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Descriptive Cataloging 101: Metadata 101

Final project for INFO 506.

Metadata 101

Useful Resources

Classification Systems

Metadata Standards

Free or Low Cost Library Management Systems (LMS

Metadata 101

Metadata/Resource Description

What are metadata?

Metadata are information that describes both physical and digital resources, such as books, paintings, song recordings, manuscripts, and more.

Why are they important?

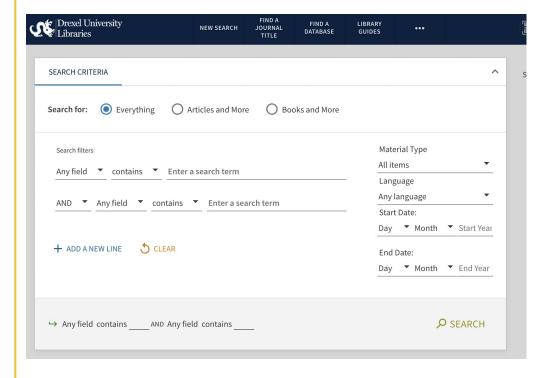
In order to conduct a search for items, you must engage with whatever metadata or resource descriptions are available in a database in order to find them. Without the existence these descriptions, it would be extremely difficult to find all kinds of resources. Remember that information is only useful when we're able to find, access, and use it.

Metadata at Work

Metadata is Everywhere

Every time that a user initiates a search within a database, they have to utilize metadata whether they know what they're looking for not.

An item's material type, title, year of release, language, and genre are all examples of metadata that help to narrow down a search to find accurate and relevant results. The two images below, from Drexel Libraries, show how a search can be manipulated depending on the metadata that is selected or omitted.



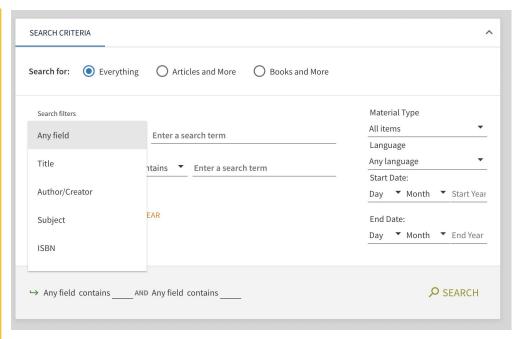


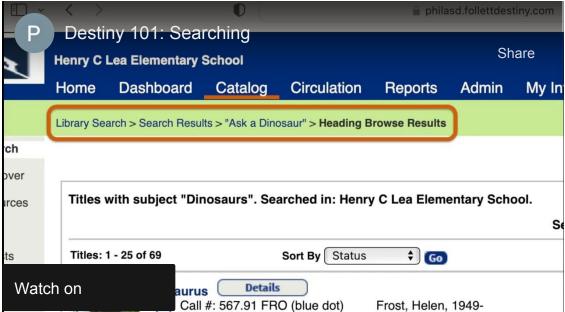
Email Me

Search

About the Librarian

Alisha Davis is currently studying for her Masters in Library and Information Science at Drexel University. She is interning with the University of Pennsylvania's Van Pelt Library, as well as, the International Center for Multigenerational Legacies of Trauma specifically focusing on descriptive cataloging, metadata, and data stewardship. She holds a BA in International Relations, a MS in Secondary Education, and nine years of 7-12 classroom teaching experience. When she's not focusing on her academic work, Alisha enjoys spending time with her two cats,





In the YouTube video above, a member of the Penn Libraries Community Engagement team demonstrates how to use metadata to

WorldCat

Autho

ISSN

OCLC Number

Oliver and Oscar (pictured above), painting, and making artisanal soap.

