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Collaborative Creation of the OER Metadata Rosetta Stone

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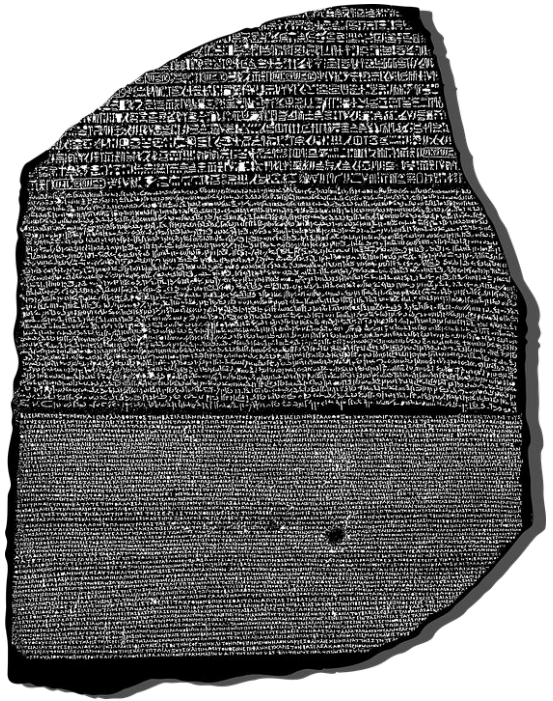


The Rosetta Stone, Pixabay

open education conference
NOVEMBER 9-13, 2020 • VIRTUAL

November 10th, 2020
1:00pm EST

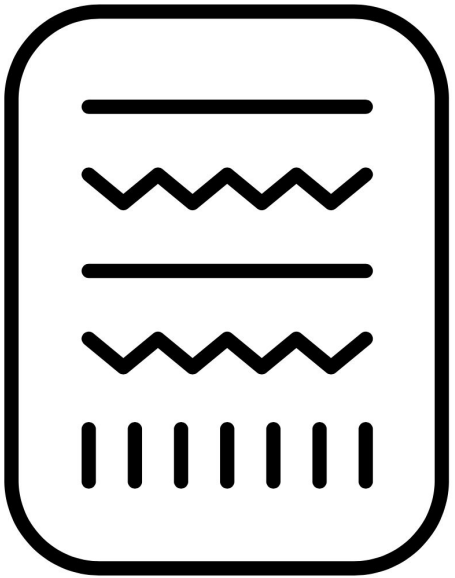
Why does OER need a Metadata Rosetta Stone?

“While there is ongoing improvement in some of the larger open educational resources (OER) search engines, librarians sending emails to listservs asking ‘anyone know of OER on this topic?’ and keeping old-fashioned reading lists of valuable OER are common occurrences.”

- Sobotka, C., Wheeler, H., & White, H. (2019). Leveraging Cataloging and Collection Development Expertise to Improve OER Discovery. *OLA Quarterly*, *25*(1), 17-24. https://doi.org/10.7710/1093-7374.1971

Metadata Silos = Discovery Silos = Missed OER

- Unique Application Profiles (data entry forms for OER details)
- Unique user interfaces based off unique metadata protocols
- Inconsistent publication data



Made, AU, Noun Project

Why does OER need a Metadata Rosetta Stone? (cont.)

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Gold Standard: Library Research

- Library Catalogs and Scholarly Research Databases
- Bibliographic Control of Descriptive Metadata
  - MARC Records
  - Controlled Vocabularies (LCSH, MeSH, Sears, etc.)
- Cataloging/Metadata Librarians and Systems Librarians that specialize in vendor-neutral information storage and retrieval

Federated Searching: a big step in the right direction

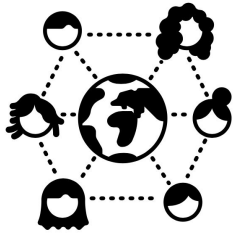
(data in/data out; no enhancement to improve OER discovery)

