

LRMI Metadata in use

DCMI Virtual
starts 15:00 UTC

Overview of this panel session

- **Introduction to LRMI Metadata.** Phil Barker (15 minutes)
- **Developing a JSON-LD-based LRMI metadata profile** Adrian Pohl (15 minutes)
- **Using schema.org/LRMI to describe curriculum materials** Steve Midgely & Phil Barker (15 minutes)
- ***Using the LRMI as the foundation for a dynamic matching system*** Brandt Redd & Michael Jay (15 minutes)
- **Questions and discussion** (30 minutes)

Audience participation

- Please ask questions in the chat window during the presentations, we will deal with them at the end.
- If you would like to ask your question yourself please say so when asking (otherwise the moderator will read them)
- note that this session is being recorded, so unless you ask us to include your name all questions will be anonymous
- Recording will be available after the session + some of the material used.
- Feel free to use Twitter or any other back-channel you wish
- We have a Google doc with some extra links at <https://tinyurl.com/lrmi-in-use>

Introduction to LRMI Metadata

Phil Barker

Chair DCMI LRMI Task Group

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<https://people.pjjk.net/phil>

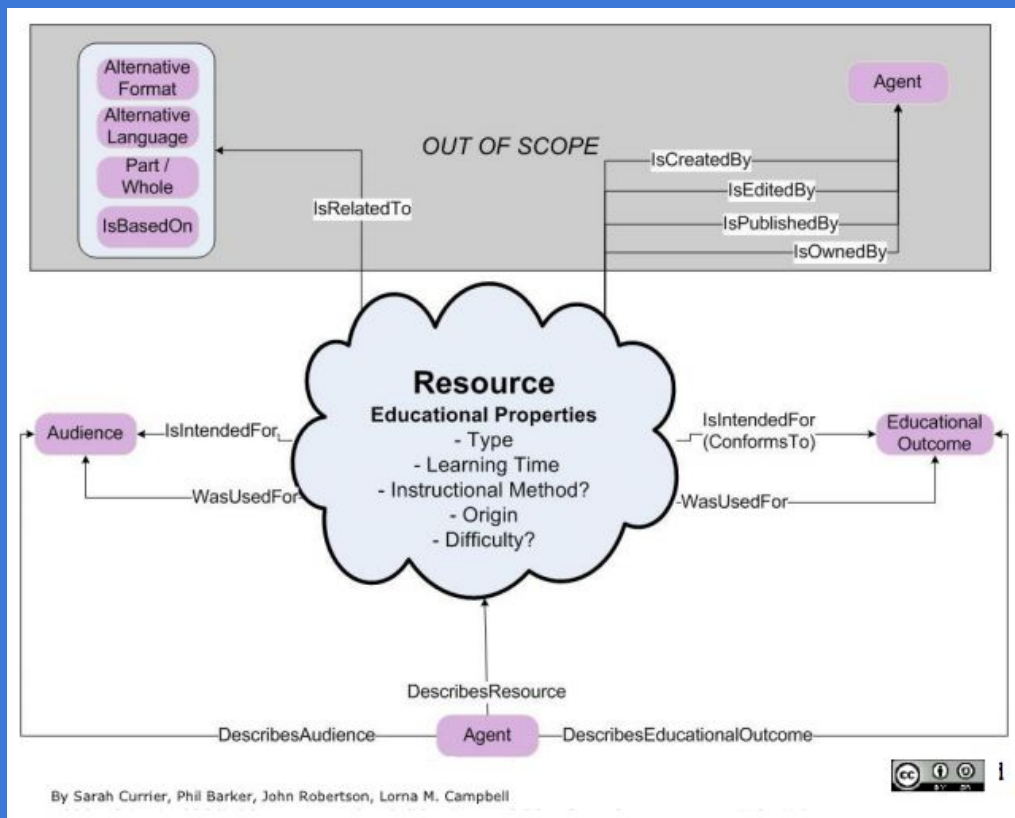
Learning Resource Metadata Initiative

Properties, classes, concept schemes to describe educational characteristics of learning resources <https://www.dublincore.org/specifications/lrmi/>

DCMI Task Group to curate them

<https://www.dublincore.org/groups/lrmi-task-group/>

In the beginning, a domain model for DC-Ed



ca. 2008: the idea to focus on the description of educational characteristics

From Sarah Currier, Dublin Core Metadata Initiative Education Application Profile Task Group Meeting, Berlin, 2008.

