

**RDA Minimal Metadata for Learning Resources Schema.org Comparison
October 2021**

	A	B	C	D	E	F
1	"Generic" Term	Description	JSON LD required (@context)	JSON LD required (@type)	Property name	Expected type
2						
3	abstract	A brief overview of the item (container)				
4	abstract_data	A brief synopsis about or description of the learning resource.	schema.org	CreativeWork	abstract	text
5	access_cost	Choice stating whether or not there is a fee for use of the resource (Boolean).	schema.org	CreativeWork	isAccessibleForFree	Boolean
6	accessibility_control	Indicates input methods that are sufficient to fully control the described resource (CV list of values at https://www.w3.org/wiki/WebSchemas/Accessibility)				text
7	accessibility_features	Content features of the resource, such as accessible media, alternatives and supported enhancements for accessibility (WebSchemas wiki lists possible values). Only 4 values of the entire list were available in the drupal production system; others are to be added to the CV for this field as called for.	schema.org	CreativeWork	accessibilityFeature	text
8	accessibility_hazard	A characteristic of the described resource that is physiologically dangerous to some users. (CV list of values at: https://www.w3.org/wiki/WebSchemas/Accessibility)	schema.org	Thing	accessibilityHazard	text
9	accessibility_summary	A human-readable summary of specific accessibility features or deficiencies, consistent with the other accessibility metadata but expressing subtleties such as "short descriptions are present but long descriptions will be needed for non-visual users" or "short descriptions are present and no long descriptions are needed."	schema.org	CreativeWork	accessibilitySummary	text
10	accessibility_api	Indicates that the resource is compatible with the referenced accessibility API (CV list of values at https://www.w3.org/wiki/WebSchemas/Accessibility)				text
11	alignment_type	A category of alignment between the learning resource and the framework node. (See notes for recommended values).	schema.org	Intangible/AlignmentObject	alignmentType	text
12	author(s)	List of full name of the author(s)	schema.org	CreativeWork	author	person
13	author.familyName	Last or family name of person(s) authoring the resource.	schema.org	Thing/Person	familyName	person
14	author.givenName	First or given name of person(s) authoring the resource	schema.org	Thing/Person	givenName	person
15	author_org	Name of organization authoring the resource.	schema.org	CreativeWork	author	organization
16	citation	Preferred form of citation	schema.org	CreativeWork	citation	text
17	completion_status	Completion status or condition of the resource (draft, final, revised, unavailable)				not declared

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18	completion_time	Approximate or typical time it takes to work with or through the resource for the typical, intended target audience.	schema.org	CreativeWork	timeRequired	duration
19	contact	Name of person who has been asserted as the contact(s) for the resource in case of questions or follow-up by resource user.	purl.org/dc/term	Class	Agent	not declared
20	context	Principal environment within which the learning & use of the resource is intended to take place, e.g., school, higher education, etc.				not declared
21	contribution_date	Date of the contribution to the resource				not declared
22	contribution_entity	Identification of and information about entities (i.e., people, organizations) contributing to the resource				not declared
23	contributor(s)	List of full name of secondary person(s) contributing to the resource.	schema.org	CreativeWork	contributor	Person
24	contributor_orgs.name	Name of contributing organization(s)	schema.org	CreativeWork	contributor	Organization
25	contributor_orgs.type	Type of contribution made by the organization	DMTC			
26	contributors.familyName	Family or last name of the contributor.	schema.org	Thing/Person	familyName	Person
27	contributors.givenName	Given or first name of contributor(s)	schema.org	Thing/Person	givenName	Person
28	contributors.type	Type of contribution made by a person or organization.	DMTC			text
29	country_of_origin	Code for country from which resource was generated;	purl.org	dc/elements/1.1.	coverage	not declared
30	coverage	Time, culture, geography or region to which this learning object applies. The extent or scope of its content. Coverage will typically include spatial location (a place name or geographic coordinates), temporal period (a period label, date, or date range) or jurisdiction (such as a named administrative entity).				not declared
31	created	The date on which the metadata record was created.	schema.org	CreativeWork	dateCreated	date
32	creator	The login name of the person creating the MD record.	schema.org	CreativeWork	creator	Person
33	credential_status	Type of credentialing offered for the resource, if any.	schema.org	CreativeWork/Course/Educatio	credentialCategory	text
34	date_created	The date on which the resource was created.	schema.org	CreativeWork	dateCreated	date
35	difficulty	How hard it is to work with or through the resource for the typical intended target audience (very easy, easy, medium, difficult, very difficult, knowledge-dependent)				not declared
36	ed_frameworks.name	The name of an framework to which the resource is aligned, if any.	schema.org	Thing/Intangible/AlignmentObj	educationalFramework	text
37	ed_frameworks.nodes.de	The description of a node in an educational framework	schema.org	Thing/Intangible/AlignmentObj	targetDescription	text
38	ed_frameworks.nodes.na	The name of a node in an established educational framework.	schema.org	Thing/Intangible/AlignmentObj	targetName	Text
39	ed_frameworks.nodes.ur	The URL of a node in an established educational framework.	schema.org	Thing/Intangible/AlignmentObj	targetURL	URL
40	ed_frameworks.url	The URL of an established educational framework	?			
41	email	Email address of person or organization that has been asserted as the contact for the resource.	vCard	Class	hasEmail	owl:ObjectProperty

