Acceso Abierto a la información en las Bibliotecas Académicas de América Latina y el Caribe

Filiberto Felipe Martínez Arellano
Coordinador

Universidad Nacional Autónoma de México
2011

Z286
O63A2

Acceso abierto a la información en las bibliotecas académicas de América Latina y el Caribe / coordinador, Filiberto Felipe Martínez Arellano / México : UNAM, Centro Universitario de Investigaciones Bibliotecológicas, 2011

viii, 352 p.— (Sistematización de la Información documental)
Los trabajos de este libro fueron presentados en el Coloquio sobre Acceso Abierto a la Información en las Bibliotecas Académicas de América Latina y el Caribe, que se llevó a cabo en la Coordinación de Humanidades de la UNAM, del 4 al 6 de abril de 2011.

1.Publicaciones de Libre Acceso 2. Bibliotecas Académicas 3. Literatura Científica 4. Recursos Electrónicos 5. América Latina 6. El Caribe I. Martínez Arellano, Filiberto Felipe, coordinador II. ser.

Diseño de portada: Mario Ocampo.
Imagen de portada: Ignacio Rodríguez Sánchez.

Primera Edición 2011

Ciudad Universitaria, 04510, México D.F.
Impreso y hecho en México
ISBN: 978-607-02-0752-5

Contenido

Mesas Redondas

Open access to scholarly communications: advantages, policy and advocacy

Ariadne Chloe Furnival
Universidad Federal de Sao Carlos, Brasil
Bill Hubbard
University of Nottingham, United Kingdom

ABSTRACT

The Open Access (OA) movement regards OA modes of disseminating research as the unequivocal future of scholarly communication. Over the last ten years, open access proponents have carried out systematic research to show how OA can bring tangible benefits to researchers, institutions and society at large. Even so, the number of research papers uploaded to OA institutional repositories remains relatively low, as authors continue to harbour concerns that are not factually sound. Policies for OA have been introduced to encourage author uptake, and these are also discussed herein. After briefly delineating these issues, this paper will then move on to outline and discuss OA advocacy in organisations, and whether this should be "downstream", in the form of informational campaigns, or "upstream", in the form of top-down change management. By examining these issues through the lens of sociology of science and management science, this paper aims to enrich the debate surrounding OA, while elucidating facets of author perceptions of OA and the changes its adoption entails.

Introduction

Since the concept of Open Access (henceforth, "OA") sprang up in the Budapest OA Initiative (2002), the Bethesda Statement on Open Access Publishing (2003) and the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003) --notably dubbed the "3 B's" by Peter Suber – worldwide there have been innumerable projects promoting OA as the future of scholarly communication. Over the years, many OA projects have successfully promoted implementation and support of institutional or discipline-based repositories where researchers are encouraged to deposit their pre- and/or post-prints ("green OA"). Other projects have centered on promoting alternative business models for publishing, including full-fledged OA journals ("gold OA")[1] and "hybrid, author-side payment" models.

Today, proponents of OA are increasingly aware of the need to tackle the less technical but equally formidable work of OA advocacy. It is by now well-recognised that the uptake of OA dissemination options for research outputs and the use of OA repositories require, above all, a change in the behaviour of the scientific community in conjunction with OA mandates to provide supportive and normative institutional procedures.

The set of activities whose objectives are the promotion of OA modes of dissemination and the encouragement of researchers and other relevant stakeholders to adopt OA modes in existing workflows is generally denominated "advocacy". OA advocacy work ultimately aims to achieve a seamless embedding of OA dissemination practices into existing academic workflows. As such, it also entails enlisting the support of university research managers and librarians. Hence, more recently, OA research projects have focussed on, among other things, issues pertaining to the economics of OA publishing, OA policies, research-funder OA mandates and author attitudes to OA (see, for exam-

1 For more on the "Gold" and "Green" paths to OA, see Harnard et al. (2004). For a list of OA Journals, see the Directory of Open Access Journals (DOAJ) at: http://www.doaj.org/doaj?func=loadTempl&templ=080423.

ple, Houghton *et al.*, 2009; Swan, 2006; Nicholas et al., 2005; Swan & Brown, 2005; Antelman, 2004).

