This issue of the SC Digest continues our quest for indicators of journal quality and our efforts to engage the CMU community in developments in policy and practice that affect the production, dissemination and recognition of research and scholarship. We also begin to address new approaches to literacy and the need to challenge the status quo.

Enhance Your Google Scholar Profile

CMU Libraries routinely harvests full-text content that CMU researchers make available open access (free to read) on their websites and deposits it in Research Showcase @ CMU if the version available complies with publisher policy on repository deposits. We discovered recently that CMU websites have been re-designed and researchers are increasingly linking to their Google Scholar profile rather than linking to open access copies of their work on their websites.

Linking to a Google Scholar profile saves valuable time, but there’s a glitch in the strategy. If no open access copy of your work is available, your Google Profile links to the published version, which could be behind a paywall. Many potential readers will not have access to it because their institution does not subscribe to the journal and they cannot afford to pay $45 or more to read your article.

There’s a simple solution. If you did not publish open access, send the citation and a copy of your accepted manuscript (incorporating changes made after peer review) to Katie Behrman, kberhman@andrew.cmu.edu. Katie will deposit your manuscript in Research Showcase and if the publisher’s policy specifies an embargo (delay) on open access, apply the embargo. Your manuscript will automatically become available open access at the end of the embargo period.

Works in Research Showcase @ CMU are indexed by Google. Immediately upon deposit or at the end of the embargo period, your Google Scholar profile will link to an open access copy of your work. Voila! Problem solved.
Transparency Principles for Journals

As open access publishing grows in popularity, we get more questions about how to identify quality open access journals. Membership in the Open Access Scholarly Publishers Association (OASPA) and listing in the Directory of Open Access Journals (DOAJ) are indicators of quality.

The OASPA, DOAJ, Committee on Publication Ethics (COPE), and World Association of Medical Editors (WAME) recently collaborated to articulate more specific indicators of quality. The group released sixteen Principles of Transparency and Best Practice in Scholarly Publishing. The Principles, appropriate for subscription journals and open access journals, include clear descriptions and easy discovery on the journal website of the journal’s:

- Peer review process
- Publication fees
- Copyright and licensing
- Editors
- Ownership and management
- Business model and revenue sources
- Publishing schedule
- Preservation strategy
- Advertising policy, including whether ads are linked to content or reader behavior

In addition, quality journals will:

- Be governed by recognized experts in the field
- Have a process for identifying and dealing with allegations of research misconduct
- Have a clear policy on handling conflicts of interest
- Not attempt on the journal website or in the journal name to mislead or to mimic another journal or publisher
- Not engage in obtrusive, inappropriate or poorly targeted direct marketing

These principles are now part of the criteria for membership in the OASPA, DOAJ, COPE and WAME.

Transparency Guidelines for Authors

“Despite their importance, transparency and reproducibility are not often rewarded.” So says the Transparency and Openness Promotion (TOP) Committee. To address this discrepancy and improve research transparency, the Committee published the TOP Guidelines.

The TOP Guidelines are author guidelines that journals can adopt to enhance the transparency of published research. The Guidelines address eight standards, each with three levels of commitment to transparency, allowing journals to select the standards and levels practical and appropriate to their discipline. The eight areas addressed are:

- Citation standards
- Data transparency
- Analytic methods transparency
- Research materials transparency
- Design and analysis transparency
- Preregistration of studies
- Preregistration of analysis plans
- Replication

As of July 22, 2015, 200 journals and 46 organizations, including Carnegie Mellon, had endorsed the Guidelines and pledged to consider adopting them within the next year.

DOAJ Quality Markers

Beginning January 2014, the Directory of Open Access Journals (DOAJ) encouraged journals listed in the Directory to reapply for inclusion under their revised (more rigorous) criteria. The DOAJ also developed a Seal awarded to journals that adhere to high levels of openness, best practice and publishing standards.

