Cross-cultural development of OER: from ideas and needs to collaboration

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EDEN Conference

18.06.2018

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JYVÄSKYLÄ

Mülheim/Bottrop

Hochschule Ruhr West
Ruhr West University of Applied Sciences

History

- Founded in 2009
- Public institution, regional development
- 6000 students, 80 professors and growing ☺
- Western Ruhr area (Bottrop, Mülheim)

Focus Areas

- Civil Engineering
- Business Administration –
  International Trade Management & Logistics
- Mechatronics
- Human-Machine-Interaction
- Business Information Systems
- Master Programme Business Administration

Glo-Link
Global Learning, Innovation and Knowledge Management
Research on Processes and Systems in the Global Context

Focus Areas

Global Learning, Innovation & Knowledge Management

- Global Information Systems
- Innovation Management
- Process Management

- Knowledge Management
- E-Learning
- Competence Management

Prof. Dr. Jan M. Pawlowski

Research Projects

EAGLE

ÖWR

play Guidance

Our team

Franziska Voß

Thomas de Fries

Irawan Nurhas

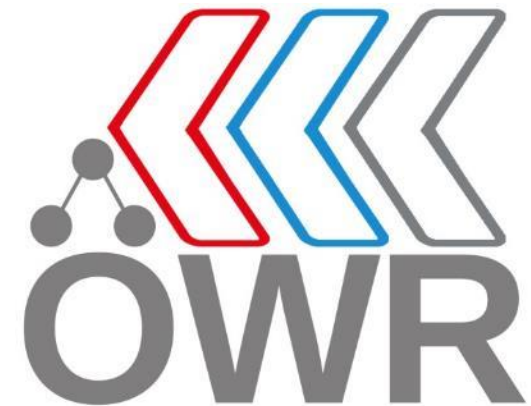Julia Stoffregen

European Projects on OER

- [ÖWR](#) – OER in öffentlichen Verwaltungen

- [Play4Guidance](#): Business Games for Entrepreneurs

- [EAGLE](#): E-Learning in Public Administration

- [Open Educational Ideas and Innovations](#) (OEI2)

- [OpenDiscoverySpace](#): OER for Schools

- [OpenScout](#): OER for Management

OER – Internationalization

Why using OER globally?

- Availability of Resources

- International Cooperation (e.g. team teaching)

- Less efforts for high quality materials

Source: https://pixabay.com/en/continents-flags-silhouettes-mosna-1055960/ (CC0)

OER in Europe / Germany

International Portals

- Open Education Europa: EU Portal
- Learning Resource Exchange (LRE): school platform
- OER Commons: ca. 50000 OER in different areas – most of them in English
- Scientix: STEM resources
- More initiatives: Wikieducator

German Portals

- Deutsche Bildungsserver: Online resources in German
- Federal OER search engine ELIXIER
- Regional portals, e.g. NRW learn:line NRW
- Private initiatives, e.g. for teachers Lehrer Online.
- OER Informationsstelle OER Coordination
- „Content Buffet": National platform Jointly
- OER World Map: Projects and initiatives

Barriers for global Open Education

|		
OER and global collaboration	Lack of awareness	• No motivation in creating OER • Slow response of potential partners • Lack of awareness on progress and commitment
	Software architecture	• Requirements not identified / interpreted correctly • Different perception about the system
Global collaboration	Lack of coordination	• Different understandings of roles and responsibilities in the collaboration
	Lack of communication	• Language differences between authors • Most OER in English • No available communication medium between authors
	Lack of internet connection	• Limitations of the supporting infrastructure of the telecommunications network
Globalization and internationalization	Lack of understanding	• Cultural differences that make a difference in the interpretation of symbols, colors, and non-verbal language • Different habits in local areas

Issues

- OER re-use is not yet common practice, in particular not in cross-border contexts

- Not-invented-here syndrome: If I have not created / spent efforts / reviewed it myself, it can't be good