Despite the proliferation of OA research and advocacy, many institutional and subject repositories have failed to build substantial collections of either pre- or post-print full-text publications. The question remains why this is so. Drawing on strands from the substantial body of OA literature and commentary, in conjunction with other relevant threads from the fields of sociology of science and behaviour theory, this paper endeavours to provide some initial answers.

1. The advantages of OA

Academic researchers work by the dictum "publish or perish" and they want to know that their published research has a positive impact on the research in their fields and respective peer communities. The article impact – i.e., "impact factor" (IF) of a given piece of research --determined by the number of times an article is cited– is of great interest to publishing academic researchers. The term was coined by Eugene Garfield of the ISI in 1955 to refer to the formulation of a citation index that could "evaluate the significance of a particular work and its impact on the literature and thinking of the period" (Garfield, 1955, p.469). Despite Garfield's warnings against using the IF as a surrogate measure of research quality, today it is regularly used to evaluate and rank journals, institutions and universtiy faculties.

Research by OA proponents have shown the positive effect of OA on citation numbers, giving rise to the concept of the "Open Access Citation Advantage", or OACA. Even though IF presents some problematic issues, it still enjoys currency and wide approval in today's global scholarly communication system. The positive effect of OA on article citations is not hypothetical or wishful thinking: it has been analysed, proven and documented in a wealth of studies. This is why OACA is used as one convincing argument, among others, to promote OA amongst researchers. In 2001, *Nature* published one of the first studies on OACA. Using original data from the field of computer science collected between 1989 and 2000, Lawrence compared publicly available "online" articles (now taken to be synonymous with OA arti-

cles) to offline articles. His results showed that "the mean number of citations to offline articles is 2.74, and the mean number of citations to online articles is 7.03, an increase of 157%" (Lawrence, 2001). Antelman's study (2004) found that the relative increase in citations of OA articles was of 45% in philosophy, 51% in electrical and electronic engineering, 86% in political science and 91% in mathematics. Across all disciplines, the OACA appears to be about twice that for print media. Again, Hajjem et al. (2005) studied 10 disciplines over 10 years, verifying that OACA for 1 citation yielded an advantage of 16%; for 4-7 citations a bump of 22%, and for more than 16 citations, an increase of 10%.

In sum, there exists substantial evidence to prove that OACA is real. Because citation counts and the IF are still highly valued by substantial segments of the scientific community, OACA constitutes a strong argument in favour of the publishing and repository facets of OA. Even so, we should be wary of those who argue that OACA is not a discernible phenomenon. If this were true, then OA would be rendered useless. Fortunately, OA is a trend on the rise as more and more people believe in the fairness of making research results openly available to society.

Other advantages of OA include increasing the visibility of an institution's research output. This is clearly the case for "green OA", i.e., versions of articles filed in academic institutional repositories (IRs). As Swann and Carr observe (2008):

Just about every institution with a repository cites this as a reason for having set it up according to our own small survey of European repositories (unpublished). Certainly, the repository is the ideal vehicle for making the work of the institution visible. Relying on pages on the institution's website is not satisfactory.

As web ranking of universities worldwide increasingly becomes the accepted measure of a university's visibility and potential impact (e.g. see the G-Factor International University Ranking[2] and the Webometrics Project[3]), traffic to a university's IR to download papers will play a progressively significant role in producing such measures. In a

2 http://universitymetrics.com/g-factor

3 http://www.webometrics.info/about_rank.html

talk at the Liber Conference in June 2010, a Chief Information Officer of a major university in the United Kingdom stated that the university IR was specifically integrated into the marketing of its postgraduate programmes, allowing prospective postgraduate students to weigh the type of research and related outputs being produced by university researchers –their potential supervisors-- before deciding where to pursue their studies.[4]

Closely associated with its marketing uses, IR can generate indicators of research output and productivity, which are used in many universities worldwide in research assessment exercises and, for example, to aid in professional and academic promotion decisions.