Search results in the DOAJ now graphically indicate journals that successfully reapplied for inclusion and journals awarded the seal. The results also conveniently display any associated Article Processing Charge (APC) or Creative Commons (CC) license.
Should CMU Endorse DORA?

The San Francisco Declaration on Research Assessment (DORA), published in 2012 by the American Society for Cell Biology, aims to put science into the assessment of research and thereby promote the fair and transparent assessment of research on its own merits rather than on the basis of the journal in which the research is published. DORA recommendations include:

• Do not use journal-based metrics (e.g., the Journal Impact Factor) as a surrogate measure of the quality of an individual’s research articles or contributions, or in hiring, promotion, or funding decisions.
• Consider the value and impact of all research outputs, including datasets and software.
• Consider a broad range of impact measures, including qualitative indicators such as influence on policy and practice.
• Be explicit about the criteria used in evaluating productivity and clearly highlight, especially for early-career researchers, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

When DORA was published in December 2012, 82 organizations and 155 individuals signed it. By January 2014, more than 400 organizations and 10,000 individuals had signed it. As of July 22, 2015, 581 organizations and 12,469 individuals had signed. (See signatories here.) Given the need to incentivize data sharing, the recognition of different kinds of research contributions, and use of alternative metrics, is it time for Carnegie Mellon to endorse DORA? Email Denise Troll Covey, Scholarly Communications Librarian, troll@andrew.cmu.edu, to let us know what you think.

Reputation Not Obligation

According to a post by Friesike, Fecher, Hebing and Linek on The Impact Blog, the reputation economy of the academy explains why researchers are hesitant to share their data. In short, they don’t share their data because they get no formal recognition or reward for sharing their data.

Despite strong agreement that data sharing contributes to the quantity, quality and pace of scientific progress, few researchers share their data. In a survey conducted by Friesike, Fecher, Hebing and Linek, 83% of the respondents agreed that data sharing has great benefits, but only 13% had shared their data. Lack of recognition for data sharing and lack of journals that foster data sharing have created a culture where only open access enthusiasts publish their data.

The solution? Appropriate policies. Researchers will invest their time in activities that increase their reputation. Policies that oblige researchers to share their data for the common good fail because they are not aligned with the incentives of the reputation economy. Reputation not obligation will motivate data sharing. Data sharing must pay in the form of recognition for it to become standard practice. Without recognition, data sharing to comply with mandates is a necessary evil, not a culture shift.

What would a truly motivational policy look like? There would be a measure analogous to citation counts to indicate impact, for example, use of published datasets or articles based on published datasets. Funders would take this measure into account and reward researchers who had published good (useful) datasets. Research communities should likewise recognize good datasets the way they reward the best papers, for example, by giving annual awards for the best publicly available and usable datasets. By routinely publishing datasets, journals could transform them into common currency. Data sharing is a worthy form of collaboration that should be recognized. We need to do more than promote data sharing. We need to reward those who take the time to share their data and make it easily re-usable.

See The Impact Blog post for more details on the topic. See also, Should CMU Endorse DORA?
© Problem Exacerbated

The US Copyright Office proposes to solve the problem of orphan works—works that can’t be used because the copyright owner can’t be identified or located to negotiate a license for use—by requiring would-be users to (1) conduct and document a diligent search for the copyright owner and (2) register a Notice of Use with the Copyright Office. (See the June 2015 report on Orphan Works and Mass Digitization.) According to Mike Masnick at Techdirt, Only The Copyright Office Would ‘Fix’ The Problem Of Orphan Works By Doubling Down On The Problem Itself.

According to the US Constitution, copyright is “to promote the progress of science and useful arts” by giving authors exclusive rights to their work for a limited time, and thereafter giving their work to the public to use without restriction. The Copyright Act of 1790 set the copyright term at 14 years and recognized the central role of registration in documenting a public record of creativity, ownership and term. What caused the orphan works problem? Elimination of the requirement that authors register works to get copyright protection and repeated extensions of the copyright term. The term is now 70 years after the author’s death. We suspect copyright ceases to incentivize authors after their death and that the Founding Fathers did not design copyright to provide financial support for the authors’ progeny for generations to come.