- Massive Open Online Colonialism…

- Lack of appreciation and recognition in the community

- Sharing complete resources might not be the solution…

What are solutions for cross-border collaboration and mutual (!) synergies?
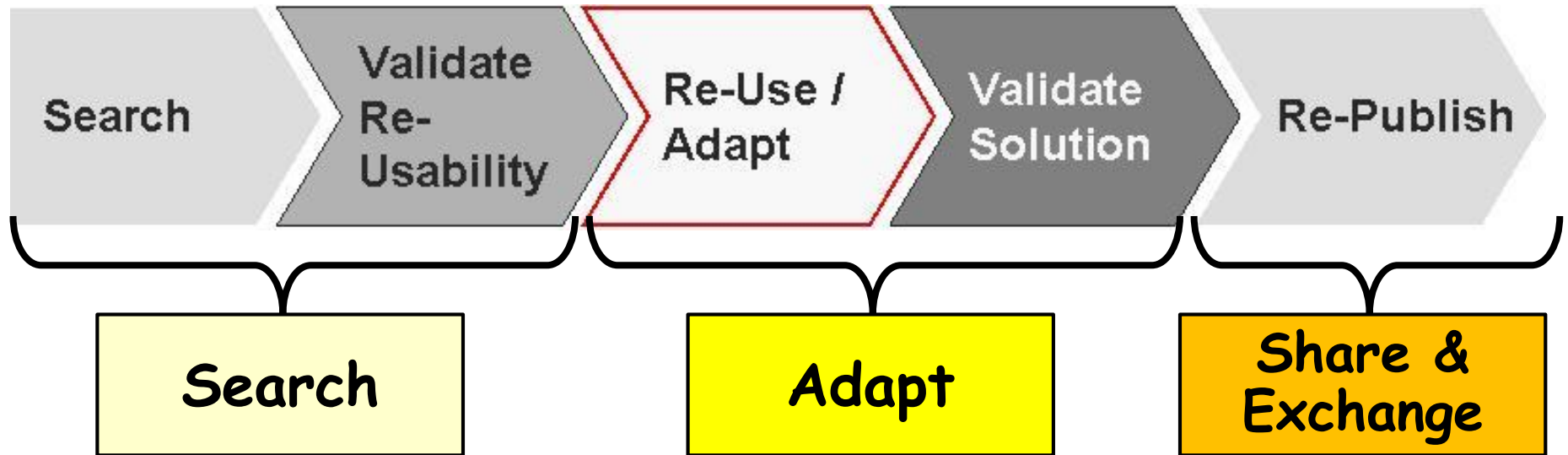
- Key issues
  - How to internationalize materials?
  - What is the effort?
  - Which materials are promising and useful?
  - Which activities might lead to long-term collaboration?

Search and Validate

Check the internationalization requirements:

- Are there national / regional concepts in the content?
- Does the curriculum fit?
- Is the resource appealing?
- What are the differences between originating and target culture?
- How can culture models be applied to the resource? (e.g. Henderson, 2014)

Content analysis

- Specific concepts and practices and their cultural specific meanings (laws, business logic, behavior, norms, music, traditions, ….)
- Language, language conventions, politeness, …
- Knowledge in context (what is common knowledge, what is made explicit?)
- Curriculum fit
- Learning outcomes and didactics
- Group work
- Teacher roles
- Localization
    - Dates, formats, numbers, units
- User interface
    - pictures, navigation, shapes, numbers, colors, …

Attribute	Description	☹☹	☹	0	☺	☺☺	Comment
Language	English				X		Parts need to be translated
Topic	Pythagoras theorem						
Age group	12-16					X	Fit exactly
Method	Interactive simulation, assisted by teacher					X	Needs to be explained in detail for distance learning pupils
Quality	• Description • Standards • Curriculum fit • Quality of contents • Interactivity • Media use • Appropriateness of methods • Technical requirements • Technical correctness • Motivational						
Culture	• Content • Method • Goal orientation • Experiment value • Teacher role • Flexibility • Value of errors • Motivation • Learner control • User activity • Cooperative learning / group work • Communication • Interface design (characters, metaphors, numbers, colors)						
Summary	Summary of fitness						

Possible Adaptation Needs

Content	Adaptation need	Tool
Sample how to apply Pythagoras theorem to measure distances	Use map from home town	Exchange map Use screen capture tool
Learning activity	**Adaptation need**	**Actions**
Spontaneous group work to measure distances	Use same age / gender group Each group gets one mentor	Build groups beforehands, provide strong guidance
Language aspect	**Adaptation need**	**Actions**
English as main language	Translate to Finnish	Use subtitle tool for video lectures Translate cases (external agency)
UI Aspect	**Adaptation need**	**Actions**
Background colors not appealing Navigation not intuitive	Change background colors and logo Change navigation structure from left to top navigation	For ppt: change master slide For simulations: use simulation generator Restructure navigation in coffeecup tool

Further Models: OER Adaptation

- OER Adapation Handbook, Open Scout Project

- Commonwealth of Learning http://hdl.handle.net/11599/233

Develop a strategy for systematic sharing

- Re-Publish: Submit to repositories

- Notification: Notify colleagues if you have used their OER

- Resubmission: Update repositories

- Further collaboration and development / Feedback Experience sharing: Discuss your results, improve your and your colleagues' work

- Next development goals: When should there be a next version, who will be involved

Alternative 2:
Early Sharing: Open Educational Ideas

- **Open Educational Ideas**
  - Recent or future needs and requirements leading to collaborative development of OER across cultures and languages