- The Mason OER Metafinder
- OASIS (Bill Jones!)
- EBSCO's Faculty Select

Next Step: Translate Metadata Languages

- Technical Services Librarians + OER Repository Administrators share expertise

OER Discovery Working Group



Iconaton, US, Noun Project

- **Bobby Bothmann**, Minnesota State University, Mankato, Mankato, Minnesota
- **Michelle Brennan**, Information Services Manager, ISKME/OER Commons
- **Gretchen Gueguen**, Digital Projects Manager, PALCI
- **Lillian Hogendoorn**, Digital Access & OER Lead, eCampusOntario, Toronto, Ontario, Canada
- **Bill Jones**, Digital Resources and Systems Librarian, SUNY Geneseo, NY
- **Camille Thomas**, Scholarly Communication Librarian, Florida State University, Tallahassee, FL (SPARC)
- **Holly Wheeler**, Library Cataloging & Metadata Specialist, Mt Hood Community College, Gresham OR
- **Heather White**, Library Technical Services & OER Coordinator, Mt Hood Community College, Gresham, OR

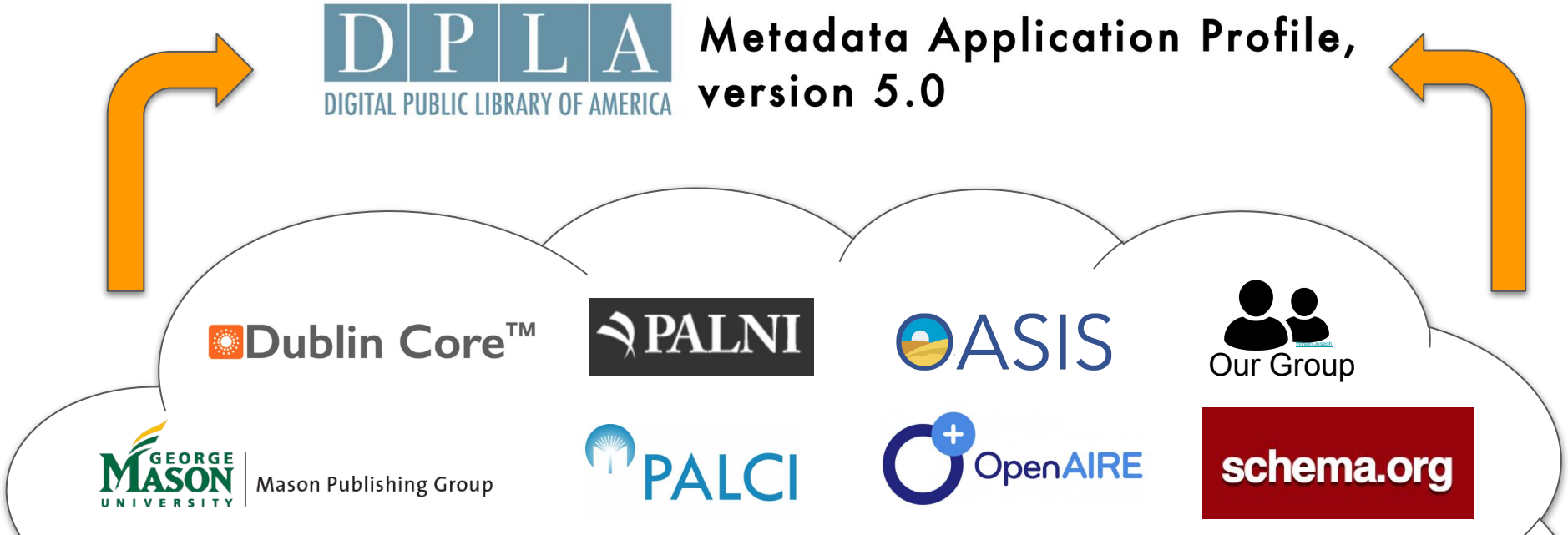
Initiative Background

- SPARC's LibOER Monthly Community Calls featured OER Discovery as a topic
- Gathered information on existing initiatives, research and leaders - particularly people with metadata and cataloging expertise
- Created an internal report to inform next steps to contribute to sustainable discovery infrastructure
- Formed OER Discovery Group

SPARC

Collaborative Process: In the beginning...

