Inclusive Excellence: research impact, OER, and open access

Rachel Borchardt and Derrick Jefferson, Library April 12, 2022

Research impact: why expand your scholarship section?

Expanding research outputs

- Decentering bias in publications
- Inclusion of cross-disciplinary, multidisciplinary, and DEI-focused publications
- Better align research outputs to audience/need
- Align publications with our values (e.g., open access, journals that value DEI)

Expanding impact measures

- Decentering biased measures
- Measuring impact of non-traditional outputs
- Accounting for discipline-specific citation/use
- Expanding impact audiences
 - Who is your research trying to reach and how can you demonstrate it?

Expanding research outputs - the library's solution

- Focus is on the review process rather than 'prestige'
- Vetted conference presentations and peer-reviewed journal articles carry equal weight
- Journal DEI checklist included in resource section
- Yours might include explicit language for publications outside the traditional 'core' of your subject/discipline
- Additional outputs may be closely tied to impact audiences

Expanding impact measures – scholarly impact

- Consider Scopus journal-level impact CiteScore, SJR, SNIP
 - Better social science coverage than Impact Factor from Web of Science
- Normalize rankings in addition to raw numbers
 - Journal-level averages vary wildly by discipline
- Consider Google Scholar citation counts
 - Track a wider range of citations
- Some altmetrics correlate highly with citation counts; others demonstrate non-scholarly engagement
 - Citation correlation is strongest in STEM disciplines
 - Views, downloads, citation software downloads (Mendeley) also show engagement for recent works
- Consider the limitations of quantitative measures
 - Humanities are not well described by quantitative measures
 - Citation rates and length of time to accrue citations varies wildly
 - Citation counts will ALWAYS be higher in biomedical or adjacent areas of research

Expanding impact audiences – some examples

- Public impact some ways to demonstrate impact:
 - Translated research pieces, e.g. The Conversation, Monkey Cage, video
 - Non-academic speaking invitations
 - Social media engagement (with researcher or research output)
- Government/policy impact
 - Policy, political speech citations
 - Lobbying, meetings with government officials, congressional testimony
- Community impact
 - Translated research pieces for community
 - Open access publications
 - Tailored impact measures, e.g. surveys, SMART goals
 - Awards/recognition
 - Practitioner impact
 - Inclusion in practitioner materials, e.g. syllabi, guides
 - Downloads, views
 - Direct engagement, e.g. email
 - Commercial impact
 - Patents creation or citation of research
 - Commercial advisory board or other partnership

Qualitative information in combination with metrics

Some common examples currently in use:

- Book publisher reputation
- Book reviews (or other reviews of scholarly outputs)
- Role/contribution to scholarship
- Surveys
- Testimonies
- External reviewers
- Impact context, especially impact relative to an individual's research specialization
 - "It's the top journal in my specialized field!" is not always easy to quantify, especially for non-STEM and cross-disciplinary fields
- Qualitative info helps tell a story about AU's diverse impact

How can I/the library help?

- Tenure guideline revisions
 - Provide discipline-appropriate literature to read/reference/cite
 - Suggest potential ideas/metrics for inclusion
 - Meet with faculty to present or facilitate discussion
 - Help define or create measures for impact audiences

Schools/departments

- Help craft impact reports, such as for a self-study or accreditation review
- Introduce relevant tools for tracking impact, particularly Dimensions and Altmetric (coming soon!)
- Individuals
 - Consultations for files for action
 - Introduce relevant tools (e.g., Altmetric, Scopus, Google Scholar, and more)

And now .. over to Derrick to discuss OER!

History of Open Educational Resources

- Open University (OU) in the late 60's suggested the following implementation of "open":
 - Open = accessible, 'supported open learning', interactive, dialogue. Accessibility was key.
 - Open = equal opportunity, unrestricted by barriers or impediments to education and educational resources.
 - Open = transparency, sharing educational aims and objectives with students, disclosing marking schemes and offering exam and tutorial advice.
 - Open = open entry, most important, no requirement for entrance qualifications. All that was needed were ambition and the will/motivation to learn.

What are OERs?

Course materials—from supplemental content to entire textbooks that are free for people to use and repurpose. Created at educational institutions across the globe, OER can be freely and legally downloaded from a variety of online databases, content libraries and established sources. OER offer faculty more flexibility than traditional textbooks and can save students collectively, millions of dollars every academic year.

--SPARC OER State Policy Playbook 2021-22

OER Myths

- #1: Open simply means free Fact: Open means the permission to freely download, edit and share materials to better serve all students
- #2: All OER are digital Fact: OER take many formats, including print, digital, audio, and more
- #3: "You get what you pay for" Fact: OER can be produced to the same quality standards as traditional textbooks
- #4: Copyright for OER is complicated Fact: Open licensing makes OER easy to freely and legally use
- #5: OER are not sustainable Fact: Models are evolving to support the sustainability and continuous improvement of OER
- #6: My institution is not ready for OER Fact: Any institution can start with with small steps toward OER that make an impact for students

Value for students

- Cost savings compared to commercial textbooks
- Open pedagogy can increase student engagement and critical thinking
- Convenience for using digital class materials
- OERs provide equal education for all students
- Diversity of voices and perspectives

Value for faculty

- Free for students!
- OER can supplement existing teaching materials (or replace them!)
- OER can be modified and remixed to fit the needs of a specific group of students, tailored to their learning styles or accessibility issues
- Creating OER can foster collaboration with graduate students, other faculty at AU or other colleagues from other campuses, creating connection around OER.
- Reviews and ratings available for quality control

Potential next steps

Schools/departments

- Incorporation of OER as an equitable teaching practice in tenure guidelines
- Collective support / commitment to OER
 - Example: Physics is adopting OER for all intro-level major courses

