

Learner User Story Analysis - RDA Minimal MD

	A	B	C	D	E	F	G	H	I	J	K
1	Learner searching for training for specific skills (L1) (user story #1)										
2	Learner looking for free courses on a specific topic (L2) (user story #15)										
3	Learner searching for specific type of LR, i.e. MOOC, self-study, webinar, F2F training opportunities (L3) (user story #13)										
4	Learner wanting to find materials from a course (L4) (user story #10)										
5	A learner could be someone in the workplace doing self directed cpd, or a student doing self directed learning i.e. in all cases looking for their own resources, not using resources provided by a teacher or instructor.										
6	Generic Term	Description	Metadata req (L1)	Useful for Extended Doc (L1)	Metadata req (L2)	Useful for Extended Doc (L2)	Metadata req (L3)	Useful for Extended Doc (L3)	Metadata req (L4)	Useful for Extended Doc (L4)	Comment / Notes
7	title	The name of the resource.	Y	Y	Y	Y	Y	Y	Y	Y	
8	abstract	A brief overview of the item (container)	Y	Y	Y	Y	Y	Y	Y	Y	
9	abstract_data	A brief synopsis about or description of the learning resource.	Y	Y	Y	Y	Y	Y	Y	Y	either an abstract or description would be needed. But probably not both?
10	access_cost	Choice stating whether or not there is a fee for use of the resource (Boolean).	N	Y	Y	Y	N	Y	N	Y	cost is useful but no explicit req in all use cases
11	author(s)	List of full name of the author(s)	Y	Y	Y	Y	Y	Y	Y	Y	don't need all the author fields as they are in this list - they are the same information just presented differently
12	author.familyName	Last or family name of person(s) authoring the resource.	Y	Y	Y	Y	Y	Y	Y	Y	see cell above and comment on author

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13	author.givenName	First or given name of person(s) authoring the resource	Y	Y	Y	Y	Y	Y	Y	Y	see cell above and comment on author
14	author_org	Name of organization authoring the resource.	Y	Y	Y	Y	Y	Y	Y	Y	
15	contributor(s)	List of full name of secondary person(s) contributing to the resource.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	
16	contributor_orgs.name	Name of contributing organization(s)	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	
17	contributor_orgs.type	organization	N	Y	N	Y	N	Y	N	Y	Use CRediT (Contributor Roles Taxonomy)?
18	contributors.familyName	Family or last name of the contributor.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	
19	contributors.givenName	Given or first name of contributor(s)	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	
20	name_identifier	organization referenced.	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	
21	name_type	The name of the identifier scheme.	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	
22	contributors.type	Type of contribution made by a person or organization.	N	Y	N	Y	N	Y	N	Y	Clarify whether this is only for a person contributor
23	contribution_date	Date of the contribution to the resource	N	N	N	N	N	N	N	N	
24	contribution_entity	Identification of and information about entities (i.e., people, organizations) contributing to the resource	N	N	N	N	N	N	N	N	
25	language_primary	Language in which the resource was originally published or made available.	Y	Y	Y	Y	Y	Y	Y	Y	
26	languages_secondary	Additional languages in which the resource is available, if any.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	Assumes, if applicable.
27	keywords	Keywords or tags used to describe the resource.	Y	Y	Y	Y	Y	Y	Y	Y	

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28	license	A license document that applies to this content, typically indicated by URL.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	might not actually be necessary for a learner if all they want to do is "take the course"; they want to know costs and any restrictions from using the material for their own learning. Necessary for FAIR
29	lr_type	The predominant type or kind that characterizes the learning resource.	Recmnd	Y	Recmnd	Y	Y	Y	Recmnd	Y	This is probably relevent for L3 (can't see where else the information relating to the type of learning material would be recorded) but is probably a secondary consideration for other uses cases once the initial identification of materials on the topic have been identified. We have inferred that it is needed but it might not be.
30	target_audience	Principle users(s) for which the resource was designed.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	May not be necessary if LR is created for a particular community or institution (i.e. a research institute vs. a general catalogue)
31	subject	Subject domain toward which the resource is targeted.	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Some resources are too generic for subject specificity
32	skill_level	Target skill level in the topic being taught; example values include: beginner, intermediate, advanced.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	
33	typical_age_range	The typical range of ages for the content's intended end user.	N	N	N	N	N	N	N	N	
34	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)	N	N	N	N	N	N	N	N	this relates to skill_level further down the list. Both might not be needed.

