

Presented in
8th Pan-Commonwealth Forum on Open Learning (PCF8)
27 - 30 November 2016

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OPEN EDUCATIONAL RESOURCES AND PRACTICES AT THE UNIVERSITY OF THE SOUTH PACIFIC: STATUS REPORT AND FUTURE DIRECTIONS

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Abstract

Open educational resources (OER), which are cost-free, openly licensed educational materials available in a variety of languages and formats, have in recent years accumulated abundant evidence of disruptive potential to surmount barriers to learning. This is certainly good news to the world of education, especially higher education, which has experienced steady growth in its cost to students. Evidence also shows, however, a low uptake of this concept in higher education. A key reason for this is a lack of awareness, understanding, and acceptance of OER and their related practices amongst faculty. If one intent of a higher educational institution, such as is that of the University of the South Pacific (USP), is to provide greater affordability for students through OER, ushering faculty towards OER is thus paramount, for they are the ones who normally choose and assign educational resources. As an initial step toward moving the USP closer to its aspirations, a survey study was undertaken aiming to describe the current status of OER uptake and open educational practices (OEP) by faculty, with the purpose of gathering information for planning future activities in this area. This paper reports results from the survey examining USP faculty: teaching practices, OER awareness, OER use, participation in OEP staff development, awareness of student OER use, barriers to OER adoption, and impact of OER use. The paper concludes with a discussion of possible future directions for OER initiative at the University.

Introduction

In the sea of today's higher education ecosystem in the small Pacific Island Countries (PICs), as in many other parts of the world, students are faced with many barriers, amongst which rising costs to students is consistently ranked as a top hurdle to student achievement. In this climate many higher education institutions, particularly in larger nations, are moving from traditional copyrighted educational materials—essentially proprietary and published under an “all rights reserved” copyright model that restricts their free use—to “open” educational resources (OER) as a key cost-saving strategy for students. The “open” in OER denotes any copyrightable work that is either in the public domain or licensed in a manner (e.g., Creative Commons) that provides users with cost-free, perpetual, and irrevocable access and permission to exercise five rights (5Rs): retain, reuse, revise, remix, and redistribute the resource (Wiley, n.d., 2016a). Since their inception approximately two decades ago, OER have increasingly gained traction in higher education, with over 300 universities participating in the movement (Ischinger, 2007).

OER comes in a variety of different languages and formats and may be classified into three types: (i) learning content: full courses, courseware, content modules, learning objects, collections and journals; (ii) tools: software to support learning content creation, distribution, use, management and improvement; and (iii) implementation resources: intellectual property licenses to promote open publishing of materials, design principles of best practice, and

localization of content (Ischinger, 2007). Their discharge within higher education context, like for example, replacing traditional textbooks in courses with open textbooks have led to notable cost-savings for students—up to 25 percent in some cases. With this type of cost-effectiveness, OER are breaking through the economic barrier and improving educational access, opportunity and affordability for thousands of students, especially those from poorer backgrounds. In economists' terms, OER are both 'non-rivalrous' – or 'non-excludable' – because one user's use of the resource does not decrease the benefit of the resource to other users; in that way, they are analogous to television programs and sunlight (Bergan, 2009; Casella & Frey, 1992; Stiglitz, 1999).

Beyond providing economic value, OER offer “multiple opportunities to innovate in the teaching and learning context” (Wiley & Green, 2012, p. 85), “giving faculty the ability to pick and choose the individual resources they want to use—and to modify those resources and “assemble” them in unique ways—promises greater diversity of learning environments”(EDUCAUSE, 2010, p. 2). For instance, faculty can repurpose OER to meet pedagogical needs, institutional requirements, student preferences, and assistive technology guidelines or make them relevant to a particular culture or region. Such types of OER consumption for teaching and learning purposes is called “open educational practices” (OEP), an umbrella term that “constitute the range of practices around the creation, use and management of Open Educational Resources which aim to improve quality and foster innovation in education” (Camilleri, Ehlers, & Pawlowski, 2014, p. 27). According to Wiley (2016b, para. 13), OEP “are only possible or practical in the context of the free access and 5R permissions characteristic of open educational resources”. Contra to traditional copyrighted materials, OER offer more academic freedom which can contribute to more productive practice of students, educators, and institutions (Butcher, 2011; McAndrew, 2010; Wiley, 2015). On the whole, OEP are essential to realizing the true benefits of OER.