Individuals

- Consider applying for a WRLC stipend
 - \$200 to review an OER material relevant to your course
- Consult Derrick, Rachel, or your subject specialist on relevant materials accessible to students
 - Library materials, OER, and other publicly-available materials are all options
- Longer term, WRLC hopes to have larger stipends (\$2000 \$7500) to support
 - Adoption of OER materials into a course
 - Adaptation of existing materials for class needs
 - Creation of new OER materials

Where to find out more: OER Commons - <u>https://www.oercommons.org</u>

Open Textbook Library - https://open.umn.edu/opentextbooks

OpenStax - https://cnx.org

Open Course Library - http://opencourselibrary.org

OERu - https://wikieducator.org/OERu/Home

SPARC - https://sparcopen.org/open-education/

Yours truly – derrickj@american.edu and borchard@american.edu

Open Access: open information is equitable

- Publishing open access contributes to an equitable information environment
 - Benefits researchers by increasing access to library resources/subscriptions
 - Allows a variety of non-scholarly groups access to research
 - E.g., community service scholarship is available to the community

What is open access?

" a set of principles and a range of practices through which research outputs are distributed online, free of cost or other access barriers"

- Primarily associated with journals, but connected to other open information as well
 - o Books
 - Data Ο

 - Code/open source software
 Educational resources (OER)
- Open Access for journals designed as an alternative to subscriptions

 - AKA paywall, limiting access to information Note, author fees create inequitable access to publishing opportunities for scholars
- Author often retains copyright and/or research is published through a Creative Commons license

Not all open access is equally open

* Preferred and supported by the library

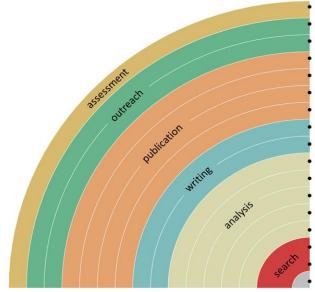
| E. | Platinum/Diamond* | All material is OA without charge |
|------------|-------------------|---|
| | Gold* | All material is OA with article processing charge (APC) charged to authors |
| | Bronze | Subscription, but some content is free (includes embargoes and many journals' COVID articles) |
| | Hybrid | Subscription, but articles can be OA with APC |
| Si Xa Li I | Green* | Any of the above, but authors can put a version of their work on a personal website or in a repository (journal usually retains the copyright) |

How do open access publications get paid for?

- Author Processing Charges (APCs) can be written into a grant
 - Increasingly, grants require open publication, including Wellcome Trust and Gates Foundation
 - All government-funded research must be public within 6-12 months, depending
- Platinum/Diamond publications do not charge for publication
- The library has an <u>OA Fund</u> to assist ANY AU faculty*
 - No cap on charges
 - Will pay for one article every 12 months
 - Does NOT cover bronze or hybrid publications (i.e., library will only pay the publisher once!)
 - * Terms subject to change in the future to keep the program sustainable

OA is just part of a larger open research infrastructure

You can make your workflow more open by ...



adding alternative evaluation, e.g. with altmetrics communicating through social media, e.g. Twitter sharing posters & presentations, e.g. at FigShare using open licenses, e.g. CC0 or CC-BY publishing open access, 'green' or 'gold' using open peer review, e.g. at journals or PubPeer sharing preprints, e.g. at OSF, arXiv or bioRxiv using actionable formats, e.g. with Jupyter or CoCalc open XML-drafting, e.g. at Overleaf or Authorea sharing protocols & workfl., e.g. at Protocols.io sharing notebooks, e.g. at OpenNotebookScience sharing code, e.g. at GitHub with GNU/MIT license sharing data, e.g. at Dryad, Zenodo or Dataverse pre-registering, e.g. at OSF or AsPredicted commenting openly, e.g. with Hypothes.is using shared reference libraries, e.g. with Zotero sharing (grant) proposals, e.g. at RIO



What might revisions look like?

Explicit wording re: role/value of choosing to publish OA, especially gold/platinum/green

How does it interact with journal prestige indicators?

Explicit wording re: role/value of publishing OER

Role/value of other open practices including:

- Putting pre-prints and manuscripts in repositories
- Open data
- Open peer review
- Pre-registering protocols
- Involvement with OA publications (reviewer, editor, etc.)

Wording from the library faculty's tenure guidelines (2022 draft)

One demonstration of DEI values in published scholarship is open access, as it contributes to a more equitable model of research. Library faculty are encouraged to adopt open research practices. These practices may include: serving in roles as peer reviewer, editor, or advisor for open access outlets, participating in open peer or post-publication review processes, publishing manuscripts and/or publications in AU's institutional or other appropriate repositories, and making research data, presentation materials, code, or other research materials openly available.

How can the library help?

- Brand new Scholarly Communication Librarian (me!) is the expert on open access on campus, and can help
 - Incorporate OA into tenure guidelines in a discipline-appropriate way
 - Incorporate OA into a grant proposal
 - Answer questions regarding the library's <u>OA Fund</u>
 - Find an appropriate OA publication for research
 - Deposit manuscripts in AU's institutional repository
 - Comply with OA grant mandates
 - Assist with other open activities

Additional assistance also available

- Data Management, including a Data Management Plan: Stefan Kramer, skramer@american.edu
- Making student research accessible in AU's archive: Leslie Nellis, <u>Inellis@american.edu</u>

Questions? Let's discuss, now or in the future!

- Rachel Borchardt, Scholarly Communications Librarian
 - o <u>borchard@american.edu</u>
 - <u>rachelborchardt.youcanbook.me</u> to make an appointment
- Derrick Jefferson, SOC Librarian and OER Specialist
 - o <u>derrick@american.edu</u>
 - o <u>derrickj.youcanbook.me</u> to make an appointment