Editorial:

Education's many "opens"

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The concept of *openness* is multifaceted and can be addressed from a wide range of different angles. Here we focus on openness in education, with a particular focus on knowledge production and access. We thus also focus on the academic publishing industry, which is in constant flux and has seen considerable changes in recent years, partly due to rapid technological changes. Ultimately, the discussion is narrowed down to focus on AJET's approach to openness as an example of open access publishing. The question is raised of how can we grow open access publishing in a higher education sector characterised by increasing budget constraints in order to make access to knowledge as open as possible to as many potential readers as possible.

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There are many *opens* of and for education. Open may mean welcoming, transparent, enabling or available in an educational context. It may represent an idealised form, or realisation, of education that we are striving for. Educators may do battle in its name (Weller, 2014). This struggle is not only for education, and knowledge more broadly, to be prized and held open, but also about who gets to define openness and to what ends.

There is a growing engagement with openness in academic publishing that has seen the concept framed by the lens of publishing business models with green and gold access and article processing charges defining the narrative and focus. In this editorial we attempt to touch on wider implications and meanings of openness that speak to the place of academic work in a modern information society and its contribution to healthy democracies (Trow, 2010).

Openness is a multifaceted concept that draws on a complex history of social, political, economic and technological change (Anderson, 2013; Marshall, 2018). Facets include:
- openness in a technological sense;
- openness as a social contract;
- openness as participatory democracy;
- openness as an alternative to the neo-liberal market;
- openness as freedom of speech;
- openness to new ideas and experiences;
- openness removing the limits of geography and time.

Engaging with openness in only one way risks ignoring the holistic way open education enables new models of scholarship and learning. The United Kingdom Open University (UKOU) represents one of the earliest forms of openness to influence education, enacting a vision of an open society through the removal of barriers to educational experiences (Trow, 2010; Wilson, 1963) that also stimulated engagement with modes of learning enabled by different technologies. Technology and openness are strongly related, and many of the facets of openness are influenced by the political philosophies that were articulated by free and open software proponents concerned about the intrusion of commercial interests into other spheres of life acting to control and restrict the free flow of information, as outlined by the Free Software Foundation (2016).

Similarly, the sense of openness enacted by the UKOU is apparent in the concept of open democracy (Rushkoff, 2003) that leads to the association of education with a range of democratic rights and freedoms, including the right to create public knowledge (Seely Brown et al., 2013). Free speech and openness are close allies, reflecting a response to the dominating models of copyright and intellectual property, which were initially established as mechanisms of censorship and monopoly to control for private gain (Statute of Anne, 1710). This alignment between free speech and openness is also associated with conceptions of academic freedom that lie at the heart of the modern university. Open reasoning is key to Barnett's (2000) conception of the university as a site of universal knowledge enabling the freedom to learn and engage in scholarly work (*lehrfreiheit* and *lernfreiheit*) which are fundamental to the Humboltian model of the university (von Humboldt, 1903/ 1970).

Openness in higher education is generally held to be both an expression of, and a response to, the idea that education and scholarship are public goods (D'Antoni, & Savage, 2009). In this respect openness is a democratizing force. It is an enabler. It may manifest through the open and distance teaching universities following the establishment of the Open University of the UK in 1969 (Lane, 2009; Peter & Deimann, 2013). Peters and Britez (2008) identified other distinct related open movements in The Open Classroom, Open Schooling and Open Courseware. The latter (which was heavily influenced by the Open Source Software movement) has given rise to arguably the most well known and widely understood current aspect of open education which is Open Educational Resources (OERs). As Cronin and McClaren (2018) have pointed out, the definition of OER has remained remarkably stable as "teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions" (UNESCO, n.d., para. 1).

The not-so-secret element underpinning OER was Creative Commons licensing. This arguably provided a revolutionary intellectual architecture that became rapidly popular due its affordances for educators. It has become a legal lingua franca for open education, is by far the dominant form of licensing for OERs, and its prevalence is now such in academic publishing that it has become practically synonymous with gold open access. Closely related to Creative Commons are Wiley's (2014) 5 Rs of Open: an enumeration of five rights (or indeed freedoms) that educators ought to be able to exercise with respect to a given artefact. They confer the right to reuse, revise, remix, redistribute and retain something. Although these are active verbs, commentators have still felt the need to caution that the OER movement might fall into a trap of overly focusing on content, and consequently the term Open Educational Practice (OEP) is invoked to shift focus to pedagogies (Geser, 2007). OEPs centre around those pedagogical practices that OERs might enable, engender, or themselves even be the product of.

