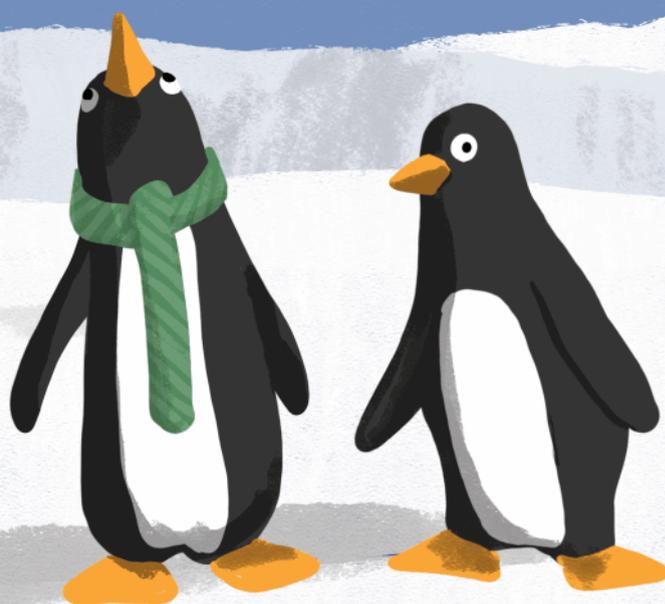


RESEARCH REVIEW

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GO-GN

Research Review Winter 2021

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Contents

Introduction	5
Acknowledgements	6
Open Educational Resources - Theory	7
The (Scientific) Digital Culture / (Wissenschafts-)Kultur der Digitalität	7
A Response to Rising Textbook Costs Difficulties in the Transition Process to OERs Through the Lens of Mezirow's Theory of Transformative Learning	8
Open Education Resources: Supporting Diversity and Sharing in Education	9
Open Educational Resources - Impact	10
A Study of STEM Usage & Perceptions of OER at a Large Research University	10
Open To What? A Critical Evaluation of OER Efficacy Studies	11
Role of Open Educational Resources to Support Higher Geoscience Education in India	12
Open educational resources in public administration: a case study in Greece	14
Open Educational Resources in Italy	15
Incentivizing faculty for open educational resources (OER) adoption and open textbook authoring	16
Open Educational Practices	18
Transformation and digital literacy: Systematic literature mapping	18
Opening up Educational Practices through Faculty, Librarian, and Student Collaboration in OER Creation: Moving from Labor-Intensive to Supervisory Involvement	19
Open Educational Resources in virtual teaching communities	21
MOOCs	23
Open to MOOCs? Evidence of their impact on labour market outcomes	23
Women's participation in MOOCs in the IT area	24
Exploring the reliability and its influencing factors of peer assessment in massive open online courses	24

	4
Open Pedagogy	26
Learners' Perception of the Transition to Instructor-Led Online Learning Environments: Facilitators and Barriers During the COVID-19 Pandemic	26
What Is Open Pedagogy? Identifying Commonalities	27
Exploring Student Perceptions as Co-authors of Course Material	29
Innovation	32
Producing OER with convOERter: First Evaluation and Feedback	32
The Global Micro-credential Landscape: Charting a New Credential Ecology for Lifelong Learning	33
Navigating support models for OER publishing: case studies from the University of Houston and the University of Washington	34
Social Justice	36
Advancing Social Justice for Asylum Seekers and Refugees in the UK: An Open Education Approach to Strengthening Capacity through Refugee Action's Frontline Immigration Advice Project	36
Open educational resources and social justice: Potentials and implications for research productivity in higher educational institutions	37
Framing Open Educational Practices from a Social Justice Perspective	38
References	42

Introduction

This report summarises some state-of-the-art research relevant to open educational resources (OER) and open educational practices (OEP) that was published recently. The reviews of these articles were written by doctoral and post-doctoral researchers who work in relevant fields and are members of the Global OER Graduate Network (GO-GN).

These reviews focus on the relevance of the papers for educational technologists, instructional designers, and educators working in higher education institutions with a particular focus on research into open education.

GO-GN is a network of PhD candidates around the world whose research projects include a focus on open education. These doctoral researchers are at the core of the network; around them, over two hundred experts, supervisors, mentors and interested parties connect to form a community of practice that:

- Raises the profile of research into open education
- Offers support for those conducting PhD research in this area
- Develops openness as a process of research

[GO-GN](#) is currently funded through the OER programme of [The William and Flora Hewlett Foundation](#) and administered by the [Open Education Research Hub](#) from the [Institute of Educational Technology](#) at The Open University, UK.

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These reviews were written by members of the GO-GN network who are actively researching open education.

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Open Educational Resources - Theory

The (Scientific) Digital Culture / (Wissenschafts-)Kultur der Digitalität

Lasch, A. (2021). The (Scientific) Digital Culture / (Wissenschafts-)Kultur der Digitalität. *Lessons Learned*. Vol. 1 No. 1/2. <https://doi.org/10.25369/ll.v1i1/2.27>

Reviewed by Robert Farrow (The Open University, UK)

This short article focuses on the idea that digital culture [Kultur der Digitalität] is often seen as a disruptive element by universities, and argues that instead we should see continuity between the traditional and digital aspects of higher education. Lasch refers to Stalder (2019) in describing the three elements of digital culture as Referentiality (knowledge may not be hegemonically owned and this is accelerated by digitalisation), Communitarity (epistemic communities are communities of practice) and Algorithmicity (machines are increasingly able to undertake tasks previously reserved for humans).

Each of these can be understood to have their own internal conflicts with respect to being closed/open. Lasch argues that these come to the fore with questions around how people participate in universities; how transparent and visible their activities and outputs are; who has access; and how value is created by activity. Openness can therefore be understood to cut across all of these critical questions.

The next section of the paper explores three projects relating to digital culture: the Lingdrafts (project) blog; the promotion of open educational resources by a group of organisations in Germany; and collaborative approaches to pedagogy as an open educational practice. The common idea here is that "Openness cannot be prescribed. Openness must be worked out together." This notion is elaborated in the final section with reference to the forthcoming virTUos project which proposes an agile, innovative, university-wide and interdisciplinary approach to pedagogy.

While there is not enough space in the paper to properly examine all the underlying claims, this concise paper does a good job of explaining how the relationship between openness and digital culture can be understood as an encompassing dialectic. The strategic vision is articulated well and likely to be of interest to those focused on how higher education institutions may move in the direction of openness.

A Response to Rising Textbook Costs Difficulties in the Transition Process to OERs Through the Lens of Mezirow's Theory of Transformative Learning

Rambow, A. (2021). Open Educational Resources (OERs): A Response to Rising Textbook Costs Difficulties in the Transition Process to OERs Through the Lens of Mezirow's Theory of Transformative Learning. In Gabellini, C., Gallner, S., Imboden, F., Kuurstra, M. & Tremp, P. (edit) *Lehrentwicklung by Openness – Open Educational Resources im Hochschulkontext*. Pp.71-75

http://www.sfdn.ch/wp-content/uploads/Lehrentwicklung_by_Openness_OER_im_Hochschulkontext.pdf#page=71

Reviewed by Glenda Cox (University of Cape Town, South Africa)

The researcher set out to understand selection quality criteria for OER and identifies this as an unknown area that needs to be explored in United States (US) undergraduate courses. Peer assessors and course reviewers were interviewed from Quality Matters, an organisation in the US that assesses online and blended courses.

Purpose, ease of use and content seem to be the three pillars of quality and are addressed in the research questions. According to this qualitative study OER improved the quality of online learning, instructors looked for OER from preferred sites like MERLOT, American Yawp and OpenStax. Overall participants rated OER positively and said they were not only about cost but also relevance and current information.

The author uses Mezirow's Theory of Transformative Learning. Mezirow's theory is used to frame each step of the journey from using traditional closed materials to using OER to the point of making a paradigm shift. The argument is made that these experienced OER practitioners have moved through all 10 stages of transformative learning.

A qualitative methodology is used. A sample of 16 course instructors were interviewed. This is a case study of a very specific group with similar perspectives. The author wanted to understand more about the quality of OER. The research questions could have dealt more specifically with quality and change of practice (transformation). The questions were nevertheless very interesting about purpose, ease of use and content of OER.

The argument about a shift in practice being a complex process is explored well with the use of Mezirow's transformational theory. This theory has been used by Stacey Katz and it is tested out again here to establish shifts in values of those who were interviewed. I wonder if it will be useful to apply this theory to instructors who

are new to OER or perhaps those who have created or used one OER and then not continued the practice. Perhaps the Stage at which the transformation is blocked can be identified.