Useful Resources

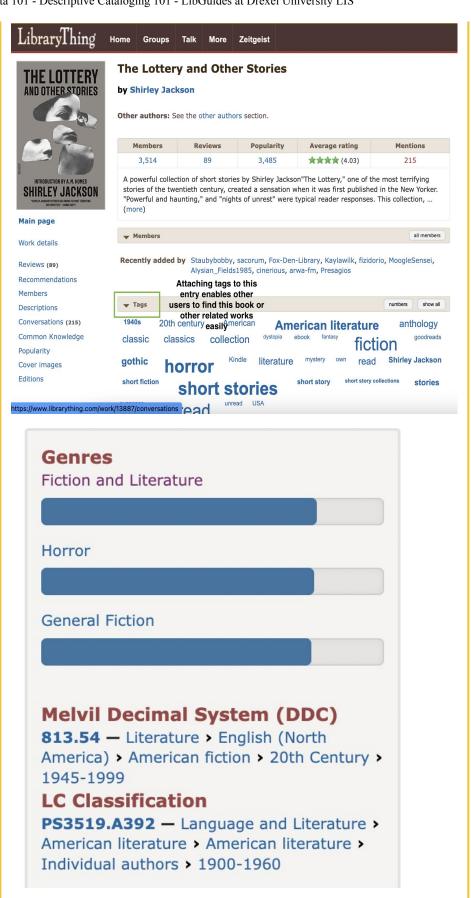
search a school library catalog for materials.

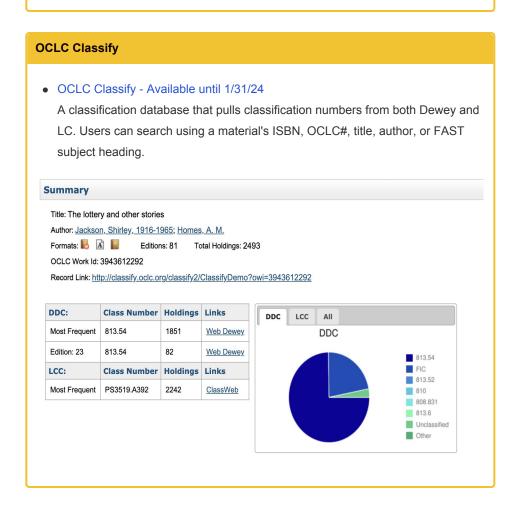
Library Thing

Library Thing:

A free online service that helps users to catalog their books virtually. It provides open access to the Library of Congress catalog, Amazon, and thousands of libraries globally. Books can be classified using LoC classification, Dewey, or alternative systems.

+





Classification Systems

What is Classification?

A classification system is a resource that provides an organizational structure for physical and digital materials within library, archives, or museum collections. Generally, the two most popular classification systems are OCLC's Dewey Decimal system and the Library of Congress' system.

Dewey, which is generally used by public and K-12 libraries, organizes materials broadly in order to be accessible to the average library patron.

The Library of Congress system is used in academic, national, and special libraries due to the level of detail that their collections materials require. LC is also less hierarchical than the DDC.

• Classification Guidance for Children's Materials

This resource shows the differences in how children's materials are classified by both the DDC and LCC.

The Dewey Decimal Classification System (DDC)

Dewey Decimal Classification

Developed and published by Melvin Dewey in 1876, the Dewey Decimal Classification System is a content organization system that adapts with changes in how society interprets information. It's currently published by OCLC and is generally used in public local and school libraries to organize their collections. It features ten main class summaries which can be divided further into more specific labels for library materials.

000 - computer science, information, general works

100 - philosophy and psychology

200 - religion

300 - social sciences

400 - language

500 - science

600 - technology

700 - arts and recreation

800 - literature

900 - history and geography

Call numbers are created with the class summary number on top and the first three letters of the author's last name on the bottom. For example, *the Mitsitam Cafe Cookbook* by Richard Hetzler has the call number **641.59 HET**. Click the image below to view the entire entry profile through LibraryThing.



Call numbers in children's book stacks usually use a letter at the top of the material label instead of a class number. For visual examples, open the slideshow at the bottom of the page and review slides 23-32.

E - Everyone (generally stories that are told with more images than words)

ER - Early Reader (specifically written for new readers. The books are leveled so that the text gets more challenging as readers progress)

EF - Early Fiction (chapter books that are more advanced than E, but are shorter, have larger text and more pictures than fiction)

F - Fiction (chapter books that feature little to no pictures with more challenging text, but still have an age or grade range)

• Use (YA - Young Adult) if materials for older adolescents are in the same space, as they tackle more mature topics

G - Graphic Novel

B or 920 - Biography (use the first three letters of the subject's last name instead of the author's)

SPA, CHI, LAN - for books that are other languages or are bilingual

Use the default class numbers for informational and non-fiction books (this includes poetry, stories in verse, folklore, fairytales, etc.)