In the intervening years much has been done, and proposed to be done, to put OER into practice (see for example, Dhanarajan & Porter, 2013; Glennie, Harley, & Neil Butcher, 2012; Kawachi, 2014; McGreal, Kinutha, & Marshall, 2013; Miao, Mishra, & McGreal, 2016). One case worthy of special mention is that of the OER universitas (OERu), a not-for-profit global network of over 35 accredited post-secondary institutions and several educational agencies, working in collaboration to assemble university-level online courses 'solely' from OER. Most importantly, by combining the potential of OER with a mission of community service, the OERu has created a 'parallel universe' of post-secondary learning pathways for learners to achieve formal credible credentials, especially to those without access to traditional university entry (Mackintosh, 2016). With OERu, learners have free access to a range of full courses (equivalent to unit) and micro-courses (partial unit); payment (a fraction of the full tuition costs) is only required when learners want to be formally assessed towards academic credit from the partner institutions (OER Universitas, 2016).

In spite of its wide-ranging benefits, OER and OEP continue to face challenges in acceptance/invoation by faculty members. In response, a growing body of research has sought to disclose the factors impeding faculty members' pedagogical integration of OER. A European report (OPAL—the Open Educational Quality Initiative) project identified lack of institutional support, lack of technological tools for sharing and adapting resources, lack of skills and time of users, lack of quality or fitness of OER, and personal issues such as lack of trust and time as the major barriers to using OER (Andrade et al., 2011). Lesko (2013), in a study conducted in South Africa with 48 faculty representing 17 public higher education institutions, identified the main barriers for using OER: lack of knowledge related to OER utilization, lack of awareness about copyright and intellectual property rights, institutional support and infrastructural challenges, and lack of knowledge about existence of OER and ability to find appropriate OER. Jhangiani, Pitt, Hendricks, Key, and Lalonde (2016), in a survey of faculty in British Columbia post-secondary institutions to assess their attitudes towards and experiences with OER, found that the top two barriers to using OER were

finding relevant and high quality OER. Similarly, Belikov and Bodily's (2016, p. 235) recent qualitative analysis of 218 U.S faculty open-ended responses regarding OER perceptions showed that “faculty wanted more information before they would be willing to adopt OER”, “faculty wanted to be able to easily find repositories of OER”, and “faculty were unaware of the difference between digital resources and OER” were the top-most barriers (for using OER) to the adoption of OER.

As highlighted by the above literature review, it is clear that faculty face an array of barriers that substantially affect their capacity to participate in the use and creation of OER. Naturally, if one intent of a higher educational institution, such as is that of the University of the South Pacific (USP), is to provide greater affordability for students through OER, ushering faculty towards OER is thus paramount, for they are the ones who normally choose and assign educational resources. Against this backdrop, the overall aim of this study—the first to be conducted in PICs context—was to investigate the inhibiting factors that prevent USP’s faculty from using OER, in order to develop strategies to optimize their usage. Our aim is divided into six objectives, which were to:

1. Examine USP faculty members’ teaching practices on two dimensions: factors they consider when choosing educational resources; and whether they shared their teaching resources.
2. Investigate USP faculty members’ awareness and utilization of OER.
3. Determine the status of USP faculty members’ participation in OEP staff development.
4. Assess USP faculty members’ awareness of student OER use.
5. Identify barriers affecting USP faculty members’ OER utilization.
6. Assess USP faculty members’ views on the impact of OER use.

The remainder of the paper is set out as follows. The next section provides the study context at the USP as a regional university co-owned by twelve PICs. The methodology section presents the process used during data collection and analysis. Results are presented according to the research objectives posed above, which is followed by discussion of the results. Lastly, some concluding remarks for future action are presented.

Study Context – the USP

The concept of OER is currently making a great splash, but it has yet to hit the shores of the USP, a regional university jointly owned by twelve PICs (Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu) scattered across 33 million square kilometres of ocean, an area more than three times the size of Europe (Figure 1). The academic schools at the USP are organized into three faculties: the Faculty of Arts, Law and Education (FALE); the Faculty of Business and Economics (FBE); and the Faculty of Science, Technology and Environment (FSTE). The University has almost 420 academic staff with an enrolment of over 26,000 students who study through a variety of modes throughout USP's 14 campuses (University of the South Pacific, 2016).