The article is brief but is a well written summary of a clearly much more detailed study. It is important in making a case that OER improve online materials. A main reason for this is that materials are available one and there is no waiting to purchase and expensive textbook. The paper concludes with a section on implications for leadership who should consider saving cost for students and encouraging instructors to use OER on an institutional level.

Open Education Resources: Supporting Diversity and Sharing in Education

Ramoutar, S. (2021). Open Education Resources: Supporting Diversity and Sharing in Education. *TechTrends* 65, 410–412. <https://doi.org/10.1007/s11528-021-00615-7>

Reviewed by Paula Cardoso

This paper presents a brief evolution of the concept and theory of Open Educational Resources (OER), since its origins to a few considerations around the future of OER.

By analysing a few of the most important references and authors in the field, the author traces a short but consistent path of the OER movement. It starts with its initial definition and explains how it has evolved into an established concept, from its roots on Learning Object Development and open content. Then, the author moves into a very brief overview of the main OER initiatives, with a focus on online resources available via online platforms and online repositories across the globe. An important aspect is that it provides examples of current research on the impact and advantages of open pedagogy, not ignoring the cultural context around OER and the political and institutional practices that support it.

Although this is a theoretical article, it is well written and clearly articulated, providing a good source of relevant research, which becomes important to systematize and advance open education research.

Open Educational Resources - Impact

A Study of STEM Usage & Perceptions of OER at a Large Research University

Bharti, N. & Leonard, M. (2021). A Study of STEM Usage and Perceptions of OER at a Large Research University. *International Journal of Open Educational Resources*, Vol. 4, No. 1.

<https://www.ijoe.org/a-study-of-stem-usage-and-perceptions-of-oer-at-a-large-research-university/>

Reviewed by Paula Cardoso

This paper presents and discusses results gathered from a survey investigating the current state of Open Educational Resources (OER) at an American research University. From the perspective of academic librarians, the authors argue that the use of OER may help the curriculum and research of an institution. Thus, they conduct a study on the usage and perceptions of OER within the context of STEM faculty, researchers and students, as the first step of an institutional strategy to establish OER initiatives on campus.

The survey investigated perceptions of OER and user experience in using open educational resources for teaching and/or research initiatives. The authors found that the importance of OER is already recognised, although a big part of faculty and students in STEM are not aware of OER content and access and do not know that OER collections are available through the institutional libraries. Thus, there is a good opportunity for the libraries to choose the path to go towards contributing to the institutional mission through the support of OER initiatives.

This paper confirms what previous studies have already concluded, namely that the lack of time and unfamiliarity of content are two of the most common potential barriers to the lack of OER use by faculty in teaching and learning activities. When it comes to research, the use of OER increases, particularly when it comes to the use of open access articles. Regarding potential benefits, the study also confirmed previous research, when it concludes that the main advantage for the use of OER is its cost-effectiveness.

This study is valuable for those who seek to further understand OER perceptions, use and challenges among the community, as well as the important role that academic librarians can have in developing an institutional campaign to support the development of OER initiatives.

Open To What? A Critical Evaluation of OER Efficacy Studies

McDermott, I. (2020) Open To What? A Critical Evaluation of OER Efficacy Studies. In the Library with the Lead Pipe https://academicworks.cuny.edu/lg_pubs/129/

Reviewed by Natascha Chtena (Harvard University, USA)

This paper is a non-comprehensive literature review on the state and limitations of OER efficacy research, with particular focus on issues of cost and access, pedagogical practice, and academic labor. The conceptual lens adopted here by McDermott is that of critical pedagogy as defined by Paulo Freire in *Pedagogy of the Oppressed* (1968) and bell hooks in *Teaching to Transgress: Education as the Practice of Freedom* (1994). In a nutshell, critical pedagogy is an educational philosophy that views teaching as a political act. McDermott notes that OER have “have radical potential as transformative tools for critical pedagogy” but, if thoughtlessly employed, they risk serving as “a cost-free version of the status quo.” This is an important point that has yet to penetrate mainstream discussions on OER and open textbooks, particularly in the United States, where the author lives and works.

Drawing on a series of studies published in North America between 2008 and 2019, McDermott argues that existing research paints an incomplete picture of how OER are adopted, developed, and sustained in higher-ed by overlooking the political economy of OER creation and implementation, by overstating the financial benefits of OER, and by failing to properly examine the pedagogical choices driving OER initiatives. “Measurables like student outcomes”, McDermott states, “are too often foregrounded to appeal to administrators and funding organizations.” It is worth noting that, while McDermott uses critical pedagogy as a lens to analyze select studies in OER efficacy, this review is not concerned with how critical pedagogy is used in specific OER textbooks or learning materials. Instead, he analyzes these studies for evidence, or lack thereof, of critical approaches to OER adoption and survey design as it relates to cost and access, pedagogy, and academic labor. His goal is to make explicit subjects indirectly addressed, if not ignored completely, in the existing literature.

The methods are scarcely described and the findings not quantified, which is neither surprising nor damning considering that the paper’s argument is anchored in humanistic social science. According to the author, the studies, reports, and articles selected for this review were drawn mostly from open access journals and websites, though articles from the following databases and search engines were used: Education Resources Information Center (ERIC), Library and Information Science Source (EBSCOhost), Education Source (EBSCOhost), and Google Scholar. Although quantification was clearly not the goal of the analysis, it would have been

nice to know the exact number of studies included in the review, as well as the rationale behind the academic database/ search engine selection.

The review's findings are presented across three sub-sections, organized around the following themes: (1) Cost Reduction, Increased Access, and Student Outcomes, (2) OER and Pedagogy, (3) OER and Academic Labor. Key points made by McDermott are that OER efficacy studies rarely engage with and/or interrogate the pedagogical specifics of OER implementation—for example, the pedagogical characteristics of particular OER and the commercial textbooks they replace, or the ways in which OER intersect with pedagogical theories or faculty/student/staff collaborations; that the literature lacks transparency when it comes to the cost savings of OER; and that few studies detail the personnel involved or the costs required for OER initiatives. The paper concludes with suggestions for how to utilize critical pedagogy for future studies and grassroots OER initiatives.

Although not a systematic review, this paper identifies several empirical and conceptual gaps in the literature on OER. It will be of great interest to those engaged in thinking about the politics of learning and how they intersect the OER, although it should be read especially by scholars whose work centers on quantitative studies of efficacy and effectiveness.

Role of Open Educational Resources to Support Higher Geoscience Education in India

Verma, O. (2021). Role of Open Educational Resources to Support Higher Geoscience Education in India. *Journal of Geosciences Research*, Vol. 6, No.1, January, 2021.

https://www.researchgate.net/profile/Omkar-Verma/publication/352256159_Role_of_Open_Educational_Resources_to_Support_Higher_Geoscience_Education_in_India/links/60c0bb894585157774bf6e48/Role-of-Open-Educational-Resources-to-Support-Higher-Geoscience-Education-in-India.pdf

Reviewed by Anuradha Peramunugamage

Verma emphasizes that India is a vast and diverse country endowed with geo-resources but frequently challenged by a diverse array of geo-related hazards and identifies the need for geoscience specialists with the evidence of literature to discover geo-resources, assure their long-term sustainability, and address geoenvironmental problems. Further identified the importance of geoscience education for the country's overall prosperity. The establishment of the Centre for Online Education at the Indira Gandhi National Open University (IGNOU) in 2004

was one of the country's first steps in this direction, marking a watershed event in the country's educational history. Currently, this collection includes self-learning resources for around 227 IGNOU programs, including geology, geography, and environmental sciences, among others.

The Department of Higher Education, Ministry of Human Resource Development, has collected information on learners' enrollment and successful completion in two master's degree programs in geoscience education, one in geology and one in geophysics, from 2011-2012 to 2018-2019. The findings of the data analysis are rather fascinating. Researchers examined data on learners' enrollment and successful completion of two master's degree programs (geology and geophysics) from 2011-2012 to 2018-2019 and discovered that approximately 41 percent of learners successfully finished these programs throughout this time period.