2. The reality of Institutional Repositories (IRs)

Despite concerted, integrated efforts to implement and promote university repositories worldwide, there is a general consensus in the community researching OA that repositories are emptier than might be expected.. As Björk et al. (2008) and Hajjem et al. (2005) note, only about 15% of the 2.5 million articles published worldwide annually are being archived in repositories by their authors. In 2007, Davis and Connolly observed that despite considerable institutional investment, Cornell University's DSpace Repository was noticeably under-used by Cornell's faculty members, affirming that: "Although a university-wide structure exists, much of it remains in skeletal form, with many collections empty or meagrely populated.(...) There is little evidence to suggest that individual faculty are making significant contributions of regular scholarly output to the repository."

Similarly, recounting the experience of implementing and embedding IR into the institutional culture at the University of Minho in Portugal, Ferreira et al. (2008) note that even though IR was launched in 2003 accompanied by an integrated advocacy programme (which included a financial incentive for the department of the depositing author):

> By the end of 2004, the number of documents in the repository reached about 630. It was felt that in spite of the various calls for deposit, the calls were not producing the expected

4 Heard in a talk at the Liber Conference, Aarhus, June-July, 2010.

> results. The number of self-archived documents was still remarkably low. Of the 630 documents in the repository, only a mere 128 were archived by the authors themselves.

On the other hand, there has been a steady growth in the number of IRs set up worldwide. The directory of OA repositories, OpenDOAR, shows that the number of repositories (which includes digital libraries) nearly doubled between 2005 and 2010 (OpenDOAR, 2010).

In light of the much-touted advantage of IR as a potential institutional marketing "shop window", this situation takes on a rather grave hue that goes beyond mere speculation about researcher indifference to self-archiving. As Swan and Carr (2008:32) emphasise:

> Except for a small number of institutions around the world that have big, growing repositories containing current research articles (rather than just, say, theses, grey literature or legacy literature from the past), most repositories are to all practical purposes empty. They are not only *not* enhancing their institution's online visibility; they are also actively projecting a very poor image of their institutions to the world. The shop window is empty.

3. Possible reasons for author resistance

As noted above, the fact that only around 15% of all journal articles written are accessible via some form of OA seems paradoxical in the light of research that shows "the vast majority" of researchers said they would "willingly" make copies of their published articles available in OA repositories (Swan & Brown, 2004; Swan, 2006). It is interesting to note that authors who are already "OA authors" rank their support for the basic principle of opening up access to published research worldwide as their main reason to favour OA – knowledge is seen as a "public good". Secondly, they believe OA journals have faster publishing turn around and underpin wider readership. The OACA and/or enhanced citation impact were cited as the last reasons for supporting OA (Swan & Brown, 2004).

Other researchers, however, have cited many specious justifications for their wariness regarding OA and IRs. For example, a frequent objection to OA self-archiving in an IR is fear of infringing publishers' copyright, even though there are simple-to- use, authoritative databases to assist authors to check copyright agreements. The RoMEO[5] database is the most complete and up-to-date of these media. Moreover, nearly 90% of all journals officially endorse some sort of OA deposition, many of these without requiring fees or a period of embargo (RoMEO, 2010). Other common concerns expressed by researchers wary of OA include the notions that OA by-passes the peer-review process and so will open the door to low quality publishing; that it will undermine and lead to the demise of professional journals; that deposition in a repository will be time-consuming and facilitate plagiarism, and that authors will be obliged to cede intellectual property rights to their university (King et al., 2006; Pinfield, 2004). None of these concerns, however, are supported by the facts.

There are websites that provide substantiated responses to these and other reasons researchers cite for not depositing in a university's IR or publishing in OA journals.[6] Moreover, there are numerous, reputable, well-researched reports and speciality websites that show many of the "issues" surrounding OA arise largely from misconceptions and have no factual basis whatsoever.[7]

4. Scientific community culture of the rewards system

One formidable barrier pervading the academic community and putting the brakes on OA and deposition in IRs is the perception that OA content is of lesser quality than "toll-access" (i.e. paid) journal content, (van Westrienen & Lynch, 2005). This points to the persistence of the more insidious and erroneous belief that OA literature is not peer-reviewed literature, a common misconception detected by many researchers in OA fields, who have endeavoured to distinguish

---

5 RoMEO: http://www.sherpa.ac.uk/romeo/

6 For exampe, see http://www.sherpa.ac.uk/documents/15concerns.html.

7

OA publishing from author self-promotion or "vanity publishing".

