



Conception and Initial Results of a Systematic Mapping of OER Stakeholders in German Education

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- 1. Background: OER in Germany / Project OERinfo
- 2. Objectives of the Systematic Mapping
- 3. Methods: Stakeholder Analysis Framework & Process
- 4. Initial Results: OER at Elementary Education Institutions
- 5. Discussion







OER in Germany

- OER = Open Educational Resources
- Numerous OER initiatives and "strong OER community" (Janssen et al., 2023, p. 12), but not yet established at all educational sectors (Janssen et al., 2023; WirLernenOnline, 2023).
- OER strategy of the Federal Ministry of Education and Research (BMBF, 2022)







Project OERinfo / Information Service OER

National funding from 2016 – 2021 and since 2023

Goal: Strengthen and expand the OER community in Germany

- Information and communication
- Provision of infrastructures
- Community building



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Goal: Strengthen and expand the OER community in Germany

- Information and communication
- Provision of infrastructures
- Community building \rightarrow Systematic Mapping







Systematic Mapping of OER Stakeholders in Germany (OERinfo)

- Mapping of various communities across educational sectors according to their OER activities.
- Identification of new communities and OER-desiderata (counterpart to OER World Map¹)
- Afterwards: Targeted addressing of demand groups with information, advisory and networking services.







Systematic Mapping of OER Stakeholders in Germany (OERinfo)

- Mapping of various communities across educational sectors according to their
 OER activities. → Systematic view on educational institutions/organizations
- Identification of new communities and OER-desiderata (counterpart to OER World Map¹)
- Afterwards: Targeted addressing of demand groups with information, advisory and networking services.





The Mapping Process

3 (+ 1) Steps:

- Systematic Analysis of OER Stakeholders in Germany (Stakeholder Analysis)
- Grouping of organizations with similar characteristics (Mapping)
- Focus Groups (+ possible add-on: stakeholder survey)

Basic principle: Agile approach in respect to the project goals.







The Mapping Process

2 (+ 1) Steps:

- Systematic Analysis of OER Stakeholders in Germany (Stakeholder Analysis)
- Grouping of organizations with similar characteristics (Mapping)
- (Focus Groups + possible add-on: stakeholder survey)

Basic principle: Agile approach in respect to the project goals.





Stakeholder Analysis Framework

- OER-Stakeholder analysis framework by Wang & Wang (2018)
- Adaption of the analysis criteria in consideration of
 - domain specific frameworks (Competency framework OER/Grégoire & Youga Dieng, 2016; DigCompEdu/Punie & Redecker, 2017),
 - the underlying database (German Education Server¹, OER World Map²)
 - and other specific requirements.





Stakeholder Analysis Criteria (Overview)

- Formal Characteristics of the Organisation/Institution:
 - Name/Title
 - Type of Institution
 - Institutional connections
- OER Characteristics of the Organisation/Institution:
 - potential benefits and difficulties
 - influence on the professional community
 - OER-related activities
 - current context factors





Stakeholder Analysis Criteria (Overview)

- Formal Characteristics of the Organisation/Institution: ٠
 - Name/Title ۲
 - Type of Institution
 - Institutional connections ۲

Method of Data Collection

Database/Online Search Database **Online Search**

OER Characteristics of the Organisation/Institution: •

potential benefits and difficulties	Literature-based, by type
influence on the professional community	Rating (own categories)
OER-related activities	Rating (categories adapted*)
current context factors	Literature-based, by type
	influence on the professional community OER-related activities







Stakeholder Analysis Process

- Data basis: Dataset of educational institutions of the German Education Server
- Analysis guide: Detailed documentation of analysis steps, criteria and sources
- Online Search checklist: Defined steps for the online information search





- Selection of a sub-sample, for practical and strategic reasons:
 - Size of the total data set = ca. 8.800 institutions, across all educational sectors
 - Focus on *higher-level institutions* in the field of *elementary education* (expected impact / desiderata)
- Institutions analyzed to date: n = 11
 - Mainly associations, societies, interest groups
 - Analysis is ongoing