The paper summarized the inadequate subject-specific knowledge of the candidates, which has been seen during the recruiting process over the last several years, with individuals scoring 30 to 40 percent on the written examination before being invited to appear before the selection committee for final consideration. Researchers mentioned numerous reasons for this performance, some of which are as follows: many learners receive their first exposure to geoscience education at the bachelor level, learners come from a diverse range of socio-linguistic and economic backgrounds, there is a scarcity of faculty, there is an uneven distribution of specialized faculty, and learners have limited exposure to field- and laboratory-based curricula, among others. However, proper analysis or evidence is not mentioned. Also, as mentioned there are a few publications on geoscience education published by Indian writers. The vast majority of learning materials, which include textbooks and practical guides, that are recommended as learning resources for various courses in geoscience education programs are of foreign origin.

Verma found that the teaching-learning community has a problem due to the scarcity of low-cost textbooks, practical manuals, and field guides/manuals in geoscience with an Indian provenance. In this context, developing geoscience educational resources as OER will be beneficial in terms of providing educational material for learners and teachers, as well as facilitating effective teaching and offering up-to-date course content. Additionally, it shows that the OER enables researchers to transform their work into educational resources that will assist geoscience faculty in revising their courses to incorporate emerging fields of geoscience, designing new interactive laboratory experiments, and gaining a better understanding of geoscience teaching practices.

Open educational resources in public administration: a case study in Greece

Mikroyannidis, A. & Papastilianou, A. (2021). Open educational resources in public administration: a case study in Greece. *Open Learning: The Journal of Open, Distance and e-Learning* (preprint).
<https://doi.org/10.1080/02680513.2021.1950526>

Reviewed by Viviane Vladimirschi

This paper describes the challenges faced by the public sector in terms of lack of openness and its impact on training and resource use for educational purposes in Greece. While the authors underscore the several advantages and benefits for open educational resources (OER) uptake in this closed context, existing obstacles hinder adoption, reuse, and adaptation for expanding and enhancing curricular and resource sharing for stakeholders. The authors advocate that OERs hold the potential to expand and enhance curricular and resource sharing in public administration and to this end training is necessary. To train civil servants for OER use, the National Centre of Public Administration and Local Government (EKDDA) was selected. EKDDA currently delivers vocational training to over 650,000 Greek public servants and has spearheaded an OER initiative for engaging civil servants.

The authors used a case study methodology to investigate the impact training on OER use would have on civil servants. The case study consisted of offering stakeholders training on the SlideWiki platform. A team of instructors and trainers from EKDDA provided training to trainees on platform use and OER use via online, blended and face-to-face courses. The pilot courses followed Salmon's (2004) 5-stage model of teaching and learning, which are geared towards providing learners skills to become self-regulated learners; increasing team maturity, and undertaking collaboration and co-creation activities. The methods used enabled learners not only to experience different learning modalities but also hands-on experience with the production OER. Artifact creation and collaborative co-creation are paramount to OER production thus the methods used were robust and appropriate in this context. Finally, this study can be easily replicated, and the method is clear and thoroughly described.

The authors used both quantitative and qualitative surveys to evaluate acquired knowledge and skills; learning achievements; and learning reactions that included the usefulness of the training, learners' satisfaction with the training, quality of the learning materials and improvement of overall knowledge. The SlideWiki platform was also evaluated. Overall impact of the training program was assessed two months after the end of the training program. Findings from the evaluation phase

are presented in a clear manner through use of graphs, numbers, pie charts and descriptive statistics, which provide support to the conclusions drawn. The authors did a good job at clearly articulating the argument by highlighting the positive impact OER use has on the much-needed collaboration between public sector employees and the need for such training courses to offer them new knowledge and skills. This collaboration may lead to the expansion and enhancement of curricular and resource sharing in public administration.

Overall, the presentation is well-organized. The article possesses high ease of readability and is accessible to laypeople. While the authors use a wide range of references to back up their study, it would be useful for readers if other studies involving training of civil servants for OER use in this same context had been included for comparison and contrast purposes. This article adds knowledge to extant literature on training public servants for OER adoption and use. The topic of training the public sector to engage in open educational practices is quite complex due to the lack of openness, a culture of collaboration, transparency and existing policies and laws that govern this sector. Hence, the findings of this study do have the potential to contribute to the open education field.

Open Educational Resources in Italy

Nascimbeni F. (2020) Open Educational Resources in Italy. In: Huang R., Liu D., Tlili A., Gao Y., Koper R. (eds) *Current State of Open Educational Resources in the "Belt and Road" Countries*. Lecture Notes in Educational Technology. Springer, Singapore. https://doi.org/10.1007/978-981-15-3040-1_4

Reviewed by Viviane Vladimirschi

This article discusses the current state of art of OER in Italy in both higher education and basic education sectors. It also provides a brief description of the Italian copyright law and its limitations and challenges (i.e., lack of policies for OE and OER uptake), which impact widespread OER adoption and use across all Italian educational sectors. Finally, the author provides suggestions and recommendations for implementing a national policy and specific actions aimed at capacity building, providing incentives and the development of a meta-platform to increase and foster OE and OER uptake in the Italian educational sector.

The method used is appropriate as it provides the reader with an in-depth view of the current state of OER uptake in Italy. The researcher conducted a thorough literature review and included key issues such as funding and undertaken actions and initiatives geared towards promoting the use of OE and OER at three main levels: the macro level - national and regional policies- the meso level- invested

stakeholders' networks and communities- and the micro level – single institutions and specific OER projects. The researcher also included data amassed from a survey carried out by the Italian Conference of Rectors. This survey was focused on understanding stakeholders' readiness and willingness to innovate educational practices via the adoption of OER.

The literature review and survey results provide relevant data that support the conclusions drawn. It is evident the researcher carried out a comprehensive investigation to back up the research claims advanced by the paper and to provide readers with a detailed understanding of the inherent challenges and opportunities regarding OER uptake in Italy. The researcher's knowledge and familiarity in the field of OE and OER are unquestionable and do indeed clearly articulate all arguments put forward. Particularly in the last section of the paper "Discussions and Conclusions" the researcher sheds light and addresses important factors that would help overcome several challenges related to OER adoption and use at the policy level and in practical implementation actions across the Italian higher education and basic education sectors. These arguments strengthen the need for policies, capacity building, awareness-raising and mechanisms that incentivize such practices.

Overall, the presentation is very well-organized. The article possesses high ease of readability and is accessible to other researchers in the field that face similar problems related to the adoption and use of OER in their countries. This paper adds knowledge to the current state of OE in Italy. It is an excellent resource for researchers from other countries to compare the progress of their current OER developments and achievements. The paper also presents some invaluable suggestions and practical implementation actions, which could be implemented by other OER researchers and/or advocates according to their specific contexts and available resources. Thus, the findings from this paper have the potential to contribute to the open education field since they not only underscore existing challenges faced by most countries in terms of OER uptake but also bring to the table possible solutions to overcome these challenges.

Incentivizing faculty for open educational resources (OER) adoption and open textbook authoring

Todorinova, L. & Wilkinson, Z. T. (2020). Incentivizing faculty for open educational resources (OER) adoption and open textbook authoring. *The Journal of Academic Librarianship*, Volume 46, Issue 6. <https://doi.org/10.1016/j.acalib.2020.102220>

Reviewed by Paula Cardoso

In this paper, Todorinova & Wilkinson (2020) explore the adoption of OER by faculty at an American University. The driving force behind the research was the concern with the costs of university textbooks and the leit motiv was, thus, to promote the affordability of textbooks and relieve students' financial burden.

The authors assessed the experiences and perceptions of faculty who had participated in an incentive-award programme in place at the university, to promote affordable course materials, among which Open Educational Resources (OER). The survey also explored faculty knowledge and use of OER, besides their interest and perception of received support to implement the programme, in order to inform future programme development.

The literature review conducted by the authors builds on the benefits, barriers and challenges in OER adoption in the teaching and learning process in higher education, from the lens of a textbook affordability incentive programme.

Within the limitations of presenting a small sample, due to the limited number of participants in the institutional programme, the results show that faculty responded well to the programme and, in general, felt that students benefitted from having an instructional experience based on redesigned course materials.

Despite the positive impact most faculty identified in the programme, results show there are challenges at several levels. On one hand, faculty reported a general inability to find materials that would always suit faculty's needs, but, at the same time, had no particular interest in creating OER or in authoring open textbooks. On the other hand, faculty reported departmental support in developing innovative practices and pedagogies, but not necessarily concerning OER.

Although the paper had the objective of assessing the implemented institutional programme, the authors may take the opportunity of using the research results to further develop the programme in a way to provide specific training on OER authoring and, simultaneously, to adopt different triggers and incentives for faculty at different stages in their career.

