

NSDL_DC to LRMI Export

Mappings

Below are attribute mappings from from NSDL_DC to LRMI schema. There are three columns. The first one is for elements mapped directly to Creative work that were defined by the LRMI spec which can be found at <http://wiki.creativecommons.org/LRMI/Properties/1.1>. The second column are attributes that are in the LRMI spec but were not added to the Creative work schema. So in case of our JSON-LD we need to define what these attributes are and found at in the context. The third column are for attributes that were not found within the LRMI but are properties in CreativeWork that we want published.

DC Attribute	CreativeWork Property that is part of LRMI spec	LRMI property not found in Creative spec	Property found in schema.org/ CreativeWork but not part of LRMI spec	Notes
dc:title	name			
dc:subject and dct:subject	about			
dc:creator	author Value mapped to schema.org/Person -> name			
dc:language	inLanguage			
dct:educationLevel	typicalAgeRange			See reference table #1
dct:conformsTo	educationalAlignment extended values mapped to schema.org/AlignmentObject			See alignment index for details
dc:source	isBasedOnURL			
dc:publisher	publisher Value mapped to schema.org/Organization -> name			
ieee:interactivityType	interactivityType			
ieee:typicalLearningTime	timeRequired			
dct:created, dc:date is second choice	dateCreated			
dc:type	learningResourceType			
dct:instructionalMethod	educationalUse			
dc:rights xsi:type="dct:URI"		useRightsURL		
dct:license xsi:type="dct:URI"				
dct:audience		educationalRole		
dc:description			description	
dc:contributor			contributor Value mapped to schema.org/Person->name	

dc:identifier			url	The first identifier appears in two places, here and above in productId . Use the 1st one that says dct:URI" and avoid type="nsdl_dc:ResourceHandle", type="nsdl_dc:MetadataHandle", type="nsdl_dc:NSDLPartnerID
dct:issued			datePublished	
dct:coverage			contentLocation Value mapped to schema.org/Place -> name	
dc:format			encodings Value mapped to schema.org/MediaType ->name	
dct:rightsHolder			copyrightHolder Value mapped to schema.org/Organization -> name or url depending if its a url	

Reference Table #1

School Level	Age Range
Pre-Kindergarten	5-
Elementary School	6-11
Early Elementary	6-8
Kindergarten	5
Grade 1	6
Grade 2	7
Upper Elementary	8-11
Grade 3	8
Grade 4	9
Grade 5	10
Middle School	11-13
Grade 6	11
Grade 7	12
Grade 8	13
High School	14-18
Grade 9	14-15
Grade 10	15-16
Grade 11	16-17
Grade 12	17-18
Higher Education	18+
Undergraduate (Lower Division)	18+

Grade 13	18+
Grade 14	18+
Undergraduate (Upper Division)	18+
Grade 15	18+
Grade 16	18+
Technical Education (Lower Division)	18+
Technical Education (Upper Division)	18+
Graduate/Professional	21+
Graduate	21+
Informal Education	16+
Elementary School Programming	6-11
Middle School Programming	11-13
High School Programming	14-18
General Public	16+
Youth Public	1-15
Vocational/Professional Development Education	21+

Alignment Appendix

Transformation from conformsTo to educational alignment does not always happen. We only use it if conformsTo is a URL otherwise we ignore it since just a name without what framework it is doesn't really tell anyone anything. By default any conforms to that contains na URL will be <http://schema.org/AlignmentObject> with a mapping of target_url = the conformsTo url.

For the following 2 examples we add more information to it.

Url is an ASN id

If its a URL that points to an ASN id, ie URL starts with either (<http://asn.jesandco.org> or <http://purl.org>) we use the ASN resolver maintained by Johnathon to get more information about the ASN. For example

ASN id = <http://purl.org/ASN/resources/S11434F6>

We can use the resolver service for this id using

<http://nsdl.org/asn/service.do?verb=GetStandard&id=http://purl.org/ASN/resources/S11434F6>

From here we know that:

framework = Common Core State Standards for Mathematics

Description = These Standards define what students should understand and be able to do in their study of mathematics. etc.....

StatementNotation = CCSS.Math.Content.5.NF.A.2

CCSS url = <http://corestandards.org/Math/Content/5/NF/A/2>

So we take this information and put it in the educational alignment schema object defined at <http://schema.org/AlignmentObject>

educationalFramework = framework

targetDescription = Description

targetName = StatementNotation

targetUrl = Both targetUrl and the asnId url

In this CCSS framework example we were able to get all this information, for other ones all this might not be available. In that case we just add what information we can.

if the URL contains project2061

A URL that starts with <http://project2061> is a American Association for the Advancement of Science framework. So we can at least add that to the alignment property educationalFramework