- **Theoretical background**
  - Wabi-Sabi principle (Treviranus, 2011): Designing the imperfect to allow creation processes
  - From Open Content to Open Thinking (deLiddo, 2010)
  - Imperfect Design
  - Frugal innovation

- **Main idea**
  - Collaborating internationally
  - One idea, two realizations
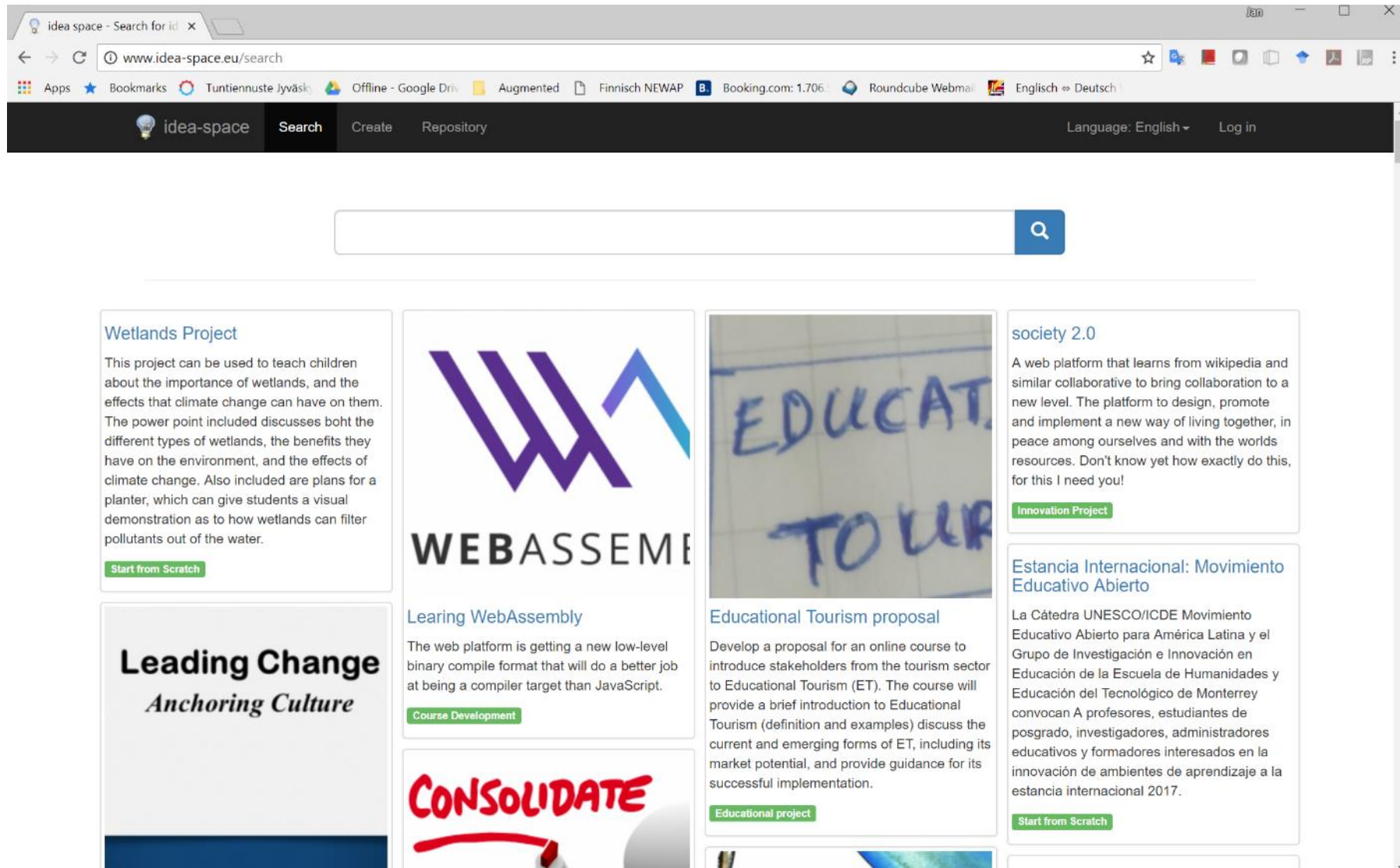
Idea Exchange and Collaboration
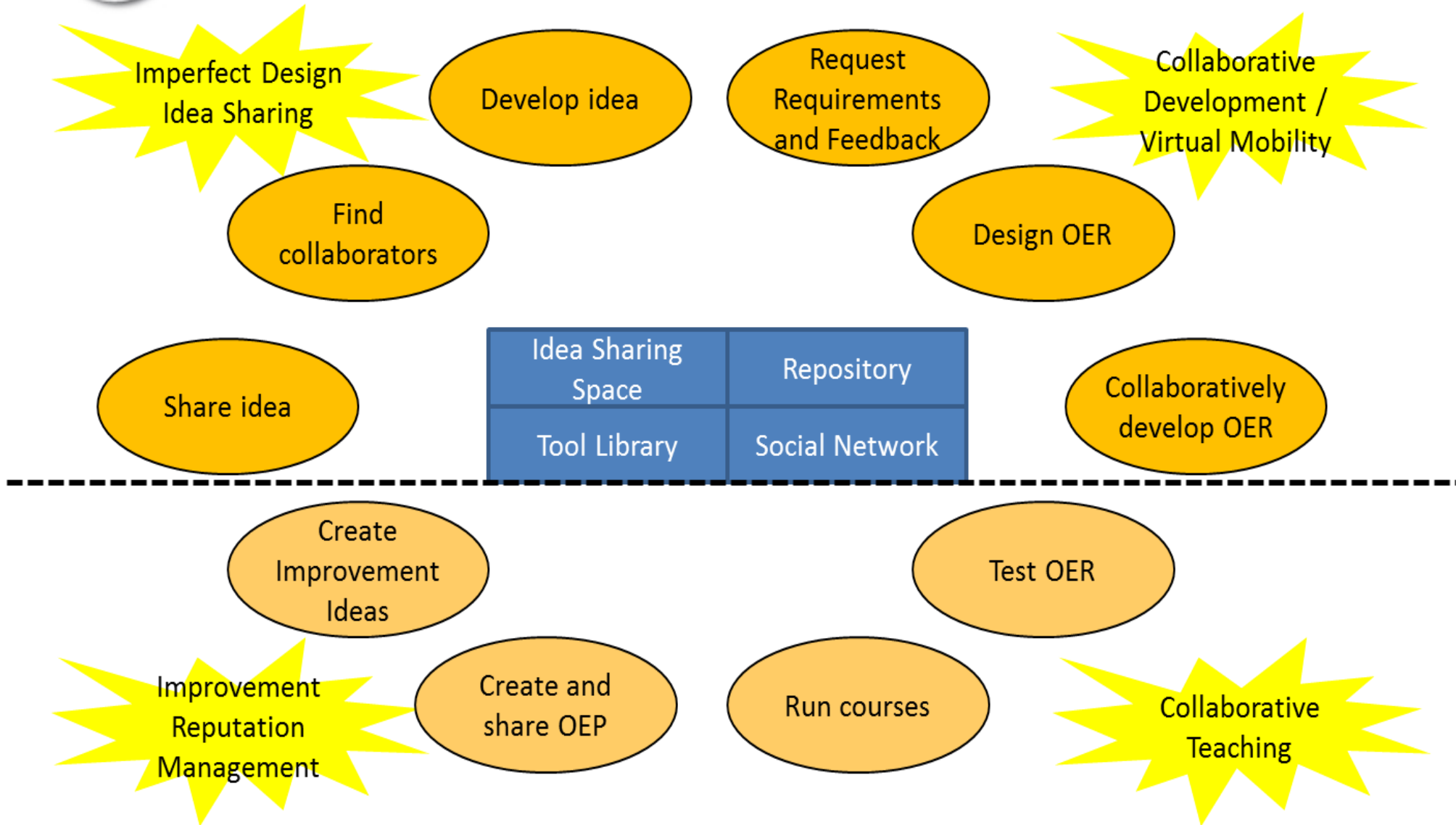
OEI Artifacts