Most research on OER adoption by faculty focuses on a bottom-up approach, where OER pioneers and champions usually implement their practices and motivate others to do it. The relevance of this paper is that it brings a top-down approach and studies this perspective to implementing an institutional strategy.

Open Educational Practices

Transformation and digital literacy: Systematic literature mapping

Farias-Gaytan, S., Aguaded, I. & Ramirez-Montoya, MS. (2021) Transformation and digital literacy: Systematic literature mapping. *Education and Information Technologies* (2021). <https://doi.org/10.1007/s10639-021-10624-x>

Reviewed by Helen DeWaard (Lakehead University, Canada)

Digital transformation and digital literacy are key considerations in higher education, now even more evident with the impact of online and remote teaching and learning resulting from the COVID-19 pandemic. For this reason, the research conducted by Farias-Gaytan et al., (2021) is worthy of attention as it provides a timely and insightful systematic literature mapping of research from 2015 to 2020. This paper opens a window on the global reach of digital transformation and digital literacy as topics of interest for researchers in higher education. Farias-Gaytan et al., (2021) outline a compelling case, as evidenced in the research, that digital transformation has had significant impact on higher education, with primacy of interest found in the areas of innovation of learning practices and the development of digital competencies (Farias-Gaytan et al., 2021).

One challenge to deeper understanding of this work by Farias-Gaytan et al., (2021) is the absence of an explicit conception of digital transformation and digital literacy. While the Boolean search strings applied by the authors include the terms media literacy, digital literacy, and digital competency, this research focuses more on digital transformations and the resulting issues of integration of technologies into all facets of the higher education sector, and less on digital or media literacies. The authors use the terms media and digital literacy interchangeably throughout the paper yet research shows there are distinctive characteristics that distinguish these terms (Buckingham, 2020; Spante et al., 2018).

The authors apply five categories for digital transformation based on work by Anderson and Ellerby (2018) that includes customer, strategy, technology, operations, and organization and culture. These categories emerge from a business context rather than an educational model so potential gaps in the analysis of digital transformation on teaching and learning, particularly in open educational contexts, are evident. An alternative framework that might better match the higher education sector and still frame the analysis of the research could be the ten dimensions of open education (Inamorato dos Santos, et al., 2016).

While the writing may at times be challenging for those not familiar with terminology and processes used in the research design and analysis (e.g. citation counts or impact factors), one significant benefit of this research is the accessible database of 298 curated articles for open review and examination. This adds significant value to those studying the field of digital transformation in higher education. Additionally, this research adds two analyses of interest to those new to the study of digital transformation in higher education. First, the geographic specific research from research question (RQ) three will help locate local or global collaborators. Second, the citation counts resulting from RQ2 can inform research work that has gained attention in the past five years, making it of some value to current literature searches.

The analysis of research question five and six add the most value to the field of open educational studies, with insights on how digital transformations are classified, and the trends and issues from the field of digital transformation in higher education. Farias-Gaytan et al., (2021) found significant diversity in the literature, and discovered that 75% of the studies made reference to pedagogies that impact users' digital skills. Interestingly, as revealed in Figure 8, very few articles in the literature collection relate to open education. Based on the research analysis, the authors determine that the "development of digital competencies of both teachers and students contributes to the adoption of new technologies that support the learning process" (Farias-Gaytan et al., 2021, Discussions, paragraph 5) and that digital literacy is promoted when diverse technological alternatives are enabled in educational contexts. Digital pedagogies that impact student and teacher's digital transformations require organizational strategies that support their adoption, according to Farias-Gaytan et al., (2021).

Opening up Educational Practices through Faculty, Librarian, and Student Collaboration in OER Creation: Moving from Labor-Intensive to Supervisory Involvement

McGeary, B., C. Guder, and A. Ganeshan. (2021). Opening up Educational Practices through Faculty, Librarian, and Student Collaboration in OER Creation: Moving from Labor-Intensive to Supervisory Involvement. *Partnership: The Canadian Journal of Library and Information Practice and Research*, vol. 16, no. 1, June 2021, pp. 1-27, <https://doi.org/10.21083/partnership.v16i1.6149>

Reviewed by Natascha Chtena (Harvard University, USA)

This article offers a detailed overview of an academic library's evolving approach toward OER implementation, with a focus on the labor implications for the various

stakeholders involved. While it is oriented predominantly toward practitioners in the field, it will be of interest to anyone concerned with questions of cost, (invisible) labor, and long-term sustainability as they relate to library-led OER initiatives.

Taking Ohio University Libraries as a case study, the authors propose a model for transitioning library-led OER initiatives away from labor-intensive activities (e.g., workshop design & delivery, training sessions) to a learner-centered model where library personnel focus on project management responsibilities. The model puts students at the forefront of OER and textbook affordability work, through compensated involvement in OER authorship and post production work, such as proofreading, checking facts and citations, verifying statistics and formatting.

With great transparency and detail, the authors describe several initiatives undertaken by the Ohio University Libraries to encourage OER adoption and use over the years, centering on a grant-funded initiative that provided support services for faculty creating OER, while also enhancing undergraduate education across the institution. This particular grant was awarded by the Ohio University Foundation in 2018 and provided \$20,000 to support the development of five OER projects that have directly involved students in the creation of those materials. Among the projects discussed in the paper are an Hispanic linguistics open textbook created using only student-authored texts, student-generated test banks to accompany existing OER materials for a large-enrollment art history course, and several other projects in which hired student assistants have helped faculty to develop content for open textbooks.

The authors contend that actively involving students in OER creation has improved student-faculty-librarian relationships and increased student engagement, while also helping foster open educational practices across the institution. According to the authors, the shift away from labor-intensive activities and toward more collaborative partnerships with faculty and students to produce OER projects also helped address barriers to OER adoption and creation faced by faculty, including a lack of time, as well as access to the right technology and the technical know-how to use it successfully.

While the authors suggest that the grant program instituted by Ohio University Libraries can be replicated at other institutions without great monetary investment, their model will likely be most applicable to institutions of a similar size and type as Ohio University, a doctoral-granting, high research university with a total enrolment of 28,770 (as of September, 2021), a well-staffed library, and other campus units providing faculty support (e.g., Academic Technology, the Center for Teaching & Learning). It is also worth noting that the paper does not include any program evaluation data or similar measures of impact/effectiveness. Nevertheless, this is a well written case study that includes a solid literature review and offers plenty to

chew on for academic librarians seeking to build or expand OER programs, as well as scholars thinking about the role of libraries in OER and open pedagogy.

Open Educational Resources in virtual teaching communities

Recio Mayorga, J., Gutiérrez-Esteban, P. & Suarez-Guerrero, C. (2021). Open Educational Resources in virtual teaching communities. *Apertura*, vol.13, n.1, pp.101-117. <https://doi.org/10.32870/ap.v13n1.1921>

Reviewed by Ada Czerwonogora (Universidad de la República, Uruguay)

This work is based on the challenge that the digital society demands to respond with a new conception of learning, and to test educational proposals that are open, flexible and adjusted to the needs of students. The access and application of new educational resources by themselves do not generate innovative environments: it is necessary to develop support and counseling strategies to articulate these educational proposals in the classroom.

The research focuses on knowing and analyzing the meaning, uses and potential of open educational resources (OER) in a virtual teaching community (*comunidad virtual docente*, CVD). CVDs were characterized as learning cyber communities (Murua, Domingo & Cacheiro, 2015). Different approaches to OER (Atkins, Brown & Hammond, 2007; Atenas & Havemann, 2014) and OEP (Cronin, 2017) were surveyed, and also examples of their use in projects and communities. The authors highlight the need to "investigate an emerging discipline, constantly advancing towards an open and flexible education model, in which the use of CVs is increasingly being promoted, and where OER are of special importance" (Recio Mayorga, et al, 2021, p. 104).

The methods section of the paper is quite detailed. The research design was qualitative, describing meanings, uses and potential of OER while trying to understand for what and how teachers use OER. The study focused on Common Open Educational Resources_STEM virtual community (<http://agrega.educacion.es/>). Two instruments were used for data gathering: semi-structured interviews and a very interesting guide designed for this study, including 34 descriptive and binary (yes / no) indicators. Both instruments were validated in a previous paper (Mayorga, Gutiérrez-Esteban & Suárez-Guerrero, 2018).

