Introduction

This report is part of an endeavor of the project "Digital educational architectures: Open learning resources in distributed learning infrastructures – <u>EduArc</u>", funded by the German Federal Ministry of Education and Research (BMBF). This study compares the digital transformation of nine [1] different higher education (HE) systems, with the intention to elicit information of how this transformation occurs as well as with the hope to learn from the practices of other countries and apply them to the German context where appropriate.

With the term "digital transformation" being broadly understood to encompass "the changes that the digital technology causes or influences in all aspects of human life" (Stolterman & Fors Croon, 2004, p. 689), the US American association EDUCAUSE (2018) defines it in view of higher education campus leadership as "a cultural, technological, and workforce shift" (p. 6). Whilst such transformation is undoubtedly driven by technological developments, it also encompasses a variety of transformation including pedagogical, instructional, and learning changes. A specific area of practice and research that has emerged over recent years is the concept of open (Weller, 2014), in the context of which MOOCs and the creation, distribution and use of open educational resources (OER) occur; intended to open up education to new audiences and enable access to study (Orr, Rimini, & van Damme, 2015).

However, while research focusing on the pedagogical merits and challenges of OER, the technical side of their distribution and storage has not yet been thoroughly analyzed, let alone the establishment of standardized practice in higher education. Germany, in this respect, is no exception. At first sight, it can be stated that OER are being produced somewhere, sometime by someone, although accessing them easily, beyond institutional IT systems - and subsequently leading to potentially higher use and acceptance amongst students and staff - is still an idea, rather than established practice.

Despite an increasing number of initiatives in German HE, such as open, institution-specific and state-wide initiatives to establish OER repositories, individualistic solutions are being sought, which can prohibit potential users and contributors being able to identify them (Atenas, Havemann & Priego, 2014), and which arguably works against the very idea of open.

The project EduArc approaches this topic by seeking to investigate the informational and computational aspects of repositories for (open) educational resources. Bringing together the disciplines of computer, information and education sciences, the project intends to model possible solutions to conceptualizations of either centralized repositories or hubs, enabling users and contributors greater access to (O)ER [2]. With information and computer scientists addressing the actual developing, modeling and testing of such approaches, the education scientists are addressing the prevailing question of OER quality (assurance), alongside conducting an international comparative study on the approaches and solutions that other countries have chosen. The international comparison also includes this report on the digital transformation of the different higher education systems, focusing on the macro-, meso- and micro- level of this transformation and emphasizing the informational and computational side of the process.

[1] Australia, Canada, China, Germany, Japan, South Korea, South Africa, Spain and Turkey.

[2] We use (0)ER to consider both open and not-open educational resources. When it is explicitly written OER, it does refer just to Open Educational Resources.



This content is provided to you freely by EdTech Books.

Access it online or download it at https://edtechbooks.org/oer_around_the_world/introduction.