While many universities and colleges have made notable progress in recent years towards embracing OER to help lower cost of their students, the USP has yet to put in place processes and procedures for mainstreaming OER within the University courses. And so, as expected, faculty use of non-OER such as traditional publisher textbooks continues to be a common practice in many USP courses, imposing an avoidable financial burden on students.



Figure 1. USP region

Methodology

A quantitative descriptive design, embedded in the positivist paradigm, was adopted in this study. Data were collected using a survey method, utilizing an online questionnaire administered through Google Forms, in the period from March to May 2016. The questionnaire was adapted from the OER Hub's (<http://oerhub.net>) researcher pack. Completion of the questionnaire was voluntary and anonymous. After receiving the ethical clearance from the ethical committee of the USP, an initial e-mail invitation to participate in the survey was sent to the target population of 332 faculty members of the university. There were 109 responders after two reminders, yielding a response rate of 33%. The data was analyzed using MS Excel. Descriptive analyses such as histograms and percentages were used to describe data. The section below presents the results of the study.

Results

Results are reported on the following headings: demographic characteristics, teaching practices, OER awareness, OER use, participation in OEP staff development, awareness of student OER use, barriers to OER adoption, and impact of OER use.

Demographics

Of 109 respondents, 60.5% were male ($n = 66$) and 39.5% were female ($n = 43$). The majority of the respondents, 80.7% ($n = 88$), were full-time faculty, with only 19.3% ($n = 21$) being part-time faculty. Participants were categorized according to the context in which they did most of their teaching: 60.5% teach face-to-face, 28.5% teach in blended mode, and the rest, 11%, teach online. Respondents' teaching experience is presented in Table 1.

Table 1. Teaching experience

Years of teaching experience	Frequency	Percentage
Less than 1 year	13	11.9
2 to 5 years	42	38.5
6 to 10 years	27	24.8
11 to 15 years	16	14.7
16 to 20 years	4	3.7
Over 20 years	7	6.4

Teaching practices

Participants were asked two questions in regards to their teaching practices.

For the first question, “When selecting resources for your teaching, how important are the following factors?”, the participants were asked to indicate the level of importance they placed on a set of thirteen aspects of selecting resources for teaching (Figure 2). The need for materials to be “high-quality and factually correct” was reported as the greatest factor when judging educational resources; 76.1% of the respondents indicated this characteristic as “very important”, and an additional 21.1% reported it as “important”. The factor “current and up-to-date” was rated in second position (74.3% reported that it was “very important” and 22.9% as “important”). This was closely followed by a proven track record of the materials in improving student performance (74.3% reporting it as “very important” and 17.4% as “important”). In comparison to these three factors, as illustrated in Figure 2, the others were less significant