The evidence showed that the main subject of interest for the CVD was OER use in STEM. It's a public CVD, with more than 150 members. The CVD's analysis was based on the evaluation guide and its indicators. The results pointed out that modification and OER adaptation were allowed; OER content was divided by

authors and members with the highest popularity. Activities including OER for application in the classroom were shared on a monthly basis.

From the coding of the interviews (11 participants), nine main categories were obtained: the reasons for participation in CVD were mostly due to permanent training. The teachers did not participate in other CVs. The themes referred to the development of training courses and the use of OER, innovative experiences, teacher training, science, etc. Feedback was essential for the community. Most considered that the development of classes with OER increased student's motivation. For this reason, the experience and contact with REA were positively valued. The interviewees agreed that the use of OER fostered a more flexible and open teaching process.

The authors considered that this work is an approach to a more complex appropriation process that depends on multiple variables. They agree with Area, Miño, Rivera-Vargas & Alonso (2020), that considering the pedagogical variable in the study of technology in education could contribute to overcoming the bias in research focused on artifacts and their effects. Moreover, it could lead to understanding of policies, subjectivities and practices to build a digital educational praxis. On the other hand, they point out that the difficulty in defining the concept of OER generated a polysemy of terms. Furthermore, the use of OER is not widespread. The contributions and feedback that occurred in these spaces were accompanied by activities related to the subject matter of the courses, where OER were shared along with guides and didactic units for their integration into the curriculum, as well as examples of sessions for their development in the classroom.

In sum, the use of resources located in CVDs not only involves a technical exercise, but also a professional and social practice, a change in the way of thinking, feeling and doing with technology. It reflects a change in the pedagogical culture, towards a culture that recognizes working openly, as well as modes of participation that go beyond standard or regulated training (López & Bernal, 2016). For the development of open research, it is important to know that this turn will depend on the creation of new open and collaborative learning environments, educational scenarios that take advantage of digitization, and that are significant for the daily life and professional life of the teacher.

MOOCs

Open to MOOCs? Evidence of their impact on labour market outcomes

Castaño-Muñoz, J. & Rodrigues, M. (2021). Open to MOOCs? Evidence of their impact on labour market outcomes. *Computers & Education* 173.

<https://doi.org/10.1016/j.compedu.2021.104289>

Reviewed by Martin Weller (The Open University, UK)

This paper looks at whether participation in MOOCs has an impact on employability for the participants, specifically examining “the impacts that MOOCs have on wages and on the probability that participants in MOOCs will change either their employer or the tasks they perform within their current firm.” Improved employability is often advanced as a benefit of MOOCs, but the authors contend that there is scant research in this area.

The method they use to investigate these questions is to focus on two very employment focused MOOCs in Spanish: ‘Business Intelligence’ and ‘Communication and Marketing’. They use two surveys, one in 2015 prior to the MOOC and one again in 2017. This provides a reasonable time frame between taking the course and any related employability outcomes.

Their main findings are that MOOC participation had no impact on wages but did increase the likelihood of workers continuing to work at the same firm and performing the same job.

This kind of longitudinal study is relatively rare in MOOC literature and is a useful example of how to interrogate the claims often made about a particular innovation. The positive impact of MOOCs seems fairly limited – being more likely to be employed in the same position at the same company. The data set is of course limited, with only two MOOCs in the Spanish context, but it represents a good example of returning to the claims made regarding educational innovations (which might include OER) and examining how they have played out over time.

Women's participation in MOOCs in the IT area

de Souza, N. S. & Perry, G. T. (2021). Women's participation in MOOCs in the IT area. *Computers & Education*, 173.

<https://doi.org/10.1016/j.compedu.2021.104270>

Reviewed by Martin Weller (The Open University, UK)

Examining data from over 4,000 learners across four MOOCs on a Brazilian platform, this paper examines whether women's student profile, persistence and grades differ from those of men studying the same MOOCs.

The student profile addressed factors such as intention to finish, time spent on the course, educational level and age group. There was no significant difference between men and women across any of these factors. The researchers also undertook a cluster analysis using performance data, and found similar groups between genders, such as "high performance students. Two MOOCs demonstrated higher persistence for men but across all four courses, the distribution of persistence and grade was the same for men and women. The authors note that women's enrolment was much lower, and, as with many MOOCs participants were from relatively privileged backgrounds, with most having at least a bachelor's degree.

The paper combines a number of data points and a large data set. The findings, although they don't reveal a difference between men and women, are interesting, in that it suggests that for these MOOCs at least, gender is not a factor in motivation, performance and persistence.

Exploring the reliability and its influencing factors of peer assessment in massive open online courses

Li, H., Zhao, C., Long, T., Huang, Y., & Shu, F. (2021). Exploring the reliability and its influencing factors of peer assessment in massive open online courses. *British Journal of Educational Technology*, 00, 1– 15. <https://doi.org/10.1111/bjet.13143>

Reviewed by Martin Weller (The Open University, UK)

This paper examines the reliability of peer assessment in MOOCs. The large scale and lack of formal support in many MOOCs has meant that peer assessment has often been proposed as a viable assessment method. By examining over 5,700 submissions, across 18 assignments in three different MOOCs on a Chinese

platform, the authors investigate the reliability of peer assessment in the MOOC context.

They report that peer reviewers tended to give scores at the extremes and that peer assessment was not particularly reliable. The assignment type was a factor in reliability, with an e-portfolio format more reliable than assignments based on papers or proposals. The reliability of peer assessment was inversely correlated to the number of reviewers per assignment and the reviews completed per reviewer.

They suggest that peer assessment should avoid being used as a summative assessment method, and should be assigned relatively low weights to final grades and that advice should be given on how to identify medium quality work to avoid the grading at extreme ends of a marking continuum.

This paper is based on a large data set, although restricted to only three MOOCs on one platform in the Chinese context, so its generalisability may be reduced. However, it does demonstrate how initial claims regarding MOOCs are now being more effectively examined and researched. Peer assessment was proposed as a model for coping with scale and absence of formal support. However, while it has been demonstrated to be an effective method in formal education and at small scale, this study calls into question its reliability within the MOOC model.

Open Pedagogy

Learners' Perception of the Transition to Instructor-Led Online Learning Environments: Facilitators and Barriers During the COVID-19 Pandemic

Kamble, A., Gauba, R., Desai, S., & Golhar, D. (2021). Learners' Perception of the Transition to Instructor-Led Online Learning Environments: Facilitators and Barriers During the COVID-19 Pandemic. *The International Review of Research in Open and Distributed Learning*, 22(1), 199-215. <https://doi.org/10.19173/irrodl.v22i1.4971>

Reviewed by Anuradha Peramunugamage

The purpose of this study was to ascertain the reactions of traditional face-to-face learners at Savitribai Phule Pune University, India, to the abrupt shift to online learning in March 2020 as a result of the pandemic, as well as the effect on their learning. In light of the COVID-19 epidemic, the authors investigated traditional learners' perceptions of online learning and its acceptance in India. The research investigated the phenomena through the use of a qualitative case study. The study examined learners' adaptation to online learning during the COVID-19 epidemic and nationwide school closures. The study's participants were enrolled in a master's program in business administration at a business school affiliated with Savitribai Phule Pune University. Due to the pandemic, the business school suspended classroom instruction and instead delivered the remaining course material via OLEs such as Microsoft Teams. Interviews with participants took place in mid-April 2020, at the conclusion of the second semester. The study enrolled 35 students. Microsoft Teams enabled 35 students to participate in structured interviews. Eight open-ended questions were asked of participants regarding their transition to OLE and their perspectives on teaching and learning in a technology-mediated environment. Additionally, the interview questions were verified by a university panel of specialists (three faculty members and two students). The initial coding, conducted using NVivo software, identified patterns, categories, and connections between the codes. The data from the interviews revealed fifteen distinct categories. The categories revealed five major themes.

The researcher mentioned that the participants emphasized the importance of having a computer and Internet access in order to participate in online courses. It is evident that online education requires access to an unrestricted Internet connection via a desktop, tablet, smartphone, or laptop. Study participants (n=32) stated that an Internet connection was a significant impediment to online learning. While some participants believed online learning was more beneficial than traditional learning and improved their ability to focus, others believed it was ineffective. These findings

are common to all developing countries. Even though the OLE has a number of benefits over traditional classroom instruction, in this study, several participants criticized the OLE for its lack of one-on-one conversations with the teacher and clarification. According to some participants, the sessions devolved into one-way communication between instructors, and the instructional materials were delivered in an ineffective manner. Additionally, participants stated that students struggled to maintain focus in class due to distractions, numerical and practical courses were difficult to grasp online and teachers' lack of control in an online environment. Furthermore, research has revealed, online learning is best suited for theoretical courses rather than practical courses involving numerical concepts. The learners agreed that the most critical factor was the instructor's physical absence. The participants perceived a dearth of learner-instructor interaction in the OLE. Student engagement was harmed by the distance, resulting in one-way teacher contact. These findings should be finalized after analyzing the course activities and delivery mechanism. As the authors suggested, additional studies with a larger sample size should be conducted in India's other regions, as well as there should be improved OLE delivery and more training on OLE in underdeveloped countries such as India.