The importance of the peer-review process to scholars must be appreciated when arguing the case for OA. It is one of the linchpins of academia's rewards system that rests on norms that are nothing less than the inculcated, underlying beliefs of scholarly communities. The sociologist Robert Merton was the first to define these prescriptive norms that include "universalism" (the notion that scholarly development should focus on the universal criteria of the object of study, and not on the particulars of the scholar --such as reputation, nationality, institutional affiliation-- making the claim,); "communism" (that any knowledge arising from the research endeavour should be made public, for the benefit of the whole scholarly community); "disinterestedness" (that the goal of the research endeavour is to seek out, and contribute to universal scientific truth, without consideration of personal gain for the researchers involved); and "organised scepticism" (that claims advanced by researchers will be scrutinised and tested, before entering the shared body of scientific knowledge) (Merton, 1979).

The peer-review process is based on the norms of communism and organised scepticism, in that the extrinsic reward for the researcher lies in peer recognition of the researcher's contribution to the common store of knowledge. Although it may seek to be as objective and fair as possible, the peer-review process is replete with instances of subjectivity. These have been widely reported in the literature of the sociology of science and mass media. Merton himself stated that recognition of scientific work by peers is very often "skewed in favour of established scientists" (Merton, 1988, p.607), a pattern that he called "the Mathew effect".[8] Merton and his peers built a reputable body of research in Sociology of Science studying this "accumulation of advantage" based on social stratification in scientific communities. One obvious result of accumulated advantage of reputation is that works of a reputable scientist will be cited more frequently. For example: over a period of approximately 20 years, scientists with 100+ citations enjoy 0.3% more citations, while those with 25 to 100 citations come

8 From the New Testament, the Gospel according to Matthew (13: 12 and 25:29): ""For unto everyone that hath shall be given, and he shall have abundance; but from him that hath not shall be taken away even that which he hath."

in at 2.7%. In contrast, other researcher are cited only once over the same span. (Garfield in Merton, 1988, p.611-2).

Over the years through the application of IF, a concomitant "accumulated advantage" of certain journal titles has been established within the scholarly community, whereby scientists will favour certain titles above others because they know that some will be read more widely and therefore cited more often. (Gadd & Oppenheim, 2002). The IF of a given journal is secured and preserved by the perpetuation of this circular practice. The journal "brand" thus equates to quality in the scholar's mind. As one mathematician interviewed by Davis and Connolly (2007) put it: "Getting published in [a journal] conveys a stamp of quality. It has nothing to do with dissemination. Journals [also] convey a certain status, something that the arXiv cannot do, at least not at present" (in Davis and Connolly, 2007).

Thus, the currency of the rewards system in scholarly research is "public" recognition, in the sense of recognition of ownership[9] of the research by peers of a given area. Based on Beecher and Trowler's (2001) well-known portrayal of scientific disciplines as "tribes" operating within "territories", Paasi (2005, p.773) observes that "peer recognition and freedom have by tradition been recognised as the primary forces in the economics of science, not money or security." Usually researchers will choose to submit to the most prestigious journals as the most effective means of securing this recognition. According to one scientist (in Davis & Connolly, 2007), researcher will deposit in the repository, only if "it is used by the rest of my community. If an institutional repository is not coming up regularly in a search, I would not put my papers there." This confirms the view that academics are decidedly attached to their disciplines and specialities, and that "subject-based expertise and achievements constitute an important form

9 For as Merton (1988, p.620) notes, "(...) it is only a seeming paradox that, in science, one's private property is established by giving it s substance away. For in a long-standing social reality, only when scientists have published their work and made it generally accessible, preferably in the public print of articles, onographs, and books that enter the archives, does it become legitimately established as more or less securely theirs.

of academic credibility" (Deem, 2010, p.39). Indeed, it has often been noted that academics and scholars usually have a stronger allegiance to their disciplines – their "tribes" – than to their universities.