Type	Typical Shared Artifacts	OEI Artifacts
OEI	Oral conversations	Ideas, innovations, needs / requirements (to develop educational material)
OER	Learning Objects, Slide sets, simulations, animations	Early stage digital objects, draft versions, course outlines
OEP	Learning designs, curricula, lesson plans, experiences	Didactic / lesson plans, new curricula, experience requests
Open Access	Articles, textbooks	Position papers, book outlines, drafts
Open Source	Authoring tools, LMS	Prototypes
Assets	Pictures, illustrations, texts	Sketches, drafts

Finding partners: Idea Space

Expressing Ideas

Collaborative Editing

- Planning together, editing locally
  - Authoring tools
  - Google docs
  - …

- Translation and adaptation software
  - E.g. power point translator
  - Under development: https://www.x5gon.org

- Continuous feedback
  - Direct communication between collaborators
  - „How would you do ….?"

Summary

- Internationalizing OER can be…
  - ….an (or the only) economic alternative
  - ….is a tool to develop collaborations

- Adaptation will become easier with upcoming technologies
- Person to person collaboration is still the key to success
  - Mutual learning
  - Continuous feedback
  - Continuous improvement & quality

- UNESCO as a community for sharing and collaborating?

Any Questions?

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http://en.hochschule-ruhr-west.de/research/computer-science/institute-members/professor-jan-pawlowski.html