Influence	Quantity
Low (only own institution/staff)	0
Medium (beyond own institution, e.g. by network/collaboration, training tasks)	6
High (formal authority of cross-institutional/regional significance or official mandate)	5
Total	11
OER-related activities	
0 - No OER activities identifiable	9
1 - Basic engagement/use	1
2 - Own creation/extended use	0
3 - Sharing, managing, publishing OER	1
4 - Promoting OER	0
Total	11





Findings

- Optimization of the Analysis Process: Work steps, fine-tuning operationalizations
- OER-related findings (related to project goals): Possible to describe "blank areas" on the OER map and find key-stakeholders
 - Mapping as a complement to the OER World Map (transfer of results)
 - Starting points for information- and networking-services by project OERinfo
- Transfer opportunities:
 - Possible searching method for identifying and describing interest groups in the educational sector for various contexts and perspectives
 - Automation of work steps





Thank you for listening and discussing! Have a good conference!

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References

- Bundesministerium für Bildung und Forschung (BMBF) (2022). OER-Strategie. Freie Bildungsmaterialien für die Entwicklung digitaler Bildung. https://www.bmbf.de/SharedDocs/Publikationen/de/bmbf/3/691288_OER-Strategie.html
- Gregoire, R., & Youga Dieng, P. O. (2016). OER trainer's guide v 1.1: Competency framework open educational resources. International Organisation of La Francophonie. <u>https://unesdoc.unesco.org/ark:/48223/pf0000266161</u>
- Janssen, B., Schuwer, R., & Orr, D. (2023). Key Policy Issues in Open Educational Resources. Paper commissioned for the 2023 Global Education Monitoring Report, Technology in Education. UNESCO.
- Punie, Y. & Redecker, C. (2017). European Framework for the Digital Competence of Educators: DigCompEdu, EUR 28775 EN, Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-73718-3, doi:10.2760/178382 <u>https://publications.jrc.ec.europa.eu/repository/handle/JRC107466</u>
- Wang, S. & Wang, H. (2018). Sustainable open educational re-sources (OER) in higher education: A stakeholder analysis approach. Journal of Teaching and Education, 8(2), 119–128.

WirLernenOnline (30. Oktober 2023). WLO-Statistiken freier Bildungsinhalte. https://www.wirlernenonline.de/statistics/





European framework for the digital competence of educators (DigCompEdu) (Punie & Redecker, 2017) Kompetenzfeld "Digital Resources": 1. Selecting, 2. Creating & modifying, 3. Managing, protecting, sharing		
Allgemeines Kompetenzprogressionsmodell: 1. Awareness, 2. Exploration, 3. Integration, 4. Expertise	se, 5. Leadership, 6. Innovation	
Ausführliches Kompetenzmodell Digitale Ressourcen: A1 Newcomer (Awareness, Uncertainty, Basic Use), A2 Explorer (Exploring Digital Resources),		
B1 Integrator (Fitting Digital Resources to the Learning Context), B2 Expert (Strategically Using Interactive Resources), C1 Leader (Comprehensively		
Using Advanced Strategies & Resources), C2 Pioneer (Promoting the Use of Digital Resources)		
OER competency framework for teachers (Grégoire & Youga Dieng, 2016) 1. becoming familiar with OER; 2. searching for OER; 3. using OER; 4. creating OER; 5. sharing OER		
OER-Kompetenzfelder in Meta-Analyse Otto (2019) 1. finding OER, 2. using OER, 3. creating OER, 4. sharing and providing OER		
Scale of OER-Adoption (DOERS3 Equity Work Group, 2023) 1. Not present, 2. Beginning, 3. Emerging, 4. Established	Selection for own operationalization	
OER Adoption Pyramid (Cox and Trotter, 2017, zit. n Baas et al. 2019)		

1. Access, 2. Permission, 3. Awareness, 4. Capacity, 5. Availability, 6. Volition

5 Stages of innovation adoption process (Rogers, 2003, zit. n. Watanabe, Schmohl & Schelling, 2023, s. auch de Hart, Chetty, & Archer, 2015)

1. Knowledge/Awareness; 2. Persuasion/Interest; 3. Decision/Evaluation; 4. Implementation/Trial; 5. Confirmation/Adoption

Backup: Types of analyzed institutions



Type of Institution	Quantity
Non-university research/service institution	1
Foundation/funding organization	1
Association/society/interest group	7
Non-governmental education provider	1
Ministry of Education / Ministry of Science	1
Total	11