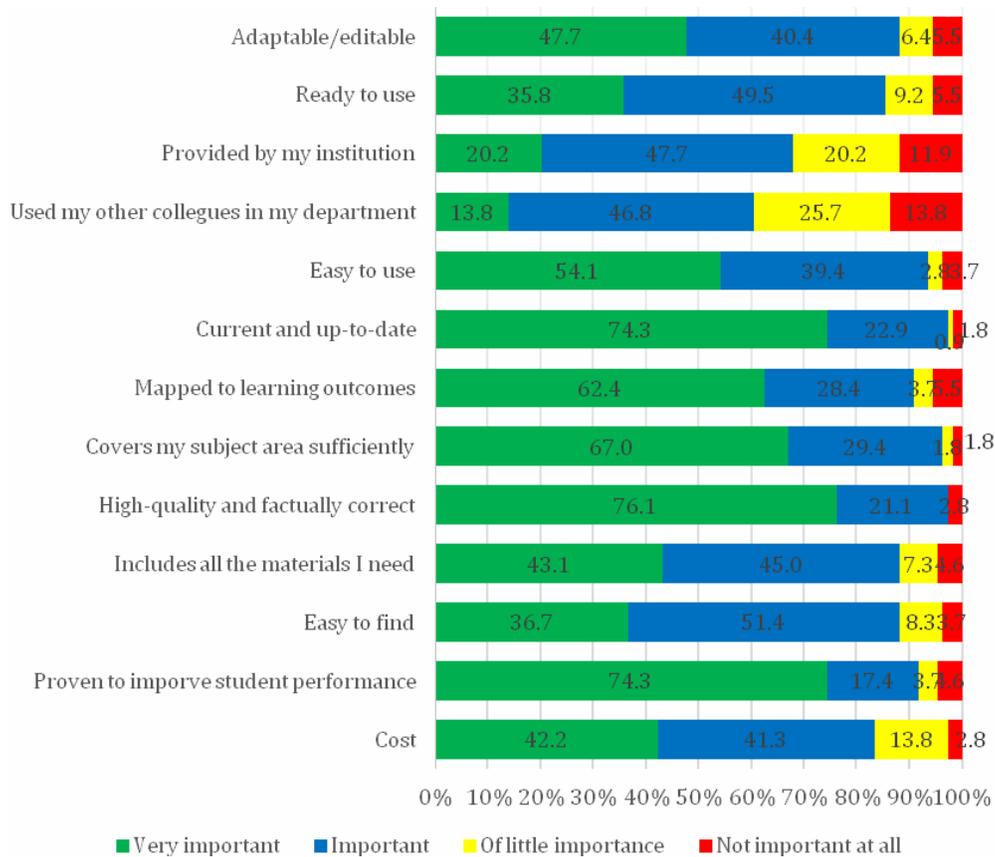


Figure 2. Importance of factors in selecting teaching resources

The second teaching practice related question asked the participants whether they shared their teaching resources. As given in Table 2, only 6 out of 109 respondents did not share their teaching materials. It is interesting to note that an overwhelming majority of the participants ($n = 103$) shared their materials, and the most preferred means of sharing was via the institution’s virtual learning environment.

Table 2. Sharing teaching resources. Note that data are inclusive, respondents could choose more than one option.

Do you share your teaching resources?	Frequency	Percentage
No, I don't share	6	5.5
Yes, through my institution's VLE	54	49.5
Yes, I normally share resources publicly online	18	16.5
Yes, in person	52	47.7
Yes, I'll send them via email if anyone asks me	47	43.1
Other	8	7.3

OER awareness

As revealed in table 3, 50% of the respondents confirmed that they were very aware of OER and knew how they can be used in the classroom. The other 50% said that they were generally unaware of OER ("I am not aware of OER" or "I have heard of OER, but don't know much about them").

Table 3. Awareness of OER

How aware are you of OER?	Frequency	Percentage
I am not aware of OER.	10	9.2
I have heard of OER but don't know much about them.	45	41.3
I'm aware of OER and how they can be used in the classroom.	54	49.5

OER use

To assess the use of OER, the respondents were asked whether they use OER in their teaching. It was found that 63.3% ($n = 69$) of the surveyed faculty use OER, while 36.7% ($n = 40$) don't. Upon further investigation, it was revealed that 100% ($n = 54$) of respondents who had earlier reported knowledge on how to use OER were actually utilizing OER in their teaching, and a third ($n = 15$) from those 45 respondents who had earlier claimed that they "have heard of OER but don't know much about them" also made use of OER.

Participation in OEP staff development

Figure 3 displays responses to the question: "Have you engaged with staff development opportunities that have helped you develop your knowledge and understanding of any of the following?" Participation rates of under 30% were generally reported except for training on the "use of already existing OER," in which 57.8% of respondents took part. Low participation may be due to various reasons; more investigation is required in this area.

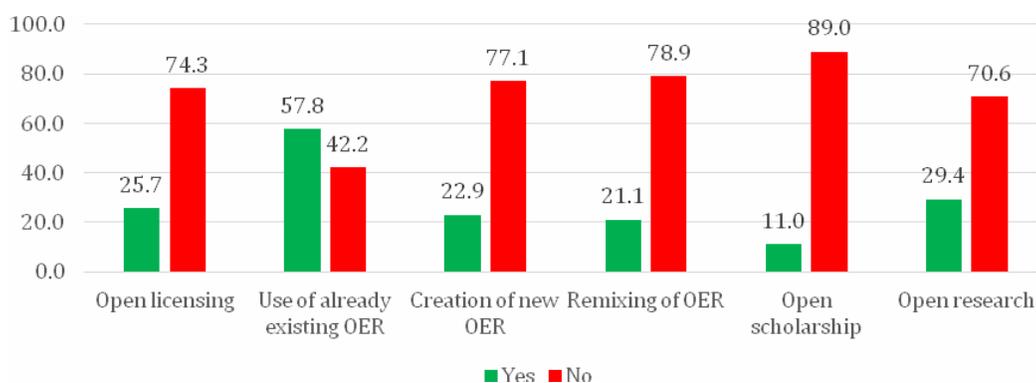


Figure 3. Staff development participation

Awareness of student OER use

In regards to student use of OER, participants were asked if they knew whether their students were using OER. 76.2% ($n = 83$) of the respondents were unaware, while 23.8% ($n = 26$) of the respondents indicated that their students are using OER. This shows encouraging signs that awareness of OER exists amongst USP students. Identifying and reaching out to these students may prove useful for future OER advocacy work at USP.