Development history of LRMI, 2011-2020

- 2011:** launch of schema.org a vocabulary for describing many aspects of many types of resource on the web
- 2011:** launch of LRMI project to develop a set of properties and classes to augment Schema.org for description of learning resources
- 2013:** LRMI terms added to schema.org
- 2014:** Curation and further development of LRMI transferred to DCMI.
LRMI 1.1 a DCMI Community Specification
- 2015:** LRMI Terms in RDF a DCMI Community Specification
- 2017:** LRMI Concept Schemes a DCMI Community Specification
- 2020:** Continue to curate LRMI in schema.org and DCMI spaces

So what is LRMI now? 1: terms & concept schemes

Properties

- learningResourceType
- teaches
- assesses
- educationalLevel
- educationalAlignment
- educationalUse(*)
- interactivityType(*)
- timeRequired
- typicalAgeRange
- isBasedOn
- license

Classes

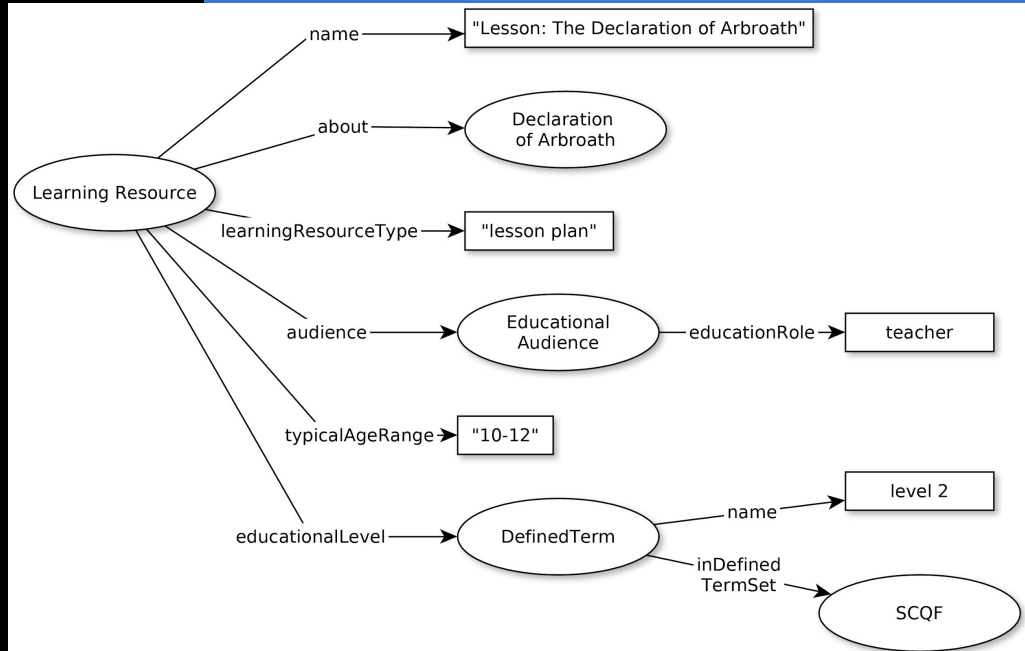
- LearningResource (*new!*)
- AlignmentObject
 - alignmentType(*)
 - educationalFramework
 - targetDescription
 - targetUrl
- EducationalAudience
 - educationalRole(*)

see <https://www.dublincore.org/specifications/lrmi/>
& <https://schema.org/LearningResource>

(* indicates concept scheme for this property)

