

# Facilitating Open Access to Information: A Community Approach to Open Education and Open Textbooks

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## ABSTRACT

Access to information as a necessary precondition for human flourishing is recognized explicitly in the UNESCO Strategic Development Goals, and mirrored by the work of universities globally to reduce barriers to information, especially research outputs. Growing international attention has turned to learning and teaching resources, particularly textbooks as a key barrier to fully engaging with, and participating in, higher education. The affordances of open texts provide an alternative to commercially published and often exclusionary access practices; and empower educators and students in co-creation and open sharing of information and knowledge. This paper examines the design of an ongoing institutional grants program predicated on a facilitated community learning approach for academic staff seeking to adopt, or adapt open textbooks into the curriculum as one mechanism to increase access to information. The participants' experiences and personal learning were captured through a series of semi-structured interviews that inform the iterative design of the ongoing grants program that could be transferred to other institutions seeking to support educational change.

## KEYWORDS

Open Educational Resources; Open Textbooks; Higher Education Access; Information Access; Theory of Educational Change

## ASIS&T THESAURUS

Staff Development, Communities of Practice, Information Resources

## INTRODUCTION

Open textbooks represent a significant lever to provide information resources free of cost to students and informal learners, and provide alternatives to traditional, proprietary sources of knowledge. Already well-established in the United States and Canada, open textbooks have begun to appear on

the Australian higher education landscape in a response to costs that are exclusionary to parts of the student cohort, and antithetical to a university committed to broadening access to, and widening participation in, equitable higher education.

The University of Southern Queensland (USQ) is a regional university with a high proportion of students from low socio-economic backgrounds, from regional and remote communities, and those who are “first in family” to study at the tertiary level. Furthermore, it provides access to education to the largest incarcerated student cohort in Australia. It is recognized that textbook costs are a significant financial burden, and barrier to information access not only for these cohorts, but all students; from this an ongoing Open Educational Practice Grant Scheme was conceived in 2015.

## OPEN EDUCATION AND OPEN TEXTBOOKS

Open educational resources (OER) “*can be defined as teaching and learning resources in any medium, digital or otherwise, that permit no-cost access, use, reuse, and repurposing by others with no or limited restrictions*” (McGreal, Miao, & Mishra, 2016, p. 1). The promise for higher education institutions engaging with OER include reduced costs for students, lowering barriers to tertiary education, exploring collaboration co-creative pedagogical practices, and the improvement in learning resources through reuse and co-construction of knowledge (UNESCO, 2016). While OER can include images, lesson plans, assessment, sound and video files, and entire courses, it is the textbook as OER that has generated international attention from both students and faculty.

Open textbooks provide flexibility for both students and educators, conceptualized as the “5 R’s” (Wiley, 2014), namely the ability to *retain* (to store, print), *reuse* (to share freely for use in a variety of institutions and contexts), *repurpose* (to change format, for example converting text to audio), *remix* (to add to the resource, usually by incorporating other OER), and to *revise* (to update, and to make changes based on local teaching and learning needs). Many universities engaged with open text production include peer-review processes, and transparently publish the reviews alongside the

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text (Ozdemir & Hendricks, 2017). Open textbooks provide affordances that are increasingly important as commercial publisher business models enclose knowledge, and privilege learners who can afford rising textbook costs. Increasingly, commercial textbooks include individual access codes to additional content (such as quizzes, case studies, and other value-add resources). This practice not only “locks out” students unable to afford the text, but removes second-hand texts as a viable information source as the codes are single-user only (Senack, Donoghue, Grant, & Steen, 2016). In an attempt to reduce student costs, other publishers instigated a rental scheme, reducing the overall cost of the text at the expense of perpetual access. Students are “locked out” of their text after semester concludes, unable to access the information, or use it post-graduation for professional purposes. The rising cost of textbooks was recognized by the Australian Student Union in 2016 (Jacobs, 2016), who responded with a petition for discussion in Federal Parliament, but no government action has been forthcoming, in direct contrast to international responses such as the Canadian provinces of British Columbia and Ontario committing to open text adoption after mounting student pressure (Barker, Jeffrey, Jhangiani, & Veletsianos, 2018).

