

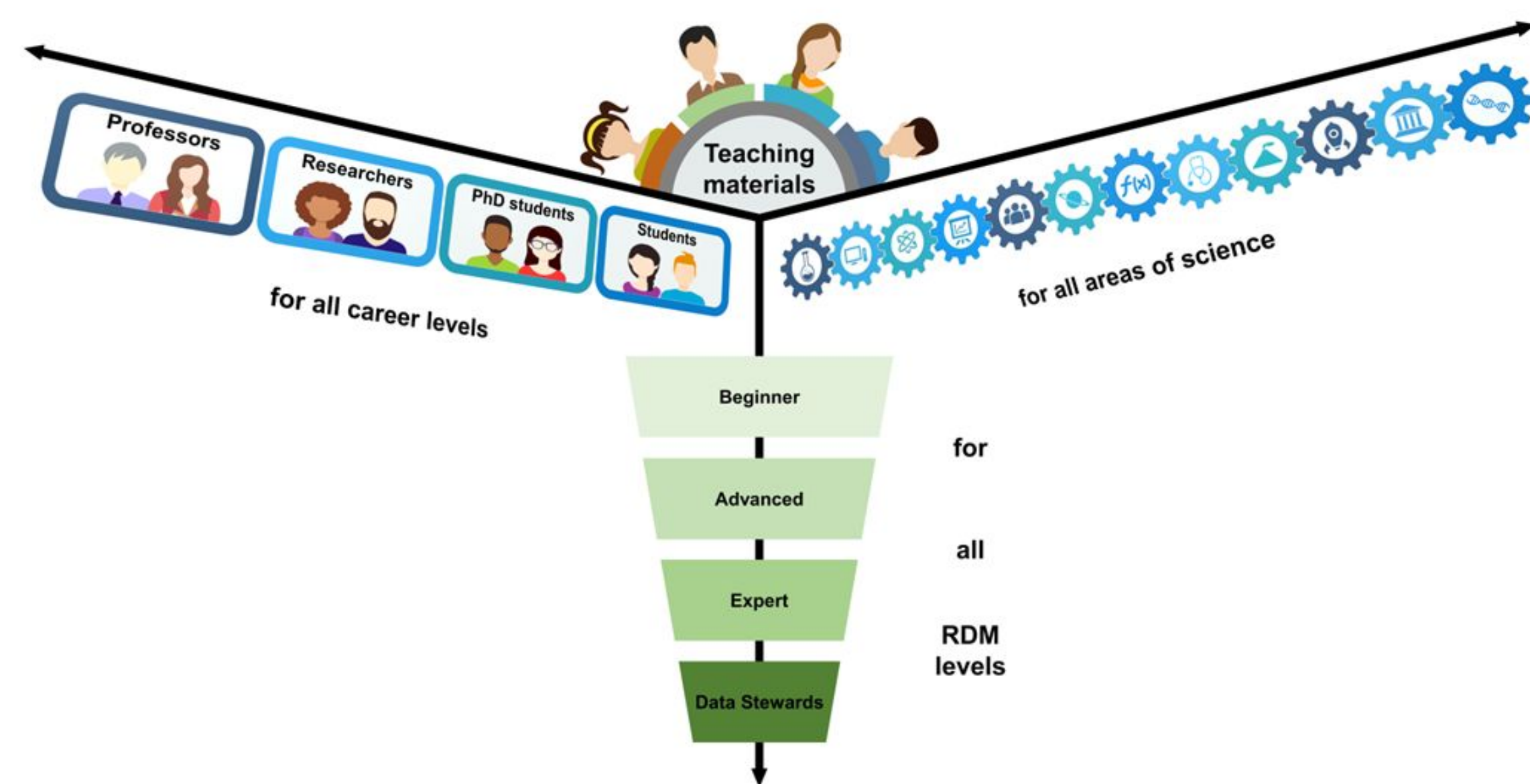
DALIA,

Uniting the Differences with The DALIA Interchange Format (DIF) – a Minimal Metadata Specification for the DALIA OER Platform

The DALIA (“Data Literacy Alliance”) project of the NFDI Training & Education section aims to link open educational resources (OER) on data literacy and make them accessible for the National Research Data Infrastructure (NFDI), federal RDM initiatives, data competence centers, and beyond. The DALIA Interchange Format (DIF) was developed for the compatibility of OER metadata.

Data Literacy Alliance

The DALIA project pools existing interdisciplinary resources and fostering synergy between RDM projects. Its objective is to ensure the sustainable availability of digital educational resources.