Barriers to OER adoption

Participants were provided with a list of barriers to OER adoption and instructed to indicate all those which applied to themselves. The list consisted of thirteen barriers. The top two barriers cited were “lack of awareness about OER in general” and “not sure how to use OER”.

Table 4. Barriers to using OER

Barriers	Frequency	Percentage
Lack of awareness about OER in general	93	85
Not sure how to use OER	75	69
Not enough subject coverage	57	52
Not relevant to one’s local context	54	50
Not knowing about permission to use or change	49	45
Too fragmented	46	42
Lack of support from institutions	42	39
Too hard to find	35	32
Not current/up-to-date	35	32
Too difficult to change or edit	35	32
Not used by colleagues in my Department/Faculty	34	31
Not high-quality	26	24
Not effective at improving student performance	24	22

Impact of OER use

To assess perceived impact of OER use, participants were asked to respond to a series of impact statements by indicating the extent to which they agreed on a 5-point Likert scale. As shown in table 5, respondents considered all 7-impact statements as generally positive impact of OER use.

Table 5. Perceived impact of OER use

Based on responses where 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree or Disagree, 4 = Agree and 5 = Strongly Agree.

Impact statements	Average
OER adoption at an institutional level leads to financial benefits for students and/or institutions.	3.94
Open educational models lead to more equitable access to education, serving the broader base of learners than traditional education.	3.94
Use of OER leads to improvement in student satisfaction.	3.91
Use of OER leads to improvement in student performance.	3.88
Use of OER leads to critical reflection by educators, with evidence of improvement in their practice.	3.83
The open aspect of OER creates different usage and adoption patterns than other online resources.	3.79
Use of OER is an effective method for improving retention for at-risk students.	3.72

Discussion

The findings from this study provide important insights into current teaching and OER practices amongst USP faculty. They have revealed that participants considered the factors “high-quality and factually correct”, “current and up-to-date”, and “proven to improve student performance” as the three most important in evaluating educational resources for their teaching purposes. These findings indicated that, when judging learning resources, faculty are more particular about quality and efficacy of learning, which is in consonance with other recent reports (Allen & Seaman, 2014; Arcos, Farrow, Pitt, Perryman, & Weller, 2015; Boston Consulting Group, 2013). In regards to faculty sharing teaching materials, it was found that 95% ($n = 103$) of the faculty were sharing their materials with others. This suggests these faculty members may be open to using others’ material as well, such as those released as OER. Further, it was found that close to 50% of the faculty used USP’s virtual learning environment to share their work, while only 16.5% ($n = 18$) shared publicly online. While this indicates that USP faculty are more comfortable sharing their work within the confines of the USP environment, further investigation is required to ascertain the reasons for not sharing publicly.

A large majority of faculty (90.8%; $n = 99$) said that they were aware of OER; however, of those, only 54 reported knowing how OER can be used in the classroom. Conversely, in terms of actual use of OER, all 54 who reported knowing how to use OER also reported that they had utilized OER, and 15 out of the 45 who indicated they knew of “OER but don’t know much about them” also reported to have used OER. This implies that varying levels of OER understanding and usage exist amongst USP faculty. Reasons for this situation seem to be embedded in the fact that the number of faculty were participating in open educational practices staff development sessions was low. 57.8% of the faculty members reported to have participated in a session on “use of already existing OER”, while attendance in five other sessions (open licensing, creation of OER, remixing of OER, open scholarship, and open research) was reported to be below 30% (see Figure 3). Clearly, more training sessions need to be conducted in the future with appropriate consideration to faculty schedules and interest in order to encourage faculty participation. In addition to faculty member use of OER, results regarding student use of OER were also interesting. 23.8% ($n = 26$) of the respondents reported knowledge of OER use by their students.