The substantive independence of the scientific community for determining where to publish leads some in the OA field to conclude that uptake of OA channels for research dissemination (in OA journals or repositories) will only come about through policy and regulatory action.

5. Policies to encourage the use of OA channels

Open Access (OA) policies can come in various flavours. In the first instance there are broad statements of support for and promotion of OA and IR. Secondly, research-funder mandates might tend to be more prescriptive and in the third case, an institution may develop criteria for the overall goals and day-to-day operation of OA Institutional Repositories (IRs).

In the first category, we can cite the various declarations and manifestos in support of OA that have been disseminated over the years. The first of these was the February 2002 Budapest Open Access Initiative, followed in 2003 by manifestos issuing from Bethesda, Berlin, the United Nations and the Association of College & Research Libraries (ACRL) (see http://www.soros.org/openaccess/initiatives.shtml for a breakdown of these OA initiatives). These policy statements constitute forms of raising awareness to OA within academia, touting it as a new path for scholarly communication, while also lending official, international and institutional credibility to the OA movement. Although these manifestos do not constitute policies to be implemented as such, the synthesis of the main arguments in favour of OA provided constitutes an initial foundation for more contextually-specific OA policies.

The second category, consisting of research-funder mandates, constitutes an important policy instrument. The policy statement encourages support for OA and compliance, while the mandate constitutes the policy's executive arm. As such, these OA mandates will be understood as the equivalent of a given research-funder's "OA policy".

A mandate stipulates that researchers receiving funding should subsequently make their research papers available via OA channels, either through publishing in OA journals or self-archiving in Institutional Repositories (IRs). Many examples of such research-funder mandates are listed on the JULIET website (http://www.sherpa.ac.uk/juliet).[10] The terms of research-funder mandates often vary. They may stipulate either subject repositories or IRs and state that the funder will underwrite costs of OA publication in an OA journal. Some mandates assert the funder's agreement with the researcher will automatically supersede other publishing agreements in the future that might attempt to restrict access. (Sale *et al.,* 2010).

At the institutional level, there are both institutional OA mandates, which equate to a given institution's explicit OA policy, and detailed IR policies for those institutions that operate an IR. Institutional mandates encourage their academics to deposit refereed final drafts of papers in the IR or a subject-based repository. Importantly, Sale et al. (2010) argue that institutional mandates are more important than funder mandates, because while all research is usually carried out within university or research institutions, not all research is funded. Moreover, IRs form an interoperable network of searchable databases, seamlessly connected from the point of view of the information seeker.

Unless followed up by more tangible, practicable action, such as high level institutional support and facilitation of IR implementation, institutional mandates encouraging academic staffs to exploit OA scholarly communication media are arguably nothing more than public pledges for of support. If OA is to be genuinely implemented, those in charge of IR must produce IR policy that embraces both the overall mission and objective of the IR (the "policy statement"), as well as the specific criteria designed to ensure that the routine operational aspects of IR and general decision making procedure genuinely reflect overall policy. For example, if a university's overarching IR mission statement is something to the effect of making free, full-text publications of the University's research available, this mission would have to

10 See also: ROARMAP http://www.eprints.org/openaccess/policysignup/

be translated into a more specific policy procedures to control the type of content deposited in the IR in order to prevent it from becoming over-saturated with metadata.[11]

7. The concept of OA advocacy

In the English language the term *advocacy* commonly means to espouse, recommend and plead for a certain position, argument or to act on the behalf of a given cause or group. A broader approach to advocacy entails the set of activities that encompass networking, community development and lobbying. Advocactes seek to reframe issues, reconfigure current discourse, introduce new ideas, and in so doing, "attract attention and encourage action" (Keck and Sikkink, 1998, p. 217).

On one level of OA advocacy , activities focus primarily on raising awareness, while explaining, clarifying and clearing up doubts about the new dissemination practices publishing researchers are expected to adopt. Such advocacy initiatives are deemed "downstream" (or "bottom-up") in the sense that they target individuals on a cognitive level, regarding them above all as rational decision-makers who enjoy the freedom to decide without any encumbrance or coercion from their work context. Information campaigns usually operate on this level.