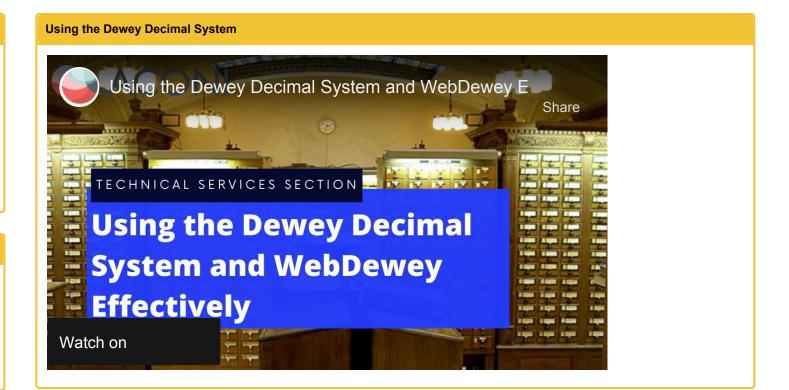
DDC Tutorial - OCLC

Dewey Decimal
 Classification System

A resource created by OCLC that guides beginning catalogers through using the DDC for the first time.

DDC Class Summaries

DDC Class Summaries
 Another resource from the
 OCLC that demonstrates how
 books are classified by subject.



Presentation from Penn Libraries Community Engagement 1 / 87 Cataloging 101 by PLCE

References

Blake, C. (2018). DDC Adults Tutorial. Dublin, OH; OCLC.

Penn Libraries Community Engagement. (2023). Cataloging 101: Destiny and Sustainable Library Systems. Philadelphia; University of Pennsylvania.

Library of Congress (LCC) Classification

Library of Congress Classification

The Library of Congress' eponymous classification system was initially developed just for the use of the library. Over time, academic and special libraries around the country have adopted the same system for organizing their collections.

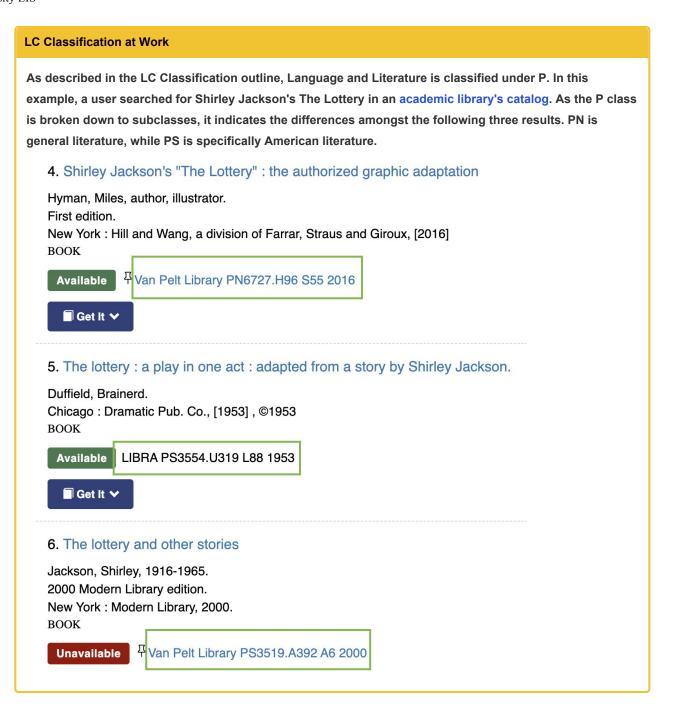
The rest of this page will provide additional resources for utilizing the LC system, but it is recommended that catalogers outside of formal institutions learn Dewey first.

LC Classification Outline

• Access to Classification Outline

A page that lists the letters and titles of the main LC classes. Each class title is accompanied by a downloadable document that contains more specific subclasses.