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35	published	Date of publication / broadcast.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	- might help with choice if more than one topic/ might not really be strictly necessary for discoverability
36	modification_date	Date at which the educational resource was most recently published or broadcast.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	not sure that this is so important for the learner for discovery; date of publication and versions are probably more important for ensuring most up to date material is found.
37	version	The specific version of the resource, if declared.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	if the version is available then it should be included but not needed for discoverability
38	publisher	The organization credited with publishing or broadcasting the resource (does not include the repository where resource is stored).	Y	Y	Y	Y	Y	Y	Y	Y	-probably not strictly needed in minimal although although reputation of organisation may be important; what about shared publishing in terms of repeatability?
39	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.	Y	Y	Y	Y	Y	Y	Y	Y	
40	usage_info	Text describing information about using the resource, not addressed by the license URL.	Y	Y	Y	Y	Y	Y	Y	Y	Would be place for adding attribution info (rather than "is-based-on-url above; row 50).
41	usage_restrictions	Yes / No response to whether copyright or other restrictions apply to the use of the resource	N	Optional	N	Optional	N	Optional	N	Optional	If no other info is available about copyright or licensing, could use this.
42	use_rights_url	The URL where the owner specifies permissions for using the resource	Y	Y	Y	Y	Y	Y	Y	Y	If no other info is available about copyright or licensing, should use this as some information is req for FAIR at least.

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43	learning_outcome	Descriptions of what knowledge, skills or abilities students should acquire on completion of the resource.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	
44	citation	Preferred form of citation	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	
45	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...	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Could be the same as the persistent ID for the resource.
46	locator.type	Controlled vocabulary designating the persistent identifier schemes used for the resource, e.g., DOI, ARK, Handle.	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Should be used with the citable locator.
47	completion_time	Approximate or typical time it takes to work with or through the resource for the typical, intended target audience.	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	This maybe important when making a decision but probably isn't necessary in all cases;
48	completion_status	Completion status or condition of the resource (draft, final, revised, unavailable)	N	N	N	N	N	N	N	N	But versioning would be helpful;could be useful from an internal system POV
49	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).	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Indicates to student amount of effort req;
50	interactivity_type	The predominant mode of learning supported by the learning resource (i.e., active, expositive, or mixed)	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	Optional	Recmnd	
51	credential_status	Type of credentialing offered for the resource, if any.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	Would need to explain the issues associated with declaring a credential (from whom, authority, academic or occupational, etc.)
52	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.	N	Recmnd	N	Recmnd	N	Recmnd	N	Recmnd	

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53	email	Email address of person or organization that has been asserted as the contact for the resource.	N	Optional	N	Optional	N	Optional	N	Optional	1 to 1 relationship for each contact name; preferred address is most stable (persistent).
54	org	Name of organization that has been asserted as the contact for the resource in case of questions or follow-up by resource user.	N	Optional	N	Optional	N	Optional	N	Optional	
55	media_type	From schema.org def: "Media type of resource, typically expressed using a MIME format" from IANA site & MDN reference.	N	Recmnd	N	Recmnd	N	Recmnd	N	Recmnd	
56	ed_frameworks.name	The name of an framework to which the resource is aligned, if any.	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Need to discuss if / how this relates to skill competence framework (e.g., FAIR4S)
57	ed_frameworks.nodes.desc	The description of a node in an educational framework	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
58	ed_frameworks.nodes.name	The name of a node in an established educational framework.	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
59	ed_frameworks.nodes.url	The URL of a node in an established educational framework.	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
60	ed_frameworks.url	The URL of an established educational framework	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
61	alignment_type	A category of alignment between the learning resource and the framework node. (See notes for Recmnd values).	N	Y	N	Y	N	Y	N	Y	
62	hasPart	A sub-Training resource or externally referenced resource	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Y	Possibly one to many
63	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).	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Many to one
64	is_based_on_url	A resource that was used in the creation of this resource (repeatable)	N	Optional	N	Optional	N	Optional	N	Optional	Attribution info included in usage information below. (row 85).