If the institutional environment and demands work to induce, facilitate and even "fossilise" certain habits and practices, then according to Verplanken & Wood (2006), it is possible that changes in the environment, or the "habit performance context", might also facilitate change in engrained behaviours. In this sense, "upstream" advocacy will likely be more effective. This type of advocacy intervention focuses on

> (...) the larger structural conditions in which people's behaviours are embedded. Thus, upstream interventions may con-

11 See http://www.rsp.ac.uk/repos/checklist4 for a useful IR policy checklist. The OpenDOAR Policy Tool lists a comprehensive set of options for IR policies, allowing an IR manager to pick and choose aspects of the policy, and then generate policy web pages and documents.

> sist of economic incentives, legislation, or structural changes in the performance environment. These interventions aim to provide contexts and societal structures that promote and sustain desired behaviour (*ibid*, p.95-6).

The importance of altering context to bring about behavioural change was also noted by Beer et al. (1990) when analyzing organisational change. These authors noted that many change programmes are encumbered by the fallacy suggesting that knowledge and attitudes of individuals must first be changed in order to change behavior and, in turn, drive institution change. They observe that reversing these assumptions is more likely to encourage changes in behaviour. "The most effective way to change behavior is to put people into a new organizational context, which imposes new roles, responsibilities and relationships on them. This creates a situation that, in a sense, 'forces' new attitudes and behaviors on people" (Beer et al., 1990, p.159).

The relevance of this scenario to advocacy in OA and repositories is evident: it has been heuristically observed that "information leaflets on their own don't work, no matter how flashy they are".[12] Advocacy work entailing political networking and lobbying with significant key players (i.e., university administrators, grant-awarding agency representatives, politicians) that aims to achieve longer-term, deep-seated institutional and inter-institutional structural change is increasingly regarded as the way forward for the OA publishing and repositories domain.

7.3 From Downstream to Context-Changing, Upstream Advocacy

We are not claiming that target audiences are impervious to "downstream" advocacy initiatives. But in view of the formidable barrier to change that the institutional *status quo* constitutes (in that it facilitates and incentivises the persistence of old habits), such downstream initiatives alone, while informative, will have limited impact. Ver-

12 Paraphrase of personal communication with RSP staff member.

planken & Wood (2006), argue that upstream advocacy programmes that have as their goal institutional context-changing actions will be more successful in bringing about the desired "disruption" of entrenched publication habits precisely because they would seek to alter the institutional context "cues" that can either perpetuate old or foster new habit formation. Downstream advocacy initiatives still have an informational role to play and can serve to motivate individuals, who may become "champions of the cause". For these enterprises to expand, however, broad, longer-term, upstream initiatives involving key decision-makers appears to be the best way forward.

8. Conclusion: Culture change in academia for OA

Organisational culture is made up of norms, values, philosophy, feelings and routine behaviour (Hellriegel *et al.*, and Smit & Cronje in Martins & Terblanche, 2003). Change management interventions to promote OA will therefore have to encompass these facets of culture, as well as the organizational structure, work processes and IT/infrastructure (Worren et al., 1999). Literature in the field, moreover, shows that for required changes to take root, stakeholder participation in the choice of change interventions is ideal. (Saunders, 2005; Van Schoor, 2003).

Resistance in academia to OA self-archiving does not take the form of vociferous opposition; rather, it is the quiet continuation of previous, well-established publishing habits in tandem in some cases with ignorance of OA objectives. Advocates of OA in academia need to regard such resistance as opportunities to focus and refine their advocacy arguments, i.e., to regard resistance in a positive light, even as a source of innovation for the proposed change implementation. As Waddell and Sohal (1998, p.545) note:

> Where resistance is at play, there is a need to examine more closely the problems that exist and consider more deeply the changes proposed. (…) (R)esistance also encourages the search for alternative methods and outcomes in order to synthesise the conflicting opinions that may exist. Thus resistan-

ce becomes a critical source of innovation in a change process as more possibilities are considered and evaluated.

