Book review: Digital Agency in Higher Education: Transforming teaching and learning, by Toril Aagaard and Andreas Lund

Victoria I. Marín

1 Ramón y Cajal Research Fellow, Department of Educational Sciences, Universitat de Lleida, Lleida, Spain

* Correspondence: victoria.marin@udl.cat

Publication date: 21 June 2023

How to cite

Peer review
This article has been through editorial review.

Copyright
2023, Victoria I. Marín. This is an open-access article distributed under the terms of the Creative Commons Attribution Licence (CC BY) 4.0 https://creativecommons.org/licenses/by/4.0/, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited • DOI: https://doi.org/10.14324/LRE.21.1.22.

Open access
London Review of Education is a peer-reviewed open-access journal.

Book review: Digital Agency in Higher Education: Transforming teaching and learning, by Toril Aagaard and Andreas Lund


Digital Agency in Higher Education: Transforming teaching and learning is an invitation for both academics and educational institutions to rethink digitalisation in the context of higher education, while other stakeholders might also benefit from reading the book to gain a more critical perspective on the digitalisation phenomenon in higher education.

The authors, both senior academics in public higher education institutions in Norway, draw attention to our agentic role as humans in interaction with digital artefacts, and how we may change in the process. They highlight that, in order to drive conscious digital transformation, human agency – and, concretely, transformative agency – is pivotal in the face of technological determination. Throughout the book, the authors introduce us to the background, implications and ideas behind digitalisation in higher education, emphasising how human agency needs to be enacted and fostered in that context.
The book is structured in eight chapters, organised into two main parts. The first part (Chapters 1 to 4) addresses the theoretical and conceptual underpinnings of digitalisation in higher education, while the second part (Chapters 5 to 8) provides practical, illustrative examples and conceptualisations.

In Chapter 1, the principle lying behind transformative agency is described as the double stimulation derived from Vygotsky's theory: a first stimulus, which represents a problem or challenge (for example, student engagement) is tackled by a second stimulus, which involves resources in a broad sense (that is, available or developed resources, such as culture and technology). In addition, there is a dialectic relationship between the first and second stimuli, where the agent (individual, institution and so on) changes not only the situation, but also themselves. What’s more, the authors link digitalisation to epistemology, due to its embeddedness, embodied character and potential for extended cognition.

Chapter 2 focuses on the (positive or negative) affordances of technology, which are only possible through interaction between humans and digital technology, and the risks of considering technologies as mere tools. This has led to digitalisation being undertheorised in education, and to a lack of knowledge about how it affects pedagogy, what digital technology entails, and how it affects higher education. Thus, the authors make a step forward by suggesting the use of the concept of ‘artefacts’ instead of ‘tools’, claiming that technologies, in the interplay with humans’ capacity for transformative agency, have significant potential for transformation of educational practice. As they convincingly argue, the reciprocal relationships between agent, artefact and practices must be considered.

Against this backdrop, educational quality emerges as a relative concept, and linked to transformative agency (Chapters 3 and 4). In this context, educational quality is considered transformative through enhancing and empowering the student. The authors argue that questions that address better learning outcomes or better learning with technologies miss the mediation agent–artefact–practices, because they are only focused on the artefact, and, therefore, there is a lack of transformative perspective. They highlight that ‘transformation as quality is constructed, not given’ (38) and that ‘developing higher education quality involves transforming and even innovating pedagogical practices’ (52).

By means of a review of 28 articles related to digitalisation in higher education, the authors identify three educational affordances presented in Chapter 5: twenty-first-century skills, educational models and digital learning resources. To engage with these resources, competences are needed, which must be connected to practices and contexts.

This fact leads to Chapter 6, where the differences between mastery and appropriation are discussed. It is argued that appropriation goes beyond mastery, since it entails a deep understanding of digital technologies and their context of use. Consequently, appropriation would be inseparable from professional digital competence (PDC). Thereafter, the focus moves to teacher education, and to a discussion of the strengths and weaknesses of well-known models for PDC in that context: the Technological Pedagogical Content Knowledge (TPACK) framework for teachers (Mishra and Koehler, 2006); the substitution, augmentation, modification, redefinition (SAMR), a pedagogical model of technology integration (Puentedura, 2006); and the European Framework for The Digital Competence of Educators (DigCompEdu), designed by the Joint Research Centre of the European Union (Punie and Redecker, 2017). As explained by the authors, ‘PDC demands that teachers be able to connect the affordances of digital technologies to vital issues in the learning sciences’ (73).

Using various vignettes of cases from Nordic universities, tensions and challenges from the affordances of the digital in higher education at the institutional level, and at the teaching and learning level (meso and micro levels), are illustrated in Chapter 7.

Finally, with the question ‘Can we educate students for a future we do not know?’, the title of Chapter 8, a proposal for a future scenario similar to that made by Ulf-Daniel Ehlers and Kellermann (2019) is suggested. In this case, the authors specifically address trends and possible futures in digitalisation, presenting four plausible scenarios for higher education that lead to the need to cultivate transformative agency:

(1) dealing with complex problem-solving and uncertainty, (2) assembling a trajectory among multiple institutions and a networked learning environment, (3) establishing a space where the student can build and refine a personal portfolio and curriculum in collaboration with peers and educators, and (4) preparing for scenarios 1–3 to be persistent in a lifelong learning perspective. (113)
The role of higher education teachers 'as designers and agents of learning, and catalysts, who instigate, enable, support, participate in, and assess object-oriented and mediated learning process’ (114) is key in this context. The presence of digital technologies in higher education keeps growing, and ethical dilemmas are becoming increasingly frequent. This fact calls for developing PDC, and for enacting human transformative agency.

In sum, this book is highly recommended reading for all. Challenging claims of technological determination, it offers an important contribution to critical reflection on digitalisation in higher education, giving (back) the power to humans and educational practices.

**Funding**

This study was funded by MCIN/AEI/10.13039/501100011033 and FSE “El FSE invierte en tu futuro” (Grant RYC2019-028398-I).

**References**


