Magic

Middleware for collaborative Applications
and Global vIrtual Communities

Science Communication Webinar

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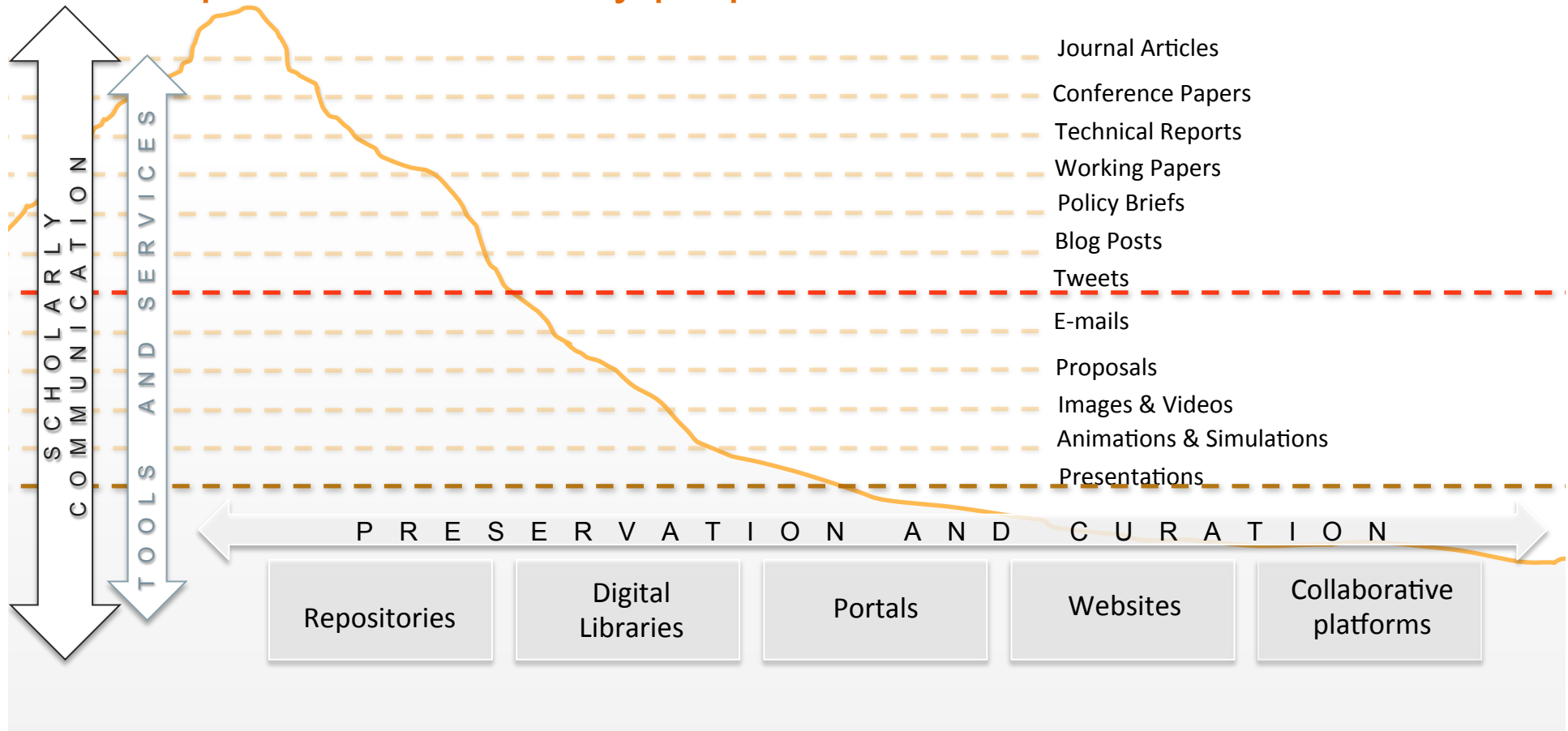
Background context

Who am I? (Context is always key)

- Curation and Dissemination Manager of the Research on Open Educational Resources for Development (ROER4D) project in the Centre for Innovation in Learning and Teaching at the University of Cape Town.

- ROER4D a Global South initiative funded by the Canadian IDRC, with 86 researchers working on 18 sub-projects in 26 countries across South America, Sub-Saharan Africa, and Southeast Asia.

- Curation and Dissemination work facilitated by centralised Network Hub at UCT. One of the project's key strategic areas, alongside Knowledge Building, Research Capacity Development, Communication, and Networking.

- ROER4D operates with Open Access, Open Research ethos.