Regarding barriers to OER use, “lack of awareness about OER in general”, “not sure how to use OER”, and “not enough subject coverage” were cited as the three top-most factors affecting faculty members’ use of OER. These findings have commonalities with the latest findings by the Babson Survey Research Group on the awareness of OER among U.S. higher education faculty (Allen & Seaman, 2016). Concerning impact of OER, generally positive OER impact was reported, with OER potential to decrease cost and increase accessibility to education rated as the two equally highly ranked impacts of OER. Such positive regard of OER is utilitarian for future OER initiatives at USP.

Conclusion and future directions

This baseline study represents the first attempt to investigate USP faculty members’ OER views and practices. As far as we know, this study is also the first to be conducted in any post-secondary institution based in small PICs. As such, the findings may be useful to other such institutions scattered in the PICs. Based on the current findings, the three following actions are recommended for USP. First, greater efforts towards OER advocacy and awareness need to be undertaken targeting both USP faculty and students; second, needs regarding faculty training should be analyzed in order to provide relevant OER-related professional development sessions to USP faculty; and finally, an institutional repository which maps OER to various disciplines and courses taught at the university should be implemented.

References

- Allen, I. E., & Seaman, J. (2014). *Opening the Curriculum: Open Education Resources in U.S. Higher Education, 2014*. Retrieved from <http://www.onlinelearningsurvey.com/reports/openingthecurriculum2014.pdf>
- Allen, I. E., & Seaman, J. (2016). *Opening the Textbook: Educational Resources in U.S. Higher Education, 2015-16*. Retrieved from <http://www.onlinelearningsurvey.com/reports/openingthetextbook2016.pdf>
- Andrade, A., Ehlers, U.-D., Caine, A., Carneiro, R., Conole, G., Kairamo, A.-K., ... Holmberg, C. (2011). *Beyond OER: Shifting focus to open educational practices*. Retrieved from <http://www.ucp.pt/site/resources/documents/CEPCEP/OPALReport2011-Beyond-OER.pdf>
- Arcos, B. de los, Farrow, R., Pitt, R., Perryman, L., & Weller, M. (2015). *OER Research Hub Data 2013-2015: Educators*. Retrieved from https://oerresearchhub.files.wordpress.com/2015/09/educators_final_oerrhdata.pdf
- Belikov, O. M., & Bodily, R. (2016). Incentives and barriers to OER adoption: A qualitative analysis of faculty perceptions. *Open Praxis*, 8(3), 235–246.
- Bergan, S. (2009). Higher education as a “public good and public responsibility”. What does it mean? In S. Bergan, R. Guarga, E. E. Polak, J. D. Sobrinho, R. Tandon, & J. B. G. Tilak (Eds.), *Public Responsibility for Higher Education* (pp. 43–61). Paris: UNESCO. Retrieved from http://www.ses.unam.mx/curso2009/materiales/m1/s1/M1_Sesion1_Began.pdf
- Boston Consulting Group. (2013). *The Open Education Resources Ecosystem*. Retrieved from <http://www.hewlett.org/library/consultant-publication/open-education-resources-ecosystem>
- Butcher, N. (2011). *A basic guide to open educational resources*. Vancouver & Paris: Commonwealth of Learning & UNESCO. Retrieved from <http://unesdoc.unesco.org/images/0021/002158/215804e.pdf>
- Camilleri, A. F., Ehlers, U. D., & Pawlowski, Ja. (2014). *State of the Art Review of Quality Issues related to Open Educational Resources (OER)*. Luxembourg. doi:10.2791/80171
- Casella, A., & Frey, B. (1992). Federalism and clubs. Towards an economic theory of overlapping jurisdictions. *European Economic Review*, 36, 639–646. Retrieved from <http://studylib.net/doc/12075954/federalism--and--clubs-jurisdictions-alessandra-casella->
- Dhanarajan, D., & Porter, D. (Eds.). (2013). *Open Educational Resources: An Asian perspective*. Vancouver & Penang: Commonwealth of Learning & OER Asia. Retrieved from <http://oasis.col.org/handle/11599/23>
- EDUCAUSE. (2010). *7 Things You Should Know About Open Educational Resources*. Retrieved August 2, 2016, from <http://net.educause.edu/ir/library/pdf/ELI7061.pdf>
- Glennie, J., Harley, K., & Neil Butcher. (2012). Introduction: Discourse in the development of OER practice and policy. In J. Glennie, K. Harley, N. Butcher, & T. v Wke (Eds.), *Open Educational Resources and change in Higher Education* (pp. 1–12). Vancouver & Paris: Commonwealth of Learning & UNESCO. Retrieved from http://oasis.col.org/bitstream/handle/11599/80/pub_PS_OER_web.pdf?sequence=1&isAllowed=y
- Ischinger, B. (2007). *Giving knowledge for free: The emergence of open educational resources*. Paris. Retrieved from <https://www.oecd.org/edu/cei/38654317.pdf>
- Jhangiani, R. S., Pitt, R., Hendricks, C., Key, J., & Lalonde, C. (2016). *Exploring faculty use of open educational resources at British Columbia post-secondary institutions*. Victoria, BC. Retrieved from https://bccampus.ca/files/2016/01/BCFacultyUseOfOER_final.pdf
- Kawachi, P. (2014). *Quality assurance guidelines for open educational resources: TIPS framework*. New Delhi: The Commonwealth Educational Media Centre for Asia (CEMCA). Retrieved from http://oasis.col.org/bitstream/handle/11599/562/TIPSFframework_Version%20%5b1%5d