Metadata Standards

Metadata Standards: Explained

While classification systems, like Dewey and Library of Congress, provide structured guidelines for how to organize physical materials for easy accessibility, metadata standards ensure that computer systems anywhere can read and understand the data about those materials. Without metadata standards, information institutions could label data however they choose, thus preventing interoperability, consistency, and accuracy in catalog records.

Since this guide is geared towards novice catalogers working in community or K-12 libraries, we're going to focus on **MAchine-Readable Cataloging**, or **MARC**. This linked resource will provide you a comparison chart for other metadata standards in the same academic discipline.

Follett Destiny, which is used by the School District of Philadelphia, will be the model library management system for this guide, but it is expensive. The featured school catalogs in Destiny are accessible to the public. Cheap or low-cost LMSs are linked on the next page.

An effective MARC record must provide an appropriate description of a material, including its access points, subject headings, and call number. Similar to DDC, MARC fields are broken down into numbered categories, called tags, from 00-887 and represent a specific piece of information about the source.

As this is an introduction, we will focus on the top eight MARC tags within a MARC record. This cheat sheet, from the New Mexico State Library, also highlights some of the basic tags for novice cataloging. If these fields are completed, then patrons who search the library catalog should be able to find any item that they're looking for:

Top Eight MARC fields for Novice Catalogers

MARC Field	Relevant Descriptive Information
020	The ISBN number
083	The Dewey Decimal call number
100	Personal name of the author
245	Title statement

260/264	Publisher
300	Physical description
650	Subject - topical
700	Added entry (additional authors, illustrator, editor)

MARC 21 Format for Bibliographic Data

• MARC Guide Online

This guide from the LoC provides both the full and concise descriptions for all MARC fields. This standard ensures that the data records can be read regardless of the institution where the data is stored.

Formatting and Punctuation

MARC Format and Punctuation
 Guide

Just as there is a standardized method for how to describe data, there is also a structure for punctuation and formatting within MARC records fields.

Subject Headings

• LC Children's Subject Headings

A supplement to the official LC Subject Headings list. This enables catalogers to find subject headings that are the most appropriate for youth materials.

LC Subject Headings

The LoC has multiple options for subject heading searches (general, authorized, topic, geographic, etc.) depending on the 6XX that is being used.

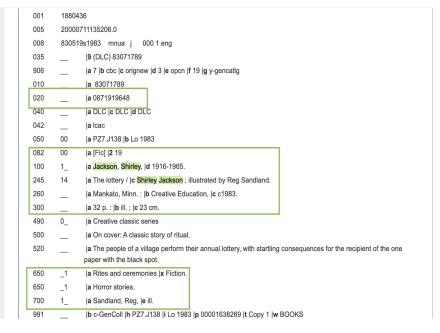
Sample MARC Record

Below is a screenshot of a material's MARC record in the LoC catalog. Green boxes show the important tags that novice catalogers should familiarize themselves with. Patrons of community and K-12 libraries are unlikely to initiate a more advanced search outside of the basic ISBN, author name, material title, publisher, or subject

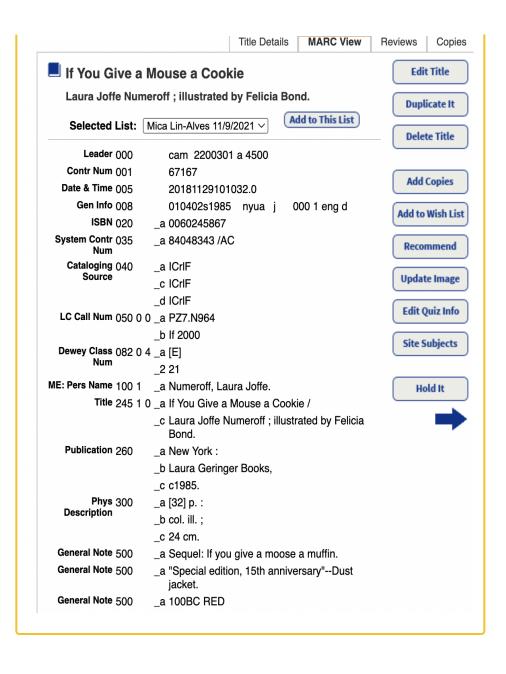


CATALOG

LC Catalog Quick Search



Here is another MARC record from the administrative side of a school library catalog in the Destiny Follett Library Management System.