Growing Opposition to Elsevier

May 20, 2015, the Confederation of Open Access Repositories (COAR) published a statement opposing Elsevier’s new policy on article sharing. As of July 22, 2015, 2,658 individuals and 263 organizations, including Carnegie Mellon, had signed the statement. Among the stipulations, the new policy imposes embargoes of 12-48 months on providing open access to articles published in 90% of Elsevier’s journals; embargoes on 40% of the journals exceed the maximum allowed under US government funder mandates. The embargoes apply to author manuscripts deposited in institutional repositories like Research Showcase @ CMU. The policy also requires manuscripts deposited in repositories to be licensed under the most restrictive Creative Commons license, CC-BY-NC-ND. Manuscripts can only be shared on commercial social sharing platforms such as ResearchGate if the company has negotiated an agreement with Elsevier.

Alicia Wise, Elsevier’s Director of Access & Policy, touts clarity and consistency as the merits of the new policy, but when interviewed by The Chronicle of Higher Education, conceded the economic interests driving the policy change: “Elsevier...felt the emerging university-based repositories were getting too close to replicating the services it sells to survive.... Even the permission for individual scientists to post freely on their own websites might cross that line as the ability to search throughout the Internet improves....” The alternative to providing open access to manuscripts on websites or repositories is to publish open access. Elsevier charges as much as $5000 to publish an article open access.

Those who signed the COAR statement opposing Elsevier’s new policy believe that commercial interests should not hinder scientific, economic and social progress; that authors should be allowed to make their accepted manuscripts available open access immediately upon acceptance under whatever type of open license they choose; and that Elsevier should not attempt to dictate researcher practice or scholarly norms protected by fair use and other copyright exceptions. Please read, reflect, and if you agree, sign the statement opposing Elsevier’s new sharing policy here.
Grump in good company

The Grumpy Geophysicist recently blogged about policy changes at Elsevier and the NSF. We could not have said it better.

Referring to Elsevier as “the Evil Empire crossed with a cable company,” and Elsevier’s new sharing policy as another chapter in “their ongoing saga of how little they value the people who generate all their income,” he asks: “Why does anybody keep publishing with these guys? ANY Open Access advocate who publishes in Elsevier should question their own stance.”

Regarding NSF’s new rule that forbids publication costs from carrying over more than a year after the end of a grant, he laments: “This is yet another insane rule as there are times that getting through review can take well over a year—and then what? So if NSF thinks Open Access is good, and Open Access costs money, then let us keep the small amounts left over for publication a little longer.”

The Grumpy Geophysicist is Craig Jones, Associate Professor at the University of Colorado in Boulder.

Consider the cost

If you publish open access, you’ve likely encountered the Article Processing Charge (APC). Perhaps you’ve requested financial support from CMU Libraries to help pay the APC. Or perhaps you have not published open access because of the APC. When you publish in a traditional subscription–paywalled–journal, you aren’t confronted with what publishing your work costs. But trust us: the cost is considerable.

Articles in subscription journals published by major publishers cost on average more than $5000. Phil Campbell, editor-in-chief of Nature, estimated costs of $30,000 to 40,000 per article in 2013. That’s what it costs the publisher. With publisher profits, the cost to the system is much higher. The cost is not sustainable.

What is a reasonable cost to the system per article? What would you be willing to pay? Thieme has announced a collaboration with the Ludwig-Maximilians-Universität to examine author perceptions of APCs and a Pay What You Want (PWYW) business model. With the launch of The Surgery Journal, an open access, multi-disciplinary journal, authors of accepted papers will pay whatever APC they think is suitable.

What do you think? Will the PWYW experiment generate enough revenue to sustain the journal? Would it generate enough to sustain a scholarly society that uses revenue from its journal subscriptions to finance conferences and scholarships? (Hmm. Why are library budgets underwriting society conferences and scholarships?)

