**Open educational resources in distributed learning infrastructures: An international comparative study**

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Open Educational Resources (OER) have the potential to support increased higher education access at a lower cost to rural, remote, lower-socio economic students, alongside lifelong learners and time-poor workers who require upskilling (Bossu & Meier, 2018; Orr, Rimini, & van Damme, 2015). The German Ministry of Education and Research (BMBF) has funded the interdisciplinary project ‘Digital educational architectures: Open learning resources in distributed learning infrastructures – EduArc’ (Learning Lab, 2019), a partnership between the University of Duisburg-Essen, the German Institute for International Educational Research, the Leibnitz Information Centre for Economics and the Carl von Ossietzky University of Oldenburg, in order to explore the development of disseminated learning infrastructures and enable national access to digital educational resources. The research questions guiding this project are:

1. How can a distributed infrastructure be designed (according to pedagogical, organisational and informational criteria), in order to realise the provision of educational resources across institutions and internationally?
2. How can (open) educational resources and study-related information, that are being provided across higher education institutions, be integrated into the systems of one higher education institution? What are the necessary success factors/conditions for the exchange?
3. How are open educational resources developed, (re)used, provided and integrated into higher education learning and teaching? How can feedback from students and teachers be used and organised to inform quality assurance?

In order to produce infrastructure that is aligned with international developments and trends in higher education digital transformation, nine comparative country studies have been commissioned alongside Germany, to be undertaken by members of the Center for Open Education Research[[1]](#footnote-1), namely:

* Australia (Melissa Bond, University of Oldenburg)
* Canada (Dr. Dianne Conrad, Athabasca University; Dr. George Veletsianos, Royal Roads University)
* China (Prof. Junhong Xiao, Shantou Radio & Television University; Dr. Jingjing Zhang, Beijing Normal University)
* Japan (Dr. Insung Jung, International Christian University Toyko)
* Korea (Dr. Insung Jung)
* South Africa (Dr. Paul Prinsloo and Dr. Jennifer Roberts, University of South Africa)
* Spain (Dr. Victoria Marin, University of Oldenburg; Dr. Albert Sangra, Univeritat Oberta de Catalunya)
* Turkey (Dr. Hakan Aydin and Dr. Aras Bozkurt, Anadolu University; Dr. Yasar Kondakci, Middle East Technical University)
* United States (Dr. Adnan Qayyum, Pennsylvania State University)

The country studies focus on digital transformation across the macro, meso and micro levels (see Figure 1), and focus in particular on the infrastructure for disseminating OER in higher education, including repositories and meta-data standards. The studies also focus on national, state and institutional policies; quality assurance mechanisms and key actors; and how change (in terms of funding, managing and promoting infrastructure) is promoted and occurs at all three levels.



*Figure 1* Country study foci

This presentation provides an overview of the project, as well as a first look at study results across countries at the macro level. Particular attention will be paid to similarities and differences between national technology and educational resource infrastructure, as well as national policies, standards and funding. Provisional recommendations based upon the first stage of this large-scale project will also be provided.

References

Bossu, C., & Meier, M. (2018). Exploring Initiatives for Open Educational Practices at an Australian and a Brazilian University. *Journal of Interactive Media in Education*, *2018*(1), 151. https://doi.org/10.5334/jime.475

Learning Lab (2019). EduArc: Digitale Bildungsarchitekturen. Retrieved from https://learninglab.uni-due.de/forschung/projekte/eduarc-digitale-bildungsarchitekturen

Orr, D., Rimini, M., & van Damme, D. (2015). *Open Educational Resources: A catalyst for innovation* (Educational Research and Innovation). Paris. Retrieved from OECD Publishing website: https://open-educational-resources.de/wp-content/uploads/OECD-OER-a-catalyst-for-innovation-2015.pdf https://doi.org/10.1787/9789264247543-en

1. <http://www.uol.de/coer> [↑](#footnote-ref-1)