We began by developing a list of “Core Elements” based on the DPLA Application Profile, and then referenced additional schemas to add new elements



Collaborative Process: Making Meaning

Label	Property	Definition	Usage	Data Type	Vocab/Syntax Schema
Material type					
Author/Creator					
Contributor					
Date					
Format					
Language					
Publisher					
Rights Holder					

We created a simple table to define our elements and assigned members of the group to define each of the elements by borrowing a definition from existing schemas or creating their own

The goal was to make the definitions as meaningful as possible

These original table headings have changed in our current version

Collaborative Process: Developing Recommendations

Is the element Required? Recommended? Or Optional?

Symbolon, IT, Noun Project

Required:
The element must be contained within the new metadata record.

Recommended:
The element must be supplied to the new metadata record when available from the original object. Some of these were elements that we wanted to be required, but thought would not necessarily always be available from the existing record. The new metadata record is still considered complete in absence of a recommended element.

Optional:
Recognized as useful, but the new metadata record is still considered complete in absence of an optional element.

Collaborative Process: Mapping the Elements

Using MHCC's OER MARC Template (CC-BY) as a foundation, we mapped the selected elements to their MARC values.

We also began by mapping to Dublin Core, and then created a blend of LRMI with Schema.org

Label	MARC21, based off	Dublin Core	Schema.org (LRMI)
Provider	040	NA	provider
Rights Holder	264 $b	dcterm: rightsHolder	copyrightHolder
Title	245 $a, $b	dcterms:title	title
Alternate Title	246 $a, $b	dcterms:alternat	

Collaborative Process: Testing the Records

We tested sample OER to see how well we would be able to adapt the existing metadata for the item into to the OER Metadata Rosetta Stone schema. One of the test source records was containing a field for Audience, which was missing from our schema. This led to the addition of the field of Audience, defined by OpenAire:

	Audience	521 (blank first indicator)	dc:audience	Audience	A class of entity for whom the resource is intended or useful.	https://guidelines.openaire.eu/en/latest/literature/field_audience.html	Recommended

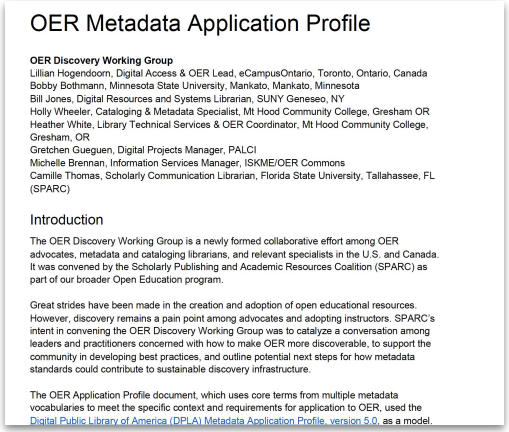
Collaborative Process: Circular Conversations

- It was important to write out a rationale
  - We'd often had to revisit elements
  - New elements when testing records
  - Discrepancies among schema
- We decided to keep a flat file structure without any subfields to make it simpler for both the metadata operator and the technical programmer

The OER Metadata Rosetta Stone

Core elements:

No.	Label	MARC21, based off MHCC's OER template	Dublin Core	Schema.org (LRMI)	Usage	Reference	Requirement
	Material type	5XX	NA	learningResourceType	The predominant type or kind characterizing the learning resource. For example, 'full course', 'lecture', or 'ancillary material'	https://wiki.creativecommons.org/wiki/LRMI/Properties/1.1	Required
	Media Format	380, 655	NA	genre	nature or genre of the resource; newspaper, textbook, video presentation, . not strictly related to the digital object, but the content of the object	https://docs.google.com/spreadsheets/d/1CWrzGgttl7np6lj8Om-P2R5w9no730hmVmL-YQ8t-sM/edit#gid=0 https://www.oercommon	Required