Take ten minutes to compare

Tools are proliferating and changing researcher workflows. Utrecht University is investigating how tool usage varies by discipline, country and position. Want to see a graph comparing your workflow with the workflow of your peers? Take the Utrecht survey. And please share the survey link—http://tinyurl.com/SCtoolSurvey—with your CMU colleagues.


Get recognized & get ready with ORCID

An ORCID ID can ensure you get credit for all your work, including publications, datasets, code, blog posts, and open peer reviews. Publishers and funders have been requesting and are beginning to require an ORCID ID with manuscript and grant submissions. Organizations have also expressed interest in implementing ORCID for peer review. You can follow ORCID on LinkedIn.

Even if you already have an ORCID ID, if you have not yet used the ORCID @ CMU web app, go to https://orcid.library.cmu.edu and follow the brief instructions. See the ORCID @ CMU FAQ for more information.
Reconsider Relevance

In *Information literacy: The Battle We Won That We Lost?*, Susanna Cowan argues that information literacy as we’ve defined and taught it for decades is no longer relevant. Cowan claims information literacy is alive and well and should be, “But perhaps not by that name, and perhaps not in the hands—at least not mostly in the hands—of librarians.” According to Cowan, library services, including Information literacy, must enter the educational commons, “the collaborative network of pedagogies and practices that crosses internal and external institutional boundaries and has no ‘home’ because it lives in no one place.”

How do we do this? Perhaps by aligning with the more broadly defined “critical literacy” movement. Perhaps by reinvigorating efforts to hand over information literacy to our faculty and students. Or perhaps by being silent on the subject for a while, simply watching and listening, and then some time in the future considering if and how the programs we built have a role moving forward.

Challenge the Status Quo

*The Chronicle of Higher Education* recently interviewed Laura Saunders, Assistant Professor at Simmons College Graduate School of Library and Information Science. Sanders believes librarians should challenge the status quo. She’s not alone. The momentum for critical pedagogy and critical information literacy is growing.

Traditional information literacy uses task- and process-based approaches that focus on basic competencies of retrieval and access. Critical information literacy focuses on critically engaging with information, thinking about how it was produced and disseminated and by whom.

Being information literate under the critical approach means understanding that information comes from and exists within power structures that affect information bias and credibility. It requires examining more than an author’s credentials or whether an article was peer reviewed. It includes examining a researcher’s choice of research methods and the agendas of journal editors and funding bodies.

Scrutinize or Conform?

Andrew Whitworth, Senior Lecturer in the School of Education at the University of Manchester, is another critic of traditional information literacy (IL). He discussed his issues with the tradition in an interview with *The Chronicle of Higher Education*.

“Mainstream IL—competency-based, focusing on correct citation practice, anti-plagiarism, etc.—attends to the quality and sustainability of information landscapes,” but does so in ways that “tend to reinforce the authority that exist within the landscape.” Mainstream IL encourages learners to conform to what is considered “good information practice,” overlooking the possibility that authoritative practices might need to be scrutinised and changed. Mainstream IL does not empower the population by “helping them develop the skills and awareness they need to resist the information that is pushed at them by dominant interests in society.”

The solution to the problem? According to Whitworth, the solution is radical information literacy, a focus on scrutiny, not conformity. Radical IL allows students to experience different perspectives. It encourages student sensitivity to critical political issues and student inquiry “into the power relations that shape their information landscape—including those that emanate from the university itself, and the library itself.”

Like Cowan, Whitworth believes information literacy is “too important to remain the preserve of the library.”

Whose Problem Is It?

According to an article by Jeanne Harris (Accenture Institute for High Performance), data is useless if no one has the skills to analyze it. For big data to create big value, the culture must become more analytical. We need people with technological skills and a data-driven mindset.

MLIS student Amanda Wanner (University of British Columbia) explores the challenges and opportunities data literacy presents for librarians. But is this problem ours alone to solve?