Instead of trying to build some ordered typology of open publishing models we may instead turn to Brown and Conole's (2018) useful metaphor of a kaleidoscope of shifting patterns. We may consider two intersecting *opens* at this point. The first is Open Scholarship where scholars converse, disseminate and enter an academic

discourse via blogs, social media, and pre-prints; and where, when they do publish in traditional journals, they do so online and via open access (Weller, 2012; Veletsianos & Kimmons, 2012). The second is Open Science. Open Scholarship is in some respects a subset of Open Science, the wider focus of which is around transparency, accountability and freedom of access to not just the summary results of research but rather to many parts of the research process (David, 2004). Open Science advocates transparency and open access to many facets of a research process such as pre-registration of studies, research instruments, workings, and datasets; it further insists that research tools themselves be open source and advocates other open practices such as open peer review and citizen science. Open Science's push for open access to scientific literature has seen some significant recent developments such as legislation in Europe (European Commission, 2018) seeking to mandate that all publicly funded research be made open access and some seismic negotiation battles between the academic publishing industry heavyweights and countries or universities that purchase access rights to journals. A significant recent development in this respect was the University of California's decision to split with publishing powerhouse Elsevier. Their explanation was that "the industry is not going to change overnight, but we want the public and the world to have access to research — to our UC research — that is funded by the public in the first place" (Kell, 2019, para. 17).

What does this all have to do with educational technology and journal publishing? *The Australian Journal of Educational Technology* (AJET), as an example, has a strong commitment to open access publishing, as made explicit in its policy:

> This journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge. The journal does not charge authors or readers at any time. (AJET, 2019, Open access policy)

Open in this context appears to be in the service of the public recognising the value of removing limits imposed by geography or markets, and enabling freedom of speech and participation by the public in the authors' work. There are many reasons for scholars to publish open access. They may be extrinsically motivated by the hypothesised Open Access Citation Advantage (Lewis, 2018). Although difficult to prove, studies increasingly support the idea that open access articles attract more citations (Piowar et al, 2018). Increasingly, commercial publishers exploit this idea quite explicitly by directly charging authors for the "privilege" of making their articles open access, allowing large commercial for profit academic publishers to steal some of the clothes of openness (Costello, 2019). Just as the environmental movement may be co-opted by bad actors via greenwashing so too can the open movement be subjected to *openwashing* (Weller, 2014).

Open access papers may attract more readers and readers always far outnumber citers (Heinrich, Henderson & Redmond, 2018). Yet, the impact of a published study may not be easily quantifiable and measurable. If an educator or a student reads an article and is inspired or challenged to change their current pedagogical practice the article author may never know. In an age of relentless metrics perhaps there is comfort to be taken that real impact can not easily be measured. Moreover, the support of the ASCILITE community for the journal means that it is free to read for people in countries who might not be able to afford access to a subscription based journal. Open access journal articles can play a critical role in education. For example in graduate education they can serve as a particular type of OER, which is easier to access and share from anywhere beyond the university walls, even if students have library access to closed journals (Anderson, 2013). One can easily envision a graduate programme built around open access articles, a curriculum that could be shared beyond the class walls to anyone who might benefit.

However, vast swathes of research, much of it publically funded, remain locked behind paywalls. Journals such as AJET play a special role in this regard as there are neither fees to publish nor to read its articles. Furthermore, the journal makes its archive available for free unlike the practice of commercial publishers who enclose the intellectual commons of published scholarship. Scholars themselves, with the ostensible freedom to publish where they choose and under which conditions, may be seen as having a responsibility here. Sometimes this can be seen as trade-offs or tensions between intellectual or academic freedom on the one hand and the public good on the other. However, we also know that academics operate under often intense pressures relating to the record of their publications. We certainly need more open access options for authors in the form of good quality journals, more education and awareness raising of the core issues and a more co-ordinated approach as a research community. Navigating the academic publishing system is not trivial, given the often complex legal and philosophical issues involved and all within the context of the lived realities of academic work.