- Copy.pdf?sequence=1&isAllowed=y
- Lesko, I. (2013). The use and production of OER & OCW in teaching in South African higher education institutions. *Open Praxis*, 5(2), 103–121.
- Mackintosh, W. (2016). OERu: Realising Sustainable Education Futures. In F. Miao, S. Mishra, & R. McGreal (Eds.), *Open Educational Resources: Policy, Costs and Transformation* (pp. 129–146). Paris & Vancouver: UNESCO & Commonwealth of Learning. Retrieved from http://oasis.col.org/bitstream/handle/11599/561/CaseStudies_OER-based_eLearning.pdf
- McAndrew, P. (2010). Fostering open educational practices. In *ICT in teacher education: Policy, open educational resources, and partnerships* (pp. 124–129). Moscow: UNESCO Institute for Information Technologies in Education. Retrieved from <http://unesdoc.unesco.org/images/0019/001936/193658e.pdf>
- McGreal, R., Kinutha, W., & Marshall, S. (Eds.). (2013). *Open Educational Resources: Innovation research and practice*. Vancouver: Commonwealth of Learning & Athabasca University. Retrieved from http://oasis.col.org/bitstream/handle/11599/486/pub_PS_OER-IRP_web.pdf?sequence=1&isAllowed=y
- Miao, F., Mishra, S., & McGreal, R. (Eds.). (2016). *Open Educational Resources: Policy, Costs and Transformation*. Paris & Vancouver: UNESCO & Commonwealth of Learning. Retrieved from <http://oasis.col.org/handle/11599/2306>
- OER Universitas. (2016). *OER Universitas*. Retrieved August 12, 2016, from <https://oeru.org>
- Stiglitz, J. E. (1999). Knowledge as a Global Public Good. In I. Kaul, I. Grunberg, & M. Stern (Eds.), *Global Public Goods: International Cooperation in the 21st Century* (pp. 308–325). New York: Oxford. doi:10.1093/0195130529.001.0001
- University of the South Pacific. (2016). *2015 USP Annual Report*. Suva. Retrieved from <http://www.usp.ac.fj/annualreport2015>
- Wiley, D. (n.d.). *Defining the “Open” in Open Content and Open Educational Resources*. Retrieved August 4, 2016, from <http://www.opencontent.org/definition/>
- Wiley, D. (2015). *Open Pedagogy: The Importance of Getting In the Air*. [Web Log Post] Retrieved August 4, 2016, from <http://opencontent.org/blog/archives/3761>
- Wiley, D. (2016a). *Iterating toward openness*. [Web Log Post] Retrieved August 4, 2016, from <https://opencontent.org/blog/page/4>
- Wiley, D. (2016b). *Open Educational Resources vs Open Pedagogy: Why Means Matter*. [Web Log Post] Retrieved August 4, 2016, from <http://opencontent.org/blog/archives/4496>
- Wiley, D., & Green, C. (2012). Why openness in education? In D. G. Oblinger (Ed.), *Game changers: Education and information technologies* (pp. 81–89). Retrieved from <http://www.educause.edu/research-publications/books/game-changers-education-and-information-technologies>