The effective implementation of an OA policy– whether on an institutional, regional, national or international scale– requires the input of innovative, upstream advocacy to garner top-down "political" and administrative backing. It also requires innovative downstream advocacy to fuel bottom-up support from both author-researchers and information end-users.

References

Antelman, K. (2004). "Do Open-Access articles have a greater research impact?"

Available at: http://web.lib.ncsu.edu/staff/kaantelm/do_open_access_CRL.pdf

Beecher, T.; Trowler, P.R. (2001) *Academic tribes and territories.* Open University Press, Buckingham, UK, 2Ed.

Beer, M., Eisenstat, R. A., & Spector, B. (1990). Why change programs don't produce change. *Harvard Business Review, 68*, 158-166.

Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003) Available at: http://oa.mpg.de/openaccess-berlin/berlindeclaration.html
Bethesda Statement on Open Access Publishing. (2003). Available at:
http://www.earlham.edu/~peters/fos/bethesda.htm

Björk, B.; Welling, P.; Laakso, M; Majlender,P; Hedlund,T; Guðnason, G. "Open Access to the Scientific Journal Literature: Situation 2009". PLoS ONE 5(6): e11273. doi:10.1371/journal.pone.0011273. Available at: http://www.plosone.org/article/info:doi/10.1371/journal.pone.0011273

Budapest OA Initiative (2002). http://www.soros.org/open-access/read.shtml

Davis, P.; Connolly, M. (2007). "Evaluating the Reasons for Non-use of Cornell University's Installation of DSpace." *D-Lib Magazine*. v.13, n.3/4. http://www.dlib.org/dlib/march07/davis/03davis.html

Deem, R. (2010). "Herding the academic cats." *Perspectives: Policy and Practice in Higher Education*, v.14, n. 2, pp.37- 43.

Ferreira, M; Rodrigues, E; Baptista, A; Saraiva, R. (2008). "Carrots and Sticks: Some Ideas on How to Create a Successful Institutional Repository." *D-Lib Magazine*. v.14, n.1/2. http://www.dlib.org/dlib/january08/ferreira/01ferreira.html

Gadd, E.; Oppenheim, C. (2002). "Self-archiving – the 'right' thing? An introduction to the RoMEO Project." *SCONUL Newsletter* 27, Winter 2002, pp.34-37. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.137.2658&rep=rep1&type=pdf

Garfield, E. (1955). "Citation indexes to science: a new dimension in documentation through association of ideas." *Science* 1955 122:108–11; Reprinted in *Essays of an Information Scientist*, v.6, p.468-471, 1983. Available at: http://garfield.library.upenn.edu/essays/v6p468y1983.pdf

Hajjem, C; Gingras, Y; Brody, T; Carr,L; Harnad, S. (2005). "Open Access to research increases citation impact." Technical Report , Institut des sciences cognitives, Université du Québec à Montréal. (Submitted). Available at: http://eprints.ecs.soton.ac.uk/11687

Harnard, S., Brody, T., Vallieres, F., Carr, L., Hitchcock, S., Gingras, Y., Oppenheim, C., Stamerjohanns, H. and Hilf, E. (2004). "The green and the gold roads to Open Access."

Nature Web Focus. Available at: http://eprints.ecs.soton.ac.uk/9940/

Houghton J, Rasmussen B, Sheehan P, Oppenheim C, Morris A, et al. (2009) Economic implications of alternative scholarly publishing models: Exploring the costs and benefits. Project Report, http://ie-repository.jisc.ac.uk/278/.

King, C; Harley, D.; Earl-Novell, S; Arter, J; Lawrence, S; Perciali, I. (2006). "Scholarly Communication: Academic Values and Sustainable Models." Center for Studies in Higher Education, University of California. Available at: http://escholarship.org/uc/item/4j89c3f7

Keck, M; Sikkink, K. (1998) "Activists beyond borders." p.217-228. **Available at:** http://www.law.kyushu-u.ac.jp/programsinenglish/materials/spring2009/international-lawintodaysworld/topic4-2.pdf

Lawrence, S. (2001). "Free online availability substantially increases a paper's impact". Available at: http://www.nature.com/nature/debates/e-access/Articles/lawrence.html

Martins, E.; Terblanche, F. (2003). "Building organisational culture that stimulates creativity and innovation." *European Journal of Innovation Management,* v.6, n.1. pp.64-74.