What Is Open Pedagogy? Identifying Commonalities

Tietjen, P., & Asino, T. I. (2021). What Is Open Pedagogy? Identifying Commonalities. *The International Review of Research in Open and Distributed Learning*, 22(2), 185-204. <https://doi.org/10.19173/irrodl.v22i2.5161>

Reviewed by Helen DeWaard (Lakehead University, Canada)

In the field of open education, there are contentious debates and problematic terminologies that impede research. Tietjen and Asino (2021) attempt to bring clarity to the conception of open pedagogy since a "definition acts as a calibrating lens to look at a phenomenon" (Tietjen & Asino, 2021, p. 199). In addition, the authors apply the short form OP to refer to open pedagogy, which helps differentiate this concept from the current confusion when using OEP for both open pedagogy and open practices. This research is a commendable effort to bring much needed cohesion to the challenging concepts of open pedagogy.

The extensive review of the research upon which Tietjen and Asino construct their five-circle framework is bounded by the years 2011, when web-based open education expanded after the Open Educational Quality Initiative (OPAL) Report (Andrade et al., 2011) and the year 2020. The authors divide this time frame into two phases using 2017 as the dividing mark since, as they explain, this was designated the Year of Open and the OER17 conference generated a significant

number of blog posts on the topic of open pedagogy. While these benchmark years are understandable ones, this narrowed focus on a single event or conference venue potentially limits the scope of the research. A broader view could include other significant events such as the Paris Declaration (UNESCO, 2012), the Open Education Conference (OpenEd17, n.d.), or the OEGlobal Conference (OE Global Consortium, n.d.) where the tenth anniversary of the Cape Town Open Education Declaration (CPT+10, n.d.) was celebrated. These additional events and documents may have potentially contributed additional clarity to the search for a definition of OP.

The research review conducted by Tietjien and Asino (2021) included a variety of source types, such as peer reviewed articles, books and book chapters, and conference proceedings. The authors describe the search strategies used to locate the 938 documents referencing open education, open pedagogy, or open educational practices. This was further reduced to 87 articles by eliminating duplicates and focusing on articles that provided substantive detail to define open pedagogy. While further reduction to 24 articles was based on having “met the relevant criteria” (Tietjien & Asino, 2021, p. 188), these criteria are not explicitly discussed. The added value to Tietjien and Asino’s (2021) research is the inclusion of germane blog posts emerging from the OER17 conference. While many names of blog post authors may be recognizable by those in the field of open education, the limitation in how these relevant blog posts were located should be recognized as a potential limitation. The selection of bloggers connected to the OER17 conference constrains the potential definitional insights from a diversity of voices. Overall, the research process and results are well described and the analysis and findings reveal interesting insights.

The five-circle framework presented by Tietjien and Asino (2021) provides an interesting conceptualization of OP and is grounded in the research. The five elements overlap and are interconnected. These elements include a diversity of voices, a participatory mindset, the application of open licenses, expansion beyond traditional academic boundaries, and cultivating collaboration (Tietjien & Asino, 2021). While this framework does much to bring coherence to the concept of OP by enhancing clarity and establishing the impetus for further research, there is a noticeable absence of an explicit inclusion of criticality and social justice. With this five-circle framework Tietjien and Asino (2021) accomplish their goal of identifying commonalities within the literature which will help others, particularly those new to the field of open education, make sense of the concept of OP, and add to the open discourse focusing on this conceptualization of OP.

Of particular interest are two key questions Tietjien and Asino (2021) ask. First, why are the learning sciences absent from the open pedagogy discourse, particularly with its connection to Scardamalia and Bereiter’s (2014) knowledge-building

network. Second, the question of why the “conversation around the term pedagogy as it relates to the OP literature is also ominously mute” points to a considerable gap in current research. Both questions point to areas that will potentially lead to further research, and makes this article a worthwhile read for anyone in the field of open education.

Exploring Student Perceptions as Co-authors of Course Material

Werth, E., & Williams, K. (2021). Exploring Student Perceptions as Co-authors of Course Material. *Open Praxis*, 13(1), 53-67.

<http://dx.doi.org/10.5944/openpraxis.13.1.1187>

Reviewed by Glenda Cox (University of Cape Town, South Africa)

The authors compare their results to only two other studies on students that have been involved in OER-enabled pedagogy. Both of those studies were at large public institutions. This research therefore provides extremely useful empirical evidence of student perception and experience. The research supports previous claims of the potential of this approach where students are motivated and gain skills and confidence.

This research takes place at private open enrolment university. Faculty redesigned a First-year seminar course to include OER-enabled pedagogy. The course had a 40% attrition rate, so the objective was to engage the students. Over 50% of the students attending were from low-income groups and therefore another purpose of the re-design was to save students money by including free materials.

Students were involved in creating content for the course and having their content included in an e-book. Students identified a knowledge gap, researched the topic and produced an artifact (video or infographic). This could be done individually or in groups. Students submitted project proposals, a draft with peer review and a final project. Instructors guided them along each step. Student's agency was enhanced with support from the instructors. They were also taught about Creative Commons and could choose their own license and whether they wanted to be attributed.

A mixed-method approach was used. A survey was conducted with all the students in the last week of class, 92 (329) completed the survey (28% response rate). The survey questions are available as an appendix which is useful for other researchers when embarking on a similar OER-enabled pedagogy. The survey was followed by 12 semi-structured interviews. In terms of validity the authors discuss their

involvement in redesigning the curriculum and facilitated training for instructors. They are careful on their transparency and reflexivity.

The survey included 15 questions. Six questions in the survey focused on students attitudes towards this new OER-enabled pedagogy. Around 40 % of students were excited, motivated, positive, and engaged by the new course curriculum. The survey used a Likert Scale and neutral responses to these questions ranged between 35-44%. Students were not concerned about having their name on materials and having the materials available for future classes.

Three questions measured whether student's skills improved in three areas, completion of a multi-week project, collaboration and research and drawing conclusions. Positive responses ranged from 44%- 56.5%. Students were willing to take another course like this although 38% were indifferent, this result was similar to what Hilton et al found.

The interviews provided greater insight into why students were motivated and felt positive about OER-enabled pedagogy. Students wanted to help others and so they were pleased that the resource they created may be useful in future. Students enjoyed agency and being able to choose topics that they found interesting. This agency is an important affordance of this open pedagogy and it disrupts the power balance in the class giving students a voice and ownership of teaching materials. This empowering aspect aligns with calls from students globally to decolonise curricula and align with principles of social justice.

The first research question addressed the area of student motivation and engagement in this open pedagogy. As hypothesised students were mostly excited and positive about the course. Their engagement was positive. This aligns with the work of previous authors (Hilton et al and Sheu).

The second research question focused on any concerns students might have about the 'openness' of the assignments. As predicted students were keen to have attribution. The authors suggest that there may be a connection between social media use and one's willingness to share. More research needs to be done in this area.

There were lots of neutral responses, is this a first-year student trend? Researchers will only know if more surveys are completed. There were also a small percentage of negative and/or unmotivated students. One reason given was that these students felt other students would not use their resources in future. This can be tested in future years as OER pedagogy matures.

Understanding student experience of the co-creation of materials is a very important aspect of future research in open pedagogy. More studies like this one at different

institutions with different levels of students and different disciplines is needed to improve the process of the design of co-created student materials.

Innovation

Producing OER with convOERter: First Evaluation and Feedback

Ali, L. & Schroeder, U. (2021). Producing OER with convOERter: First Evaluation and Feedback. In Gabellini, C., Gallner, S., Imboden, F., Kuurstra, M. & Tresp, P. (edit) *Lehrentwicklung by Openness – Open Educational Resources im Hochschulkontext*. pp.45-48.

http://www.sfdn.ch/wp-content/uploads/Lehrentwicklung_by_Openness_OER_im_Hochschulkontext.pdf#page=45

Reviewed by Robert Farrow (The Open University, UK)

This article presents the results of initial evaluation of a tool named convOERter which aims to facilitate the production of OER from other online resources. The prototype tool works with Microsoft Word documents and Microsoft PowerPoint presentations, replacing non-OER images with open equivalents taken from image portals like Flickr and CC Image Search. Metadata and licence information are also retrieved and integrated into the new product when it is published. This functionality is complemented by web analytics which can be used to reconstruct and build on the operation. This paper reports on the initial evaluation of the prototype.

