdf



Further Reading

- https://www.lter.uaf.edu/metadata_files/UnderstandingMetadata.pdf
- http://pages.cs.wisc.edu/~caden/projects/Choosing%20a%20Metadata%2 OType--Partial%20Draft.pdf