Merton, R.K. (1979). "The Normative Structure of Science" In: R.K. Merton, *The Sociology of Science: Theoretical and Empirical Investigations* University of Chicago Press (1979), 267-278.

Merton, R. (1988). The Mathew Effect in Science II. Cumulative Advantage and the Symbolism of Intellectual Property. ISIS, 79 : 606-623

Nicholas, D.; Huntington, P.; Rowlands, I. (2005) "Open access journal publishing: the views of some of the world's senior authors". Available at: http://www.publishing.ucl.ac.uk/papers/2005aNicholas_etal.pdf

OpenDOAR Directory of Open Access Repositories Available at: http://www.opendoar.org/countrylist.php

Paasi, A (2005). Globalisation, academic capitalism, and the uneven geographies of international journal publishing spaces. *Environment and Planning A*, v.37, p.769-789.

Pinfield, S. (2004). "Self archiving publications." Published in: Gorman, G.E. and Rowland, Fytton (ed.s). *International Yearbook of Library and Information Management 2004-2005: Scholarly publishing in an electronic era*. London: Facet, 2004, pp 118-145. Available at: http://eprints.nottingham.ac.uk/142/

RoMEO. http://www.sherpa.ac.uk/romeo/

Sale, A; Couture, M.; Rodrigues, E.; Carr, L.; Harnard, S. (2010). "Open Access Mandates and the 'Fair Dealing' Button". Available at: http://arxiv.org/PS_cache/arxiv/pdf/1002/1002.3074v1.pdf; accessed: June 2nd, 2010.

Saunders, M. (2005). Opinion piece in *Academy Exchange,* 2, Autumn 2005, p.23.

Suber, P. Open Access Overview. http://www.earlham.edu/~peters/fos/overview.htm

Swan, A. (2006) The culture of Open Access: researchers' views and responses. In : Jacobs, N., Eds. Open Access: Key Strategic, Technical and Economic Aspects. Oxford : Chandos/ 52-59, 2006 http://eprints.ecs.soton.ac.uk/12428

Swan, a.; Brown, S. (2005). JISC/OSI Journal Authors Survey Report. http://www.jisc.ac.uk/uploaded_documents/JISCOAreport1.pdf

Swan, A.; Brown, S. (2004). *"Authors and open access publishing".* http://eprints.ecs.soton.ac.uk/11003/1/Authors_and_open_access_publishing.pdf
Swan, A.; Carr, L. (2008). "Institutions, their repositories and the web." *Serials Review*, v.34, n.1, pp.31-35.

Swan, A. (2010) The Open Access citation advantage: Studies and results to date. Technical Report , School of Electronics & Computer Science, University of Southampton. Available at: http://eprints.ecs.soton.ac.uk/18516/

Van Schoor, A. (2003) Learning to overcome resistance to change in higher education: the role of Transformational Intelligence in the process. Available at: http://www.herdsa.org.au/wp-content/uploads/conference/2003/PDF/HERDSA16.pdf

Van Westrienen, G & Lynch, C. (2005) D-Lib Magazine September 2005 Volume 11 Number 9 Academic Institutional Repositories. **Deployment Status in 13 Nations as of Mid 2005** http://dlib.org/dlib/september05/westrienen/09westrienen.html

Verplanken, B.; Wood, W. (2006)."Interventions to Break and Create Consumer Habits". *Journal of public policy and marketing.* **v.25, n.1, 90-103.**

Waddell, D; Sohal, A. (1998). "Resistance: a constructive tool for change management." *Management Decision*. v.36, n.8, p.543–548. Available at: http://www.icti.ie/articles/Resistance%20a%20constructive%20tool%20for%20change%20management.pdf

Worren, N; Ruddle, K; Moore, K. (1999). "From Organizational Development to Change Management: The Emergen-

ce of a New Profession." *Journal of Applied Behavioral Science,* 35, n.3, pp.273-286.