23 participants took part in the evaluation across several different workshops. More than half had previous experience of working with OER, and more than three quarters agreed that finding suitable images is a challenge.

The evaluation is rather brief. It was found that the convOERter tool was considered easy to use and more than 90% felt that it could be a valuable tool for instructors in converting their materials to OER. However, the suitability of the substitute images got a more mixed response. Just over half (53.8%) felt that the images returned were appropriate, or that the tool encouraged them to produce more OER.

There seems to be a lot of enthusiasm for the idea of semi-automated support for OER production among those that participated in the evaluation. If the results can be improved and other types of content included in the operation then the convOERter tool could be a very interesting and useful tool for practitioners.

The Global Micro-credential Landscape: Charting a New Credential Ecology for Lifelong Learning

Brown, M., Nic Giolla Mhichíl , M., Beirne, E., & Mac Lochlainn , C. (2021). The Global Micro-credential Landscape: Charting a New Credential Ecology for Lifelong Learning. *Journal of Learning for Development* , 8(2), 228-254.

<https://jl4d.org/index.php/ejl4d/article/view/525>

Reviewed by Robert Farrow (The Open University, UK)

This article provides a timely overview of the landscape around microcredentials - short, accredited courses intended to be delivered flexibly - and contextualises this by highlighting their attractiveness as part of the post-pandemic return to work and digital education. The paper begins by elaborating several terms relating to microcredentials including nanodegrees, digital badges, short online courses, and micromasters, showing how different countries have shown different patterns of interest in different terms. Overall, the landscape is somewhat convoluted with many overlapping terms and strategies. The authors propose three emergent categories: from bundled to unbundled learning; from non-credit bearing to credit bearing; and microcredentials which are unbundled but credit bearing.

The authors note that lack of standardization has not hindered activity in the field, with governments, international organisations, business and higher education all showing a strategic interest. However, the case is made that greater synchronisation and harmonization is needed to enable progress. In Europe this could be provided by the coordination of national recognition frameworks with the European Qualification Framework (EQF) and the Common Micro-credential Framework (CMF) developed by the European MOOC Consortium.

An excellent summary of the state of the art in micro credentialing is conveyed, taking in different stakeholder perspectives and summarising activity in different countries and regions. The main takeaway is that there is a need for a common and unified credential ecosystem that incorporates microcredentials; is transparent, using a common language; and is flexible, offering multiple pathways to recognition and engaging employers. It is suggested that some regions (Europe, Australasia, Canada) are in advantageous positions to offer this.

Navigating support models for OER publishing: case studies from the University of Houston and the University of Washington

Santiago, A. and Ray, L. (2020). Navigating support models for OER publishing: case studies from the University of Houston and the University of Washington. *Reference Services Review*, Vol. 48 No. 3, pp. 397-413.
<https://doi.org/10.1108/RSR-03-2020-0019>

Reviewed by Rebecca Pitt (The Open University, UK)

This paper presents two examples of US higher education institutional support for developing and publishing OER. Both case studies provide guidance and support for institutions who are at the initial stages of considering how best to support educators who are publishing OER at their institution.

There is currently little literature or examples of institutional OER publishing programmes available. However, this paper, and others noted, provide a number of varied examples to draw on. These fall into two categories, as identified by the Open Education Network (OEN, previously Open Textbook Network): minimal institutional support (e.g. educator driven with institutional support specific points) or institutionally supported throughout the duration. The two case studies discussed in this paper fall into the former category. The literature discussed surfaces issues such as workflows, approaches to sustainability and publication, and external support from organisations such as OEN and Rebus.

Presenting the motivation, method, support and outcomes to date of the University of Houston (UH) and the University of Washington (UW) reveal a number of differences in approach and context, as well as shared questions and challenges. These include the review process for open textbooks and other OER, ensuring accessibility, institutional policies and access to materials post-tenure. Developing realistic timescales for materials and how to recognise impact beyond cost savings was also important and connected to moving beyond the issue of textbook costs, which is often the primary driver for OER adoption. As discussed by the authors, continuing to focus on cost can limit development of institutional programmes to broader goals or aspirations, which ensure sustainability.

In addition to the rich detail provided by both case studies, there are very useful insights and perspectives provided by UH and UW colleagues who are specifically dedicated to supporting open initiatives at their respective institutions. The paper also concludes with a clear and pertinent set of recommendations for institutions

who are considering how to embed and support the development of OER at their institutions. These recommendations are intentionally of wider interest and applicability to the open education community. Additional areas for further research and models are also considered.

Social Justice

Advancing Social Justice for Asylum Seekers and Refugees in the UK: An Open Education Approach to Strengthening Capacity through Refugee Action's Frontline Immigration Advice Project

Charitonos, K., Albuerno Rodriguez, C., Witthaus, G. and Bossu, C. (2020). Advancing Social Justice for Asylum Seekers and Refugees in the UK: An Open Education Approach to Strengthening Capacity through Refugee Action's Frontline Immigration Advice Project. *Journal of Interactive Media in Education*, 2020(1), p.11. <http://doi.org/10.5334/jime.563>

Reviewed by Paco Iniesto (The Open University, UK)

The authors in this paper point out Britain's asylum system is failing the most vulnerable and for that purpose, the charity Refugee Action developed the Frontline Immigration Advice Programme (FIAP). FIAP is a technology-supported capacity strengthening programme that aims to increase access to justice for those going through the asylum system in the UK. The authors provide a detailed literature review about access to social justice in the UK. The key aspect of the research carried out in the paper has to do with the design of the FIAP programme, for that purpose authors had interview six people from the organisations involved in the FIAP, but as well, from Refugee Action and the Office of the UK's Immigration Services Commissioner.

The methodology used is a view on social justice to explore the relationship between social justice and open education. Results from the research contribute with six dimensions for social justice approaches for professional learning as demonstrated through the case of the FIAP as an Open Education initiative for Social Justice. The dimensions are:

- Deliberate iterative design.
- Access to provision.
- The flexibility of provision.
- Development of resources.
- Support
- Advancing knowledge and skills whilst adapting to the workplace.

Authors point out that all these dimensions should be carefully considered to create spaces for practice and care for the most vulnerable, as well as for those involved in the provision of services. This using this approach will help to address some of the

systemic issues affecting the refugee sector and will also support empowering, enhancing legal literacy and self-agency for professionals in the sector.

Even the sample is relatively small and limited to a UK context, it is based on expert and experienced profiles in the area of a programme such as FIAP. An added value is that it keeps strong foundations on Open Education as an initiative for Social Justice. It will be certainly promising to see how the dimensions are used in future research for their refinement of a framework for working with organisations to provide holistic support for professional learning across an entire sector, with a longer-term aim to increase impact through openness. This aspect is as indicated by the authors quite important since the use of digital and online technologies for learning in sectors other than traditional educational settings is in expansion.

Open educational resources and social justice: Potentials and implications for research productivity in higher educational institutions

Ochieng, V. O., & Gyasi, R. M. (2021). Open educational resources and social justice: Potentials and implications for research productivity in higher educational institutions. *E-Learning and Digital Media*, 18(2), 105-124.

<https://doi.org/10.1177%2F2042753021989467>

Reviewed by Paco Iniesto (The Open University, UK)

The focus of this extensive paper is to analyse the contribution of OERs and Social Justice on research productivity in higher education institutions using as methodology a scoping review. Authors in the background literature define the context of OERs and Social Justice. Then move on that relationship to their use on research productivity in institutions of higher learning, considering the positive benefits of OER to different stakeholders (learners, educators, institutions, and governments) and addressing key educational challenges. Authors detail, as well, some of the most notable OER initiatives (OpenLearn, OER Impact Map, OERu, UNESCO-COL OER, etc until a total of 22). Finally, the impact, threats and demerits of OERs are reviewed considering how OERs emphasise the objective of altering the accessibility of learning materials to enable learners to take active roles in shaping their learning. While limitations reported include sustainability issues, quality, and intellectual copyright.