OER Metadata Application Profile

OER Discovery Working Group
Lillian Hogendoorn, Digital Access & OER Lead, eCampusOntario, Toronto, Ontario, Canada
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Bill Jones, Digital Resources and Systems Librarian, SUNY Geneseo, NY
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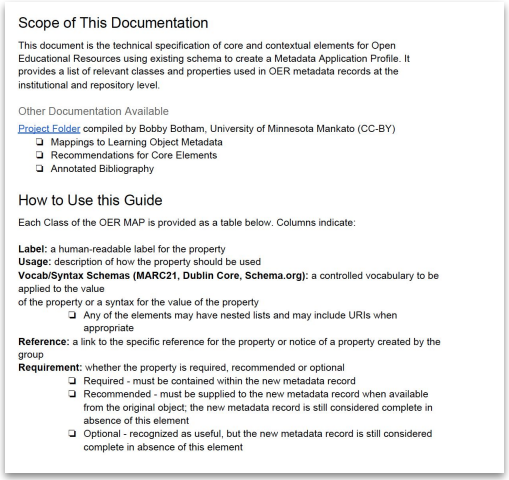
Camille Thomas, Scholarly Communication Librarian, Florida State University, Tallahassee, FL (SPARC)

Introduction

The OER Discovery Working Group is a newly formed collaborative effort among OER advocates, metadata and cataloging librarians, and relevant specialists in the U.S. and Canada. It was convened by the Scholarly Publishing and Academic Resources Coalition (SPARC) as part of our broader Open Education program.

Great strides have been made in the creation and adoption of open educational resources. However, discovery remains a pain point among advocates and adopting instructors. SPARC's intent in convening the OER Discovery Working Group was to catalyze a conversation among leaders and practitioners concerned with how to make OER more discoverable, to support the community in developing best practices, and outline potential next steps for how metadata standards could contribute to sustainable discovery infrastructure.

The OER Application Profile document, which uses core terms from multiple metadata vocabularies to meet the specific context and requirements for application to OER, used the Digital Public Library of America (DPLA) Metadata Application Profile, version 5.0, as a model.



Scope of This Documentation

This document is the technical specification of core and contextual elements for Open Educational Resources using existing schema to create a Metadata Application Profile. It provides a list of relevant classes and properties used in OER metadata records at the institutional and repository level.

Other Documentation Available

Project Folder compiled by Bobby Botham, University of Minnesota Mankato (CC-BY)
- Mappings to Learning Object Metadata
- Recommendations for Core Elements
- Annotated Bibliography

How to Use this Guide

Each Class of the OER MAP is provided as a table below. Columns indicate:

Label: a human-readable label for the property
Usage: description of how the property should be used
Vocab/Syntax Schemas (MARC21, Dublin Core, Schema.org): a controlled vocabulary to be applied to the value
of the property or a syntax for the value of the property
- Any of the elements may have nested lists and may include URIs when appropriate

Reference: a link to the specific reference for the property or notice of a property created by the group
Requirement: whether the property is required, recommended or optional
- Required - must be contained within the new metadata record
- Recommended - must be supplied to the new metadata record when available from the original object; the new metadata record is still considered complete in absence of this element
- Optional - recognized as useful, but the new metadata record is still considered complete in absence of this element

The OER Metadata Rosetta Stone: Core Elements

Required	Recommended	Optional
Title	Audience	Alternate Title
Author/Creator	Contributor	Edition Statement
Subject	Editor	Page Count
Description	Table of Contents	Publisher
Language	File Type	Provider
Date	File Size	Place
Material Type	Duration	Provenance
Media Format	Identifier	Relationship
Rights Holder	Peer Review	Is Ancillary
License Description	Education Level	Has Ancillaries
License Title	Course Title	
License URL	Course Identifier	

Current Status & Next Steps

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- Review from other stakeholders like Open Textbook Network, and Library of Congress
- Add Canadian metadata language OpenAIRE
- IMLS grant proposal - Fostering Implementation

Thank you!

Questions?

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Presentation Handout