In addition, fifteen years of research has yielded results that indicate awareness of OER (and in particular open textbooks) is still low, and that academic staff report the major barriers to use and reuse include a lack of time, and lack of sufficient skills to locate and appropriately interpret OER for localized contexts (McGreal et al., 2016). To realize the potential OER-empowered transformation of practice, therefore, requires time, support, and a meaningful context in which OER represent value to the curriculum. It should also be noted that while open texts are free to access and (re)use, they are not free to create and require institutional commitment to resourcing, reviewing, and integrating into existing practice, mirroring the experiences of institutional approaches to funding open access research publications (Pinfield, Salter, & Bath, 2016).

#### **SUPPORTING OPEN TEXTBOOKS THROUGH GRANTS**

In 2015, USQ committed funds to an Open Textbook Grants Scheme (later renamed the Open *Educational Practice Staff Scholarship Scheme*). The purpose of the T&L Grants generally is to construct an environment in which change to practice occurs in a structured, robust, repeatable (or transferable) manner resulting in innovation - relative to the institution or sector - that benefits students and develops the capabilities of educators. Developing leadership (especially practice-based, and thought leadership) may be explicit, implicit, or absent from the grants process, depending on the desired outcomes of the funding body. The emphasis on formal research publication and dissemination arising from the project is explicit in national grants schemes, but at the institutional level there may instead be a focus on enhancing practice within a Faculty (or other organizational unit). Linked to these principles were those of educational change, and the grant

structure and processes needed to recognize the inherent challenges, especially as change is predicated on staff attitudes, beliefs, and values.

Engaging with the “beliefs, behaviors, attitudes, and values” of teaching is part of internal institutional change discourse; one intrinsically linked with open educational practice. A framework serves as a starting point, is viewed as an attempt to represent reality, and perspectives that interpret “framework-as-reality” are avoided. The framework is coupled with the realization that - as a construct - it provides the points of sameness or foundational consensus while simultaneously acknowledging the “subjective unknown” underlying individual paradigms that interpret reality.

Fullan and Stiegelbauer’s *Theory of Educational Change* (1991) provides a lens to design and develop appropriate responses to these challenges; and to view ongoing engagement with the grant activities as situated professional learning. In this environment, de-contextualized, generic professional learning fails to reach its’ full potential (Fullan & Stiegelauer, 1991) as the practitioner is incumbent to cognitively translate the generic skill set into a nuanced environment – often without dedicated support. Instead, Fullan’s theoretical framework is predicated on four environment triggers namely that (1) staff need to actively participate in change seeking behavior usually starting in small groups and building in scope, (2) that pressure exists to change and that support exists to facilitate and navigate change, (3) that successful change requires attitudinal and behavioral change, and (4) that participants take ownership of the process as their confidence increases.

Staff agency and autonomy becomes a non-negotiable goal within the process and is achieved by providing a supportive, and supported environment in which they have the time and space to explore responsive approaches to their educational context, bounded by grant activities, and where the complexity of informational needs are acknowledged. The design supporting grant activity progress melded the *Theory of Educational Change* with Wenger’s *Communities of Practice* (Wenger, 2010). In the CoP environment, the community is bounded by a domain of knowledge, committed to engaging with and building that domain collaboratively, underpinned by the consensus that the community space is “safe” for open discussion and practice. The designed community conceptually deviates from Wenger’s original work (Dessne & Byström, 2015), however, the centrality of member autonomy was respected and the CoP leadership role was primarily focused on acting as a facilitator for the community, and intermediary between the CoP and the institution.

The resulting grants scheme developed to include a competitive call for proposals, supported by information sessions, and direct coaching to prepare submissions in the first phase, to a facilitated monthly community gathering of all successful grant awardees that focused on building professional

networks and contacts, sharing emerging practice (and transferring practice across disciplines), peer-supported problem solving, and community celebration of individual successes. Most of the awardees were funded to author texts based on a mixture of original and open content; the remainder added value to curated OER by providing an explicit learning design that sequenced and aided students in “sense-making”. From the outset, the facilitators strove to create an environment in which the community became responsible for charting their professional learning needs.