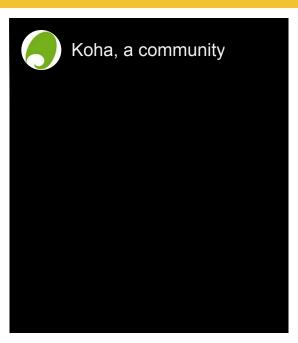


Free or Low Cost Library Management Systems (LMS)

Library Management Systems: Explained

A Library Management System (LMS) helps librarians and library staff to manage the multiple processes of a library, which includes its database of materials, patron information, an automated log of materials that have been checked in or out, due dates, and much more. While many LMSs can cost upwards of thousands of dollars a year, open source LM systems and software support smaller community and K-12 libraries for free or a modest fee.

Koha



"Koha is a true enterprise-class ILS with comprehensive functionality including basic and advanced options. Koha includes modules for acquisitions, circulation, cataloging, serials

Evergreen



"The Evergreen Project develops an open source ILS (integrated library system) used by more than 2,000 libraries around the world. The software, also called Evergreen, is used by libraries to provide their public catalog interface as well as to manage back-of-house operations such as circulation (checkouts and checkins), acquisition of library materials, and (particularly in the case of Evergreen) sharing resources among groups of libraries."

SLIMS



FOLIO (\$)

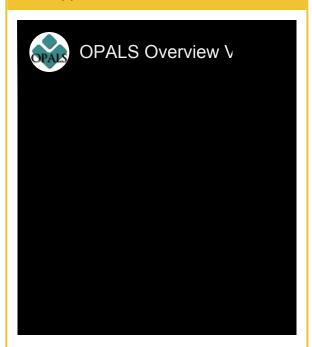


"[Folio] is the only LSP designed for the cloud, created through the collaboration of libraries, developers, vendors, networks and consortia.

Anyone can contribute, and everyone will benefit. Since its inception hundreds of librarians

management, authorities, flexible reporting, label printing, multi-format notices, offline circulation for when Internet access is not available, and much more. Koha will work for consortia of all sizes, multi-branch, and single-branch libraries."

OPALS (\$)



"OPALS is a community of academic, education, special and public librarians that collaborate with experienced software engineers, automation consultants, support technicians and administrators to develop and support this open source integrated library system. Our goal is to create sustainable, state-of-the-art technology that is easy to use, easy to implement and easy to afford."

Tiny Cat



"Started in 2016, TinyCat transforms your collection in LibraryThing into a simple and attractive small library catalog. With over 4,900 sources for cataloging information, LibraryThing is a wealth of data for and about your library. TinyCat allows you to share that data with your patrons."

SLiMS offers the following features and more:

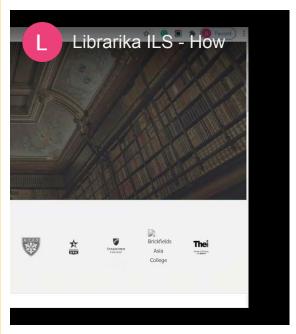
- "Online Public Access Catalog (OPAC) with thumbnail document image support (for images of book covers), Simple Search and Advanced Search mode
- Digital contents/files (PDF, DOC, RTF, XLS, PPT, Video, Audio, etc.): attachment in each bibliographic record is supported
- Documents record detail in MODS (Metadata Object Description Schema) XML format
- Documents record detail in JSON-LD format with schema.org
- RSS (Really Simple Syndication) XML format for OPAC
- OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting) in Dublin Core format for metadata harvesting purposes
- Bibliographic/catalog database management with book cover image support"

BiblioteQ

"BiblioteQ is free and open library software."

representing libraries of all types, sizes and locales have contributed their subject matter expertise to help define FOLIO functionality."

Librarika



"Librarika is a powerful Integrated Library System (ILS) designed to enhance the customer experience. It offers a wide range of features to make library management efficient and effective."

Invenio ILS

"InvenioILS provides a data model based on JSON Schema with structured bibliographic records such as Documents, Series, Items, Electronic Items and more."