Modern scholarly communication means…

- Operating in context where open scholarship (particularly Open Access and Open Data) has become mainstream, and is increasingly being mandated by funders

- Repository and other "sharing" or communications infrastructure is key to the research process

- Communications (re-)establishing itself at the centre of the research process

- Sea change in journal publishing models (and rise of "alternative outputs")

- Rise of data (big and small, qualitative and quantitative)

- Web-based communication is semantic and interoperable (so metadata and description is key)

- Strategies for preservation and long-term access are key

- Visibility is key (particularly for scholars in the Global South) and obscurity is a greater threat than theft

Great wealth of scholarly content to be communicated for development and visibility purposes

SCHOLARLY COMMUNICATION

TOOLS AND SERVICES

Journal Articles

Conference Papers

Technical Reports

Working Papers

Policy Briefs

Blog Posts

Tweets

E-mails

Proposals

Images & Videos

Animations & Simulations

Presentations

P R E S E R V A T I O N   A N D   C U R A T I O N

| Repositories | Digital Libraries | Portals | Websites | Collaborative platforms |

Dominance of journal publishing obscures wealth of resources

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Collaborative Documents

Images & Videos

Animations & Simulations

Presentations

PRESERVATION AND CURATION

[Boyer]

Discovery

Application

Teaching & Learning

Repository

Digital Library

Reference

Search

APIs

Working in Global South research context means…

- Imperative to boost visibility and make content findable

- Being comfortable with diversity

- Working with content in translation, moving beyond the hegemony of English

- Challenge of conceptual cohesion across differing cultures and languages

- Differing research cultures and protocols in terms of referencing, methodology articulation

- Differing understandings of ethics and consent approval processes

- Intervention/mediation required in terms of situating research in a familiar (citable) context for Northern readers

- Imperative to curate and disseminate in a manner that is accessible in resource-constrained environments on a range of devices

- Strategies required to overcome research infrastructure deficits

1. A more strategic approach towards communication

◆ core mission

◆ audience and objectives

◆ contractual/grant framework

Ask questions about your mission

1. Have you articulated a project mission? Does it have a communications component?

2. What constitutes quality/excellence in your context?

3. Who do you see as your main audience in fulfilling your mission?

4. Where (geographically) do you see your target audience as being located?

5. What are your most important communication channels?

6. What usage/uptake indicators are your funders interested in?

7. Are your communication interests vested in formal scholar-to-scholar paradigm, or in an expanded, informal scholarly and public context?

Map your mission to audience and objectives

Mission	Audience	Communication activity
Academic excellence	Scholarly peers, institutional managers, journals/ publishers, funders	**Ensure work is openly available and visible on the internet for access and citation**, profile findings via social media and website
Policy influence	Government, CBOs/NGOs, mainstream media	Blog about and profile findings on social media, identify key persons and alert them to your work, engage mainstream media, communicate updates
Contributing to teaching and education	Scholarly peers, lectures and teachers, students, public	Translate work into popularly accessible outputs, promote work in relevant forums and social network communications, **ensure that copyright and (re)usage permissions are clear and explicit**
Community engagement	CBOs/NGOs, church groups and societies, charity organisations, government, mainstream media	Translate work into popularly accessible outputs, explore alternative channels of communication (e.g. TV and radio), translate work into local languages
Contributing to your discipline	Scholarly peers, scholarly societies, journals/ publishers, lecturers and teachers, librarians	Make underlying datasets and other artifacts from research process available, apply content licensing that allows for reuse and modification
Contributing to the profession	Scholarly peers, scholarly societies, practitioners, industry partners, journals and trade publications	Communicate opportunities for professional partnership, interact via social media, blog about findings, apply content licensing that allows for reuse, modification and commercial application

Interrogate your objectives and activities against your grant/contractual framework

Grant agreement between funder and host organisation provides master framework > Sub-grant agreements between host organisation and sub-projects should be evaluated for exceptions and limitations (contingent on differing institutional policies)

Ethics provisions dictated by funder in line with international best practice: no transfer of raw data without requisite de-identification processes, clearly articulated processes for ethics clearance and management of consent

Consider:

1. Do your co-authors' contractual frameworks differ from yours in any way?
2. What do your contracts stipulate in terms of required communication activities?
3. What do your contracts stipulate in terms of copyright and licensing?
4. Any jurisdiction (country) legislation considerations?
5. Are your funders aware of and do they endorse your communication plans?

Engage your researcher community

> Collaborate with your researcher community in articulating your communications strategy.

> Ascertain a sense of researchers' publication and dissemination ambitions to establish a sense of collaboration and partnership, and tailor activity to address researchers' needs.

> The researcher is always at the centre of communications activity.

2. Curation for optimal communication

- IP, copyright and ethics

- Infrastructure

- metadata

Curation

Systematic organisation (and description) of resources to ensure the findability and searchability of your content, for the purposes of optimal sharing and reuse (internal and external)

> Undertake this work so that you (and others) can find your work when you are looking for it and to boost the return on your investment.

Dissemination

Access

Curation   **Rights management**