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42	featured_event	Course instance or event where this training resource was or will be featured. (inverse of workFeatured)	schema.org	Event or Course		event or course
43	hasPart	A sub-Training resource or externally referenced resource	schema.org	CreativeWork		Creative Work
44	id	System identifier for the MD record.	schema.org	Thing	identifier	text
45	interactivity_level	Degree of interactivity characterizing the resource; refers to the degree to which the learner can influence the aspect of behavior of resource (e.g., very low, low, medium, high, very high).				not declared
46	interactivity_type	The predominant mode of learning supported by the learning resource (i.e., active, expositive, or mixed)	schema.org			text
47	is_based_on_url	A resource that was used in the creation of this resource (repeatable)	schema.org			CreativeWork or URL
48	isPartOf	Course in which this resource was/will be used, or the resource in which this resource is a part (e.g., part of a book or slide-set associated with a course).	schema.org	CreativeWork		CreativeWork or URL
49	keywords	Keywords or tags used to describe the resource.	schema.org	CreativeWork	keywords	text
50	language_primary	Language in which the resource was originally published or made available.	schema.org	CreativeWork	inLanguage	schema.org/Language
51	languages_secondary	Additional languages in which the resource is available, if any.	schema.org	Thing	translatedInto	schema.org/Language
52	learning_outcome	Descriptions of what knowledge, skills or abilities students should acquire on completion of the resource.				text
53	license	A license document that applies to this content, typically indicated by URL.	schema.org	CreativeWork	license	URL
54	locator.data	From DC "An unambiguous reference to the resources within a given context." Use a string that conforms to an ID system. See how FAIRsFAIR deals with this...	purl.org	dc/terms (Dublin Core/Terms)	identifer	IRI
55	locator.type	Controlled vocabulary designating the persistent identifier schemes used for the resource, e.g., DOI, ARK, Handle.	DMTC			text
56	lr_type	The predominant type or kind that characterizes the learning resource.	schema.org	CreativeWork	learningResourceType	text
57	md_record_id	Globally unique, persistent ID for the metadata record within the system for the resource being described.	schema.org	Thing	identifier	URI
58	media_type	From schema.org def: "Media type of resource, typically expressed using a MIME format" from IANA site & MDN reference.	schema.org	CreativeWork / MediaObject	encodingFormat	text or URL
59	mentions	Data-sets, tools, technologies, entities, other training materials in the series, etc., to which the resource <i>makes reference</i> . **	schema.org	Thing/CreativeWork	mentions	Creative Work

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60	modification_date	Date at which the educational resource was most recently modified; could also be considered a version date.	schema.org	CreativeWork	dateModified	date
61	name_identifier	The unique identifier for individual or organization referenced.		Thing/StructuredValue/Property	value	text
62	name_type	The name of the identifier scheme.		Thing/StructuredValue/Property	valueReference	text
63	org	Name of organization that has been asserted as the contact for the resource in case of questions or follow-up by resource user.	FOAF	Agent	Organization	not declared
64	published	Date of publication / broadcast.	schema.org	CreativeWork	datePublished	Date
65	publisher	The organization credited with publishing or broadcasting the resource (does not include the repository where resource is stored).	schema.org	CreativeWork	publisher	schema.org/Organization
66	purpose	The purpose of the work in the context of education.	schema.org	CreativeWork	educationalUse	text
67	rating	Placeholder for comments given by users assessing the educational resource after use.	schema.org	Thing/Intangible/Rating	ratingValue	Number or Text (Floating Point?)
68	ratings	If applicable, placeholder for overall ratings for the educational resource, based on a collection of reviews or ratings.	schema.org	Thing/Intangible/Rating	aggregateRating	Integer (Floating Point?)
69	resource_id_label	A globally unique label that identifies the learning object.				not declared
70	resource_id_scheme	Name or designator of the identification or cataloging scheme for the globally unique label (resource ID)				not declared
71	resource_id_value	Value of the identifier within the identification or cataloging scheme that designates or identifies the learning object. Should be a namespace specific string.	schema.org	Thing	identifier	text, url
72	resource_size	Size of the resource in bytes (uncompressed)				not declared
73	semantic_density	Degree of conciseness; may be estimated in terms of its size, span or duration				not declared
74	skill_level	Target skill level in the topic being taught; example values include: beginner, intermediate, advanced.				text
75	subject	Subject domain toward which the resource is targeted.	schema.org	Thing	about	text
76	submitter_email	Person submitting the resource into the DMTC queue for publication.	vcard		hasEmail	owl:ObjectProperty
77	submitter_name	Email address of person submitting the resource into the DMTC queue for publication.	vcard		Contact	owl:Class
78	target_audience	Principle users(s) for which the resource was designed.	schema.org	Thing/Intangible/ Audience/ Ed	educationalRole	text
79	title	The name of the resource.	schema.org	CreativeWork	name	text
80	typical_age_range	The typical range of ages for the content's intended end user.	schema.org			text
81	url	URL that resolves to the learning resource or to a "landing page" for the resource that contains important contextual information including the direct resolvable link to the resource, if applicable. Should be a PID, if possible.	schema.org	CreativeWork	url	URL

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82	usage_info	Text describing information about using the resource, not addressed by the license URL.	schema.org	CreativeWork	usageInfo	text or URL?
83	usage_restrictions	Yes / No response to whether copyright or other restrictions apply to the use of the resource				not declared
84	use_rights_url	The URL where the owner specifies permissions for using the resource	schema.org			url
85	uses	Data-sets, tools, technologies, entites, etc. that are <i>actively utilised</i> in this resource.	schema.org	Thing		not declared
86	version	The specific version of the resource, if declared.	schema.org	CreativeWork	version	Number or Text
87						
88						
89						
90	REFERENCES					
91	* Taken from https://zenodo.org/record/3903341 (ENVRI LOM profile)					
92	** Taken from https://bioschemas.org/profiles/TrainingMaterial/0.7-DRAFT-2019_11_08/					
93						