Free publication is useful for scholars, particularly those without access to the means to pay publication charges, but it is the freedom of access that has a much wider reaching impact. Readers include educators, teachers, students, policy makers, and anyone from anywhere who has access to the internet. Free archives allow a return to the earlier models of community access to library resources that traditionally were provided by universities, but which have now been removed by the requirements of the publisher's license agreements, something the University of California is trying to reverse, as noted in the earlier example.

The larger philosophical issue at stake is about knowledge itself and knowledge creation as a perpetual process of scrutiny and improvement. For this system to work most effectively, it is crucial that all available knowledge is accessible to all who want to scrutinise it and/or build on it. These are the basic principles that underpin innovation and knowledge creation. Blocking access, through fees, creates an elite group with access, but who are not necessarily those who will drive the knowledge forward into new directions. Seen in this way, the case for open access seems attractive and strong. However, knowledge production, especially knowledge production based on research, comes at a cost. The costs of research, and the funding associated with expensive research, are essentially disconnected from the publication of such research. In other words the academic publication industry runs parallel with funded research, but there is no intrinsic reason, other than a commercial one, why the publication of funded research should come at a cost to those who want to read it. Commercial publication in itself does not contribute to the funding of research, but it does restrict access to research.

Restricting access restricts the potential of knowledge creation and innovation, which thus presents a strong argument in favour of open access publication for the public good. Indeed, this is how AJET's host platform Open Journal Systems (OJS), as part of the Public Knowledge Project (PKP), frames its mission:

> OJS is open source software made freely available to journals worldwide for the purpose of making open access publishing a viable option for more journals, as open access can increase a journal's readership as well as its contribution to the public good on a global scale. (PKP, 2014, OJS features, para. 3)

For scholars, open access journals play a unique role. However they are few in number, limiting the options of scholars committed to open publishing. Scopus indexes 120 journals in its e-learning category, only 21 of which are open access journals at the time of writing. Of the four journals in the top quartile one ceased accepting submissions for several years ago (*Educational Technology and Society*), while another (*The International Review of Research in Open and Distributed Learning* [IRRODL]) has paused acceptance of all submissions from May 2019 for the remainder of the year. A third journal is a specialist journal on information literacy (*Communications in Information Literacy*), leaving AJET as the only top ranked journal dedicated to the broad

domain of educational technology that is fully open access. As such it fulfills a special and vital role. It is hence that we express our deepest thanks and gratitude to all of its authors, reviewers, readers, editors and other supporters, including Ascilite which provide funding, and hope you enjoy the current issue, and many more issues to come, whoever and wherever you are. The big question is: how can we grow open access publishing in a higher education sector characterised by increasing budget constraints in order to make access to knowledge as open as possible to as many potential readers as possible? This question is a large one, and is worthy of a much larger forum, as well as its own research agenda.

Acknowledgements

References

Australasian Journal of Education Technology (AJET) (2019). *Editorial policies*. Retrieved from https://ajet.org.au/index.php/AJET/about/editorialPolicies#openAccessPolicy

Anderson, T. (2013). Open access scholarly publications as OER. *The International Review of Research in Open and Distributed Learning*, *14*(2), 81-95. DOI: https://doi.org/10.19173/irrodl.v14i2.1531

Conole, G., & Brown, M. (2018). Reflecting on the impact of the open education movement. *Journal of Learning for Development*, *5*(3), 187-203.

Costello, E. (2019). Bronze, free, or fourrée: an open access commentary. Science Editing, 6(1), 69–72. https://doi.org/10.6087/kcse.157

Cronin, C., & MacLaren, I. (2018). Conceptualising OEP: A review of theoretical and empirical literature in open educational practices. *Open Praxis*, *10*(2), 127-143. DOI: https://doi.org/10.5944/openpraxis.10.2.825

David, P. A. (2004). Understanding the emergence of "open science" institutions: Functionalist economics in historical context. *Industrial and Corporate Change*, 13(4), 571–589. DOI: https://doi.org/10.1093/icc/dth023

D'Antoni, S., & Savage, C. (2009). *Open educational resources: conversations in cyberspace*. Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO).