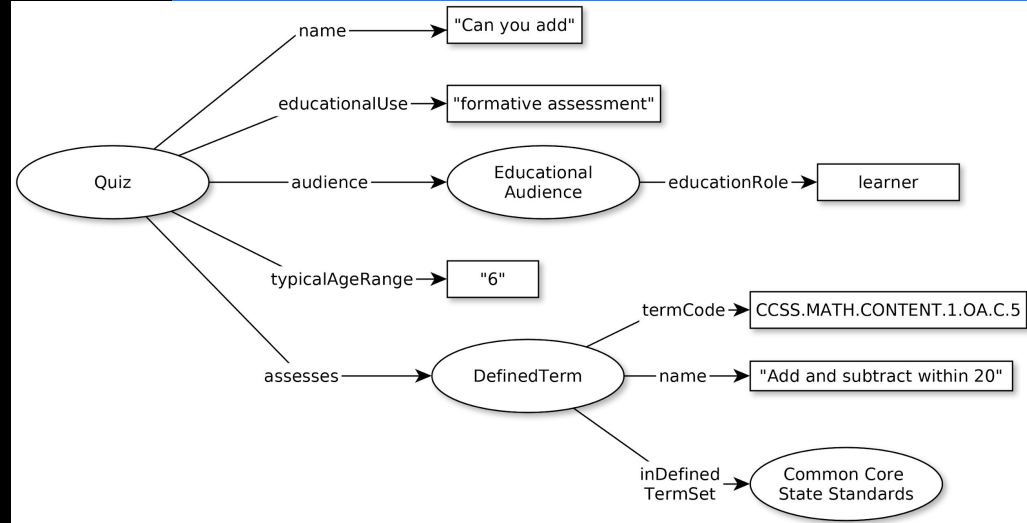
Example: a lesson plan

```
01 {  
02   "@context": "https://schema.org/",  
03   "@type": ["WebPage", "LearningResource"],  
04   "url" : "http://example.org/lessonplan",  
05   "name": "Lesson: The Declaration of Arbroath",  
06   "about": {  
07     "@id": "https://www.wikidata.org/entity/Q598496"  
08   },  
09   "learningResourceType": "lesson plan",  
10   "audience": {  
11     "@type": "EducationalAudience",  
12     "educationalRole": "teacher"  
13   },  
14   "typicalAgeRange": "10-12",  
15   "educationalLevel": {  
16     "@type": "DefinedTerm",  
17     "name": "Level 2",  
18     "inDefinedTermSet": {  
19       "@type": "DefinedTermSet",  
20       "name": "SCQF",  
21       "url": "https://scqf.org.uk/"  
22     }  
23   }  
24 }
```



Example: a Quiz

```
1 {
2   "@context": "https://schema.org/",
3   "@type": "Quiz",
4   "url" : "http://example.org/quiz",
5   "name": "Can you add?",
6   "educationalUse": "formative assessment",
7   "audience": {
8     "@type": "EducationalAudience",
9     "educationalRole": "learner"
10  },
11 },
12 "typicalAgeRange": "6",
13 "assesses": {
14   "@type": "DefinedTerm",
15   "name": "Add and subtract within 20",
16   "termCode": "CCSS.MATH.CONTENT.1.OA.C.5",
17   "inDefinedTermSet": {
18     "@type": "DefinedTermSet",
19     "name": "Common Core State Standards. Math.",
20     "url": "http://www.corestandards.org/Math/"
21   }
22 }
23 }
```



So what is LRMI now? 2: DCMI Task Group

"The LRMI Task Group is charged with defining and executing DCMI work on the LRMI family of metadata specifications and the related activities necessary to their stewardship and adoption." (DCMI Website)

Not a specification/standards body, but we have significant overlap of membership with such organizations.

Task Group mailing list <http://www.jiscmail.ac.uk/lists/dc-lrmi.html>

Monthly calls (first Tuesday at 0700 Pacific time, advertised on Task Group list)

Also, outreach Google group <https://groups.google.com/g/lrmi>

Adrian Pohl Developing a JSON-LD-based LRMI metadata profile

Q & A

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Thank You

If you're interested in LRMI:

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