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65	resource_size	Size of the resource in bytes (uncompressed)	N	Recmnd	N	Recmnd	N	Recmnd	N	Recmnd	Important for downloadable resource.
66	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)	N	Optional	N	Optional	N	Optional	N	Optional	
67	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.	N	Optional	N	Optional	N	Optional	N	Optional	
68	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)	N	Optional	N	Optional	N	Optional	N	Optional	
69	accessibility_summary	Human readable summary of accessibility features and deficiencies	N	Optional	N	Optional	N	Optional	N	Optional	
70	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)	N	Optional	N	Optional	N	Optional	N	Optional	
71	date_created	The date on which the resource was created.	Recmnd	Y	Recmnd	Y	Recmnd	Y	Recmnd	Y	creation date might be a long time before publication date so may be the most relevant especially if topic is likely to have changed
72	country_of_origin	Code for country from which resource was generated;	N	Optional	N	Optional	N	Optional	N	Optional	would depend on whether the topic is country specific e.g. legislation

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73	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).	N	Optional	N	Optional	N	Optional	N	Optional	would depend on whether the topic is country specific e.g. legislation
74	mentions	Data-sets, tools, technologies, entities, other training materials in the series, etc., to which the resource makes reference. **	N	Optional	N	Optional	N	Optional	N	Optional	Ambiguous term; is this duplicative of others?
75	context	Principal environment within which the learning & use of the resource is intended to take place, e.g., school, higher education, etc.	N	Optional	N	Optional	N	Optional	N	Optional	
76	purpose	The purpose of the work in the context of education.	N	N	N	N	N	N	N	N	Ambiguous term;
77	uses	Data-sets, tools, technologies, entities, etc. that are actively utilised in this resource.	N	Optional	N	Optional	N	Optional	N	Optional	
78	rating	Placeholder for comments given by users assessing the educational resource after use.	N	Optional	N	Optional	N	Optional	N	Optional	
79	ratings	If applicable, placeholder for overall ratings for the educational resource, based on a collection of reviews or ratings.	N	Optional	N	Optional	N	Optional	N	Optional	Aggregation of rating comments.
80	semantic_density	Degree of conciseness; may be estimated in terms of its size, span or duration	N	Optional	N	Optional	N	Optional	N	Optional	Related to interactivity level. May be difficult to discern.
81	System MD fields below:										
82	id	System identifier for the MD record.	Y	Y	Y	Y	Y	Y	Y	Y	System field

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83	md_record_id	Globally unique, persistent ID for the metadata record within the system for the resource being described.	Y	Y	Y	Y	Y	Y	Y	Y	Necessary for FAIR; should be in the form of a resolvable ID, e.g., DOI, Handle, ARK, LSID, etc.
84	submitter_email	Person submitting the resource into the DMTC queue for publication.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	Not necessary for discovery; useful for admin/system
85	submitter_name	Email address of person submitting the resource into the DMTC queue for publication.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	Not necessary for discovery; useful for admin/system
86	created	The date on which the metadata record was created.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	System field
87	creator	The login name of the person creating the MD record.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	System field
88	featured_event	Course instance or event where this training resource was or will be featured. (inverse of workFeatured)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	Events out of scope.
89											
90											
91	resource_id_label	A globally unique label that identifies the learning object.	?	?	?	?	?	?	?	?	Used by ENVRI LOM: identifier (General 1.1)
92	resource_id_scheme	Name or designator of the identification or cataloging scheme for the globally unique label (resource ID)	?	?	?	?	?	?	?	?	Used by ENVRI LOM: catalog (General 1.2)
93	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.	?	?	?	?	?	?	?	?	Used by ENVRI LOM: entry (General 1.3)
94											
95	REFERENCES										
96	https://zenodo.org/record										
97	** Taken from https://bioschemas.org/profiles/TrainingMaterial/0.7-DRAFT-2019_11_08/										