European Commission. (2018). *Plan S: Making full and immediate Open Access a reality*. Retrieved from: https://www.coalition-s.org/Free Software Foundation. (2016). *What is free software?* Retrieved from https://www.gnu.org/philosophy/free-sw.en.html.

Geser, G. (2007). *Open educational practices and resources: OLCOS roadmap 2012*. Salzburg, Austria: Salzburg Research / EduMedia Group.

Heinrich, E., Henderson, M., & Redmond, P. (2018). How international is AJET? *Australasian Journal of Educational Technology*, *34*(4). https://doi.org/10.14742/ajet.4830

Humboldt, W. von. (1903/1970). On the spirit and the organisational framework of intellectual institutions in Berlin. *Minerva, 8*(2), 242–267.

Kell, G. (2019, March). Why UC split with publishing giant Elsevier. *Berkeley News*. Retrieved from https://www.universityofcalifornia.edu/news/why-uc-split-publishing-giant-elsevier

Lane, A. (2009). The impact of openness on bridging educational digital divides. *The International Review of Research in Open and Distributed Learning*, *10*(5). DOI: https://doi.org/10.19173/irrodl.v10i5.637

Lewis, C. (2018). The Open Access Citation Advantage: Does it exist and what does it mean for libraries? *Information Technology and Libraries*, *37*(3), 50-65. https://doi.org/10.6017/ital.v37i3.10604

Marshall, S.J. (2018). Open education: A parable of change in higher education. In Marshall, S. *Shaping the university of the future: Using technology to catalyse change in university learning and teaching* (pp. 213-251). Sydney, Australia: Springer. DOI: https://doi.org/10.1007/978-981-10-7620-6_11

Peters, M. A., & Britez, R. G. (Eds.). (2008). *Open education and education for openness* (pp. 3-15). Rotterdam: Sense Publishers.

Peter, S., & Deimann, M. (2013). On the role of openness in education: A historical reconstruction. *Open Praxis*, *5*(1), 7-14. DOI: 10.4000/dms.2491

Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... & Haustein, S. (2018). The state of OA: a large-scale analysis of the prevalence and impact of open access articles. *PeerJ*, *6*, e4375. DOI: https://doi.org/10.7717/peerj.4375

Public Knowledge Project (PKP) (2014). *Open journal systems*. Retrieved from https://pkp.sfu.ca/ojs/

Rushkoff, D. (2003). *Open source democracy: How online communication is changing offline politics.* London, UK: Demos.

Seely Brown, J., Corcoran, B., Davidson, C. N., Dierkes-Thrun, P., Edebohls, T., Gierl, M. J., et al. (2013). *A bill of rights and principles for learning in the digital age.* Retrieved from http://s3.documentcloud.org/documents/560667/bill-of-rights-and-principles-final.pdf.

Statute of Anne. (1710). Retrieved from http://www.copyrighthistory.com/anne.html.

Trow, M. (2010). *Twentieth-century higher education: Elite to mass to universal.* M. Burrage (Ed.). Baltimore, MI: The John Hopkins University Press.

UNESCO (n.d.). *Open Educational Resources* Retrieved from https://en.unesco.org/themes/building-knowledge-societies/oer

Veletsianos, G., & Kimmons, R. (2012). Assumptions and challenges of open scholarship. *The International Review of Research in Open and Distributed Learning*, *13*(4), 166–189. DOI: http://dx.doi.org/10.19173/irrodl.v13i4.1313

Weller, M. (2011). *The digital scholar: How technology is transforming scholarly practice*. Basingstoke: Bloomsbury Academic.

Weller, M. (2014). *The battle for open: How openness won and why it doesn't feel like victory*. London: Ubiquity Press.

Wiley, D. (2014). *The access compromise and the 5th R. Iterating toward openness*. Montreal: Pressbooks.

Wilson, H. (1963). *Labour's plan for science*. London, UK: Victoria House Printing Company.