Some of the findings indicate that the proponents of OERs and OEPs largely guided by Social Justice ideals are keen on changing the narrative around the educational provision and its perception and understanding in the contemporary world.

Evidence points to a positive impact of OERs and OEPs on research productivity in higher education, there are salient challenges that ought to be addressed if OERs and OEPs are to have maximum impact in the educational sphere. The infrastructural, technical skills gap, economic, social, and legal challenges that impede full actualization of OERs by stakeholders, must be addressed if universal operationalisation of OERs is to be realised. One example given is the overuse of English OERs limiting Social Justice in different languages.

Following the authors' argumentation, the fact that many open and free-to-use resources and websites are available on the internet means that optimisation of OERs requires attitudinal change among users on web-based learning and usage. Therefore, some implications are suggested from this piece of research for the future of OERs and social justice:

- Raise OERs awareness among stakeholders on the existing OERs in terms of long-standing viability and quality.
- Institutions should put in place open publication divisions to plan and support the publication of books and journal papers on emerging areas.
- Establishment of appropriate infrastructure for ICT facilities, research centres, and online information.
- Infrastructural development through the creation of institutional research funds.

In general terms, the article provides a good review of Open Education and Social Justice concepts and background but lacks innovative proposals reproducing some of the well-known facts and providing relatively naive implications.

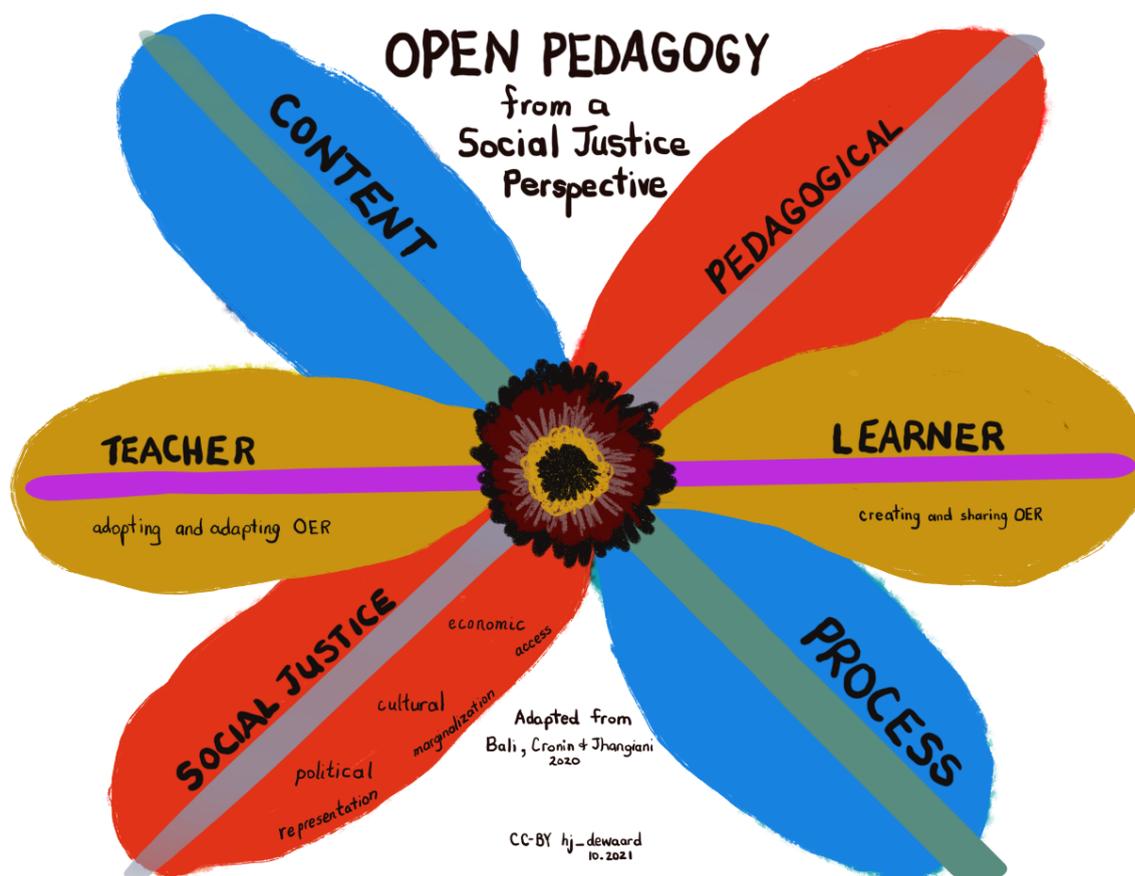
Framing Open Educational Practices from a Social Justice Perspective

Bali, M., Cronin, C. and Jhangiani, R.S.. (2020). Framing Open Educational Practices from a Social Justice Perspective. *Journal of Interactive Media in Education*, 2020(1), p.10. <http://doi.org/10.5334/jime.565>

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Bali et al., (2020) explore definitions of open educational practices (OEP) and present a typology that supports a nuanced application of openness across continuum and along three axes. These three axes of openness are defined as content-centric to process-centric, teacher-centric to learner-centric, and primarily pedagogically focused to primarily for social justice (Bali et al., 2020). These are examined simultaneously in the OEP analyzed in "expansive conceptualisations of

OEP that center on process more than content” (Bali et al., 2020, p. 1), which may make this a challenging read for those new to the field of open education or those looking for ways to integrate social justice into their open teaching practice. Figure 1 is offered here in an effort to bring understanding to this complex conceptualization.



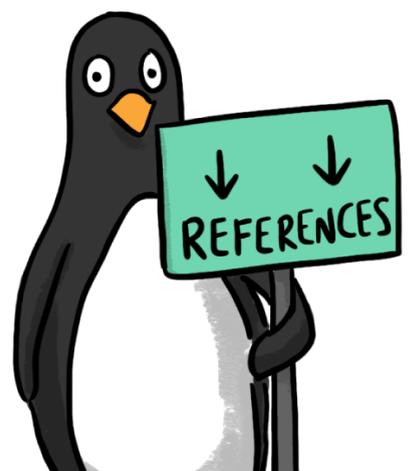
The authors investigate several examples of open pedagogical strategies from a social justice perspective to examine the economic, cultural or political injustices inherent in their designs. Readers can gain clarity for this analysis by also reviewing the social justice framework presented by Hodgkinson-Williams and Trotter (2018), upon which the authors frame their analysis. The open educational applications include: renewable assignments in the form of student created quiz questions; open connected courses, such as Equity Unbound; public scholarship by/for educators; public scholarship by/for students, such as Domain of One’s Own; Virtually Connecting; Wikipedia editing; and collaborative web annotations, such as marginal syllabi using Hypothes.is. Bali et al., (2020) provide a detailed and specific examination of the negativity, neutrality, ameliorative, or transformational contexts. This allows for consideration and re-evaluation of the impact of open pedagogical

practices on social justice related issues such as equity, diversity, inclusion, marginalization, Indigenous knowledge, representation, and participation.

The data presented within the tables merit a closer examination and should not be ignored since the information offered in these summaries support the analysis provided in the body of the article. While the critical analysis completed by Bali et al., (2020) is extensive, there may be additional examples that could be included to expand the inquiry into OEP. While this exploration encourages a continuation of the application of social justice perspectives to the analysis of additional OEP, there is one omission in the collection of exemplars, e.g. the integration of Wikipedia editing into course work and participation in Wiki Scholars work as a form of public scholarship for both educators and students (Davis, 2021).

Bali et al., (2020) present a variety of concepts and applications that connect to the social justice focused open learning strategies which, when examined carefully, can expand open teaching and learning practices. These include: using a critical digital pedagogical approach as modelled in Equity Unbound; making tacit and hidden teaching processes explicit and transparent as modelled in the Open Pedagogy Notebook, the Faculty Patchbook, and the Open Learner Patchbook; challenge power dynamics and systemic practices that limit freedom of expression; enhance a “parallel mode of developing social capital” (Bali et al., 2020, p. 8) through engagement and participation within affinity space structures (Gee, 2017) that encourage agency and design; examine the gatekeeping of knowledge by dominant voices; and, enhance deep reading and co-construction of knowledge through social annotation.

Bali et al (2020) offer much to consider in this concise exploration of openness and OEP, with current references to relevant literature supporting their explorations into social justice focused teaching strategies. The authors conclude with a caution that social justice considerations do not redress social injustice and projects emphasizing openness may not “meet the needs of those farthest from justice” (Bali et al., 2020, p. 12)



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