## RESEARCH AND FINDINGS

Ongoing research has been conducted to understand the experience of the grant participants, especially in terms of the value ascribed to the support, and the types of mediated support that emerge during the completion of grant activities. Informed by a qualitative research approach, data is gathered through voluntary, semi-structured interviews, and subsequently organized in themes. Individual comments are isolated where statements illustrate the impact of strategies, or provide outcomes that are particularly valued by the participants. Over the 2015–2017 grants period, all successful grant awardees were invited to participate, seventeen out of twenty-four awardees agreed to be included in the research. They were interviewed at three key stages of the grant lifecycle; (1) three months after the grants were funded, (2) at seven months following the submission of an *Interim Report*, and (3) at thirteen months after the submission of the *Final Report*.

The predominant themes emerging from the interview analysis revealed *attitudes* to the experience of both the grant activities, and the community engagement; the *valued characteristics* of the community approach, and the *values, behaviors and attitudes* to open education.

Overwhelmingly, the participants described the community grant experience as *positive* experience, and an important *contributor* to their success, albeit an experience that was extremely *challenging*. The *regularity* of meeting intervals was valued, as a way of exploring *possibilities* for open textbooks, and as a forum to *generate, refine, and share ideas*. One participant [P01] noted:

I think working with a team has been really good. Listening to other people, when we go to [] meetings... there are other people doing their own projects and the way they were doing them was a real eye-opener. It was something that gave me ideas, things to aspire to.

The role of the community was emphasized as highly *collaborative*, especially when related to *interactions with internal staff*, and the role of the facilitator was perceived as one of *guidance* and *connecting* – aligning with the original intent of a constructed CoP. The *approachability* of institutional

staff, and willingness to *support* individual project was a key point of value, without which participants agree their projects would have been more challenging. The enduring nature of the networks beyond the grants is best encapsulated by reflections from one participant [P02]:

There are other people there to help you see and just knowing that is really important. So that’s another thing that it has changed for me with the openness, is knowing how many people are involved and sorts of things that they can help with, here at the uni particularly. But beyond the uni as well, you know through USQ’s involvement with other organizations around openness, that all helps. I kind of feel like, if I wanted to do other stuff, I have more knowledge about who to go and ask.

When discussing open education, the experience of *authoring resources* dominated responses although *reflection on staff learning* was evident across the participants. Of particular note were concerns around staff knowledge of *copyright, and intellectual property policies* related to the creation of openly licensed content, and the need for pre-publication *quality assurance processes*. One participant described the need to recall Copyright and licensing with the following image, pointing to the need to reinforce concepts in practice:

And so I go out there like, you know, like Little Red Riding Hood in the woods, with all my ideas in the basket and then suddenly come across the big bad wolf. What happened was, I had to really struggle to understand what creative commons licensing meant in practice. And I’m not very good with abstract figures and concepts unless they’re embedded in a real experience that makes sense to me. So I kept forgetting what it meant and having to go back again and again.

Through the lens of policy influencing practice, copyright and intellectual property requires specific focus. Australian higher education institutions traditionally permit academic staff to retain ownership of research, while prevailing metrics of research prestige and impact are reliant (in some cases solely) on citation counts and Impact Factors. The underlying rationale espouses that research is valued when it reaches a wide readership, and is leveraged as the foundation (or contributor to) the creation or extension of new knowledge. By direct contrast, learning and teaching resources are traditionally closed to those outside of a course or unit, and ownership is retained by the university – the lecturer must seek policy approval to release course materials outside of the institution. This practice has ramifications for the perceived value of knowledge sharing, and the role of effective co-construction of knowledge across discipline fields. Policy misalignment between research output and learning resource

construction was raised by a number of community participants; many of whom had not questioned the practice previously.

In cases where existing open content was (re)used in the grant project, participants expressed concern over the ability to locate sources of information *compatible with their local needs*, and the interaction of *existing license frameworks* (especially Creative Commons) with the university policy environment. *Ideological alignment* (that is to the extent to which an individual's personal beliefs about access to education drove engagement with openness) was not evident as a major theme, with a *student learning rationale* more common across participants. A post-grant reflection recorded in almost all interviews expressed a perception that open education was *poorly understood* across the institution (reflecting on the knowledge base of peers and colleagues) and that *baseline awareness* was low.