Development of the DALIA Interchange Format (DIF)

- provision of a standardized metadata framework for integrating resources into the DALIA platform
- ensuring the interoperability of educational resources in the DALIA knowledge graph
- collaborative development with the specialist community
- consideration of data standards such as LRMI [1], the recommendations for the minimum metadata set of the RDA ETHRD-IG [3] and the Allgemeines Metadatenprofil für Bildungsressourcen (AMB) [4]

Structure of the DIF

- based on the Dublin Core Application Profile (DCTAP) [2]
- transferable into the RDF model and to SHACL shapes
- use of standardized vocabularies for a consistent categorization

Description elements

- attribute name
- **mandatory**, **recommended**, **optional**
- description
- values (constraint type: constraint)
- examples
- cardinality
- data type
- propertyID
- comment

References

- [1] Barker, Phil und Stuart Sutton (Hg). 2022. "LRMI Terms (RDF) 2022-06-14." <https://www.dublincore.org/specifications/lrmi/lrmi-terms/2022-06-14/>.
- [2] Coyle, Karen (Hg). 2022. "Elements for DC Tabular Application Profiles." Unter Mitarbeit von Tom Baker, Phil Barker, John Huck und Nishad Thalath. <https://www.dublincore.org/specifications/dctap/elements/>.
- [3] Hoebelheinrich, Nancy J. et al. 2022. "Recommendations for a minimal metadata set to aid harmonised discovery of learning resources." Zenodo. DOI: [10.15497/RDA00073](https://doi.org/10.15497/RDA00073).
- [4] Pohl, Adrian et. al. 2024. "Allgemeines Metadatenprofil für Bildungsressourcen (AMB)." Entwurf vom 21. November 2024. <https://dini-ag-kim.github.io/amb/draft/>.

Project website

<https://dalia.education>



Authors – mandatory | 1..n

The name of the person(s) or organization(s) who created (wrote, made, presented, ...) the resource.

Biernacka, Katarzyna :
{<https://orcid.org/0000-0003-4864-8036>} *
Castillo Upiachihua, Claudia Beatriz :
{<https://orcid.org/0009-0009-2186-3212>} *
Dockhorn, Ron :
{<https://orcid.org/0000-0002-5268-5430>} *
...

License – mandatory | 1

The license identifier of the resource.

CC-BY-4.0

File Format – recommended | 0..n

The (technical) file format, physical medium, or dimensions of the resource.

.pdf * .zip * .txt * .docx * .rtb * .pptx * .xlsx

Publication Date – recommended | 0..1

The publication date of the resource.

2024-10-31

Learning Resource Type – recommended | 0..n

The pedagogical type of the resource: information for the educational use. This includes the most specific type: rather "tutorial" than "article".

Book * <https://w3id.org/kim/hcrt/course> *
https://w3id.org/kim/hcrt/lesson_plan *
<https://w3id.org/kim/hcrt/worksheet> *
https://w3id.org/kim/hcrt/drill_and_practice

Link – mandatory | 1..n

The hyperlink of the original resource.

<https://doi.org/10.5281/zenodo.13927614>

Title – mandatory | 1

The title (and subtitle) of the resource.

Train-the-Trainer Concept on Research Data Management

Description – recommended | 0..1

The description of the resource.

This version of the 'Train-the-Trainer Concept on Research Data Management' is the English translation of the fifth updated version of the German 'Train-the-Trainer-Konzept zum Forschungsdatenmanagement' ...

Language – recommended | 0..n

The language(s) of the resource, 2 char code preferred.

en

Media Type – recommended | 0..n

General type of data content encoded in a computer file. Digital media type of the resource. If the resource consists of more than one item with different DOIs, the MediaType is "multipart" and the relations are provided in the field "RelatedWork". If the media type should be physical (CD-ROM, audiotape, etc.), choose from <https://ceds.ed.gov/element/001401>.

text * presentation

Community – recommended | 0..n

Associated community(ies) of the resource who are either the supporting organization/institution, or the recommender, or both.

DINI/nestor UAG Schulungen/Fortbildungen (SR)

Keywords – recommended | 0..n

Essential and characteristic topics or content of the resource.

research data * research data management * RDM * train-the-trainer * OER * training * Forschungsdaten * Forschungsdatenmanagement * Didactics

Proficiency Level – recommended | 0..n

Proposed level(s) of proficiency in RDM and data literacy of the learners in regard to the learning content.

novice * advanced beginner * competent

Target Group – recommended | 0..n

Refers to learning resource and learners: A class of agents for whom the learning resource is intended or useful.

data steward * teacher (higher education)

Discipline – recommended | 0..n

The discipline(s) or university/college subject the learning resource belongs to.

<https://w3id.org/kim/hoerschulfaechersystematik/n0>

Related Work – optional | 0..n

Relation(s) to other learning resources: isPartOf, hasPart, or isBasedOn (prerequisite), isSupplementedBy, isSupplementTo, isNewVersionOf. Please provide the links of these resources.

isNewerVersionOf:<https://doi.org/10.5281/zenodo.10122153> *
isNewerVersionOf:<https://doi.org/10.5281/zenodo.4071471>

Size – optional | 0..1

The size of the resource in megabyte.

195.2

Version – optional | 0..1

The version of the learning resource.

5.1

DIF publication and .csv template



Geiger, Jonathan, Petra Steiner, Abdelmoneim Amer Desouki & Frank Lange (2024). [DALIA Interchange Format](https://doi.org/10.5281/zenodo.11521029). Zenodo. DOI: [10.5281/zenodo.11521029](https://doi.org/10.5281/zenodo.11521029).