## DISCUSSION

Based on the participant interviews, a supportive, community-based approach that provides regular space for discussion, the generation of new ideas, and testing of proposed activities is a valued approach to successfully developing staff learning concurrently with meeting the expectations of a funded grant process. The role of mediator and facilitator needs to be explicitly designed as a method of constructing a CoP, with a focus on structuring meetings as appropriate and connecting participant-identified needs with sources of information and expertise within the institution. Integrating open education with existing teaching and learning practices (especially in authoring or repurposing open textbooks) requires a deliberate and purposeful strategy and a focus on contextualized staff learning, driven by the participants and mediated by the CoP facilitator. The grants process also highlighted policy deficiencies, especially in the intellectual property area – that need to be addressed. Without this policy focus, open licensing of educational content remains the remit of funded grant activities only, instead of becoming normalized mainstream practice.

## CONCLUSION

Open textbooks have the potential to reduce barriers to the creation, use, and dissemination of quality information resources that support authentic learning and teaching practices, and positively contribute to widening participation and increasing access to education globally. In order to engage with this agenda, staff require purposefully designed spaces (both physically and conceptually) that support staff learning, nurture relational approaches to learning resource design, and actively support the desired pedagogical outcomes.

## REFERENCES

- Barker, J., Jeffrey, K., Jhangiani, R., & Veletsianos, G. (2018). Eight patterns of open textbook adoption in British Columbia. *International review of research in open and distance learning*, 19(3), 320–334. <https://doi.org/10.19173/irrodl.v19i3.3723>
- Dessne, K., & Byström, K. (2015). Imitating CoPs: Imposing formality on informality. *Journal of the Association for Information Science & Technology*, 66(11), 2277–2284. <https://doi.org/10.1002/asi.23322>
- Fullan, M., & Stiegelauer, S. (1991). *The new meaning of educational change*. New York: Teachers College Press.
- Jacobs, C. (2016). *National union of students launches campaign calling for cheaper university textbooks*, ABC news, February 20, Retrieved from <https://www.abc.net.au/news/2016-02-20/call-for-cheaper-university-textbooks/7186214>
- McGreal, R., Miao, F., & Mishra, S. (2016). *Open educational resources: Policy costs, and transformation*. France: UNESCO and Commonwealth of Learning. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000244365>
- Ozdemir, O., & Hendricks, C. (2017). Instructor and student experiences with open textbooks, from the California open online library for education (Cool4Ed). *Journal of computing in higher education*, 29(1), 98–113. <https://doi.org/10.1007/s12528-017-9138-0>
- Pinfield, S., Salter, J., & Bath, P. A. (2016). The 'total cost of publication' in a hybrid open-access environment: Institutional approaches to funding journal article-processing charges in combination with subscriptions. *Journal of the Association for Information Science & Technology*, 67(7), 1751–1766. <https://doi.org/10.1002/asi.23446>
- Senack, E., Donoghue, R., Grant, K., & Steen, K. (2016). *Access denied: The new face of the textbook monopoly*. Washington, DC: Student organizing Inc. Retrieved from [www.studentpirgs.org/textbooks](http://www.studentpirgs.org/textbooks)
- UNESCO. (2016). *Study on international collaboration on Open Educational Resources (OER) (Commissioned study prepared under a consultant contract for UNESCO)* (pp. 1–15). Paris, France: UNESCO. Retrieved from [http://en.unesco.org/sites/default/files/oer\\_study\\_march\\_2017.pdf](http://en.unesco.org/sites/default/files/oer_study_march_2017.pdf)
- Wenger, E. (2010). Communities of practice and social learning systems: the career of a concept. In *Social learning systems and communities of practice* (pp. 179–198).
- Wiley, D. (2014). The access compromise and the 5th R, *iterating toward openness* [blog], March 5, Retrieved from <https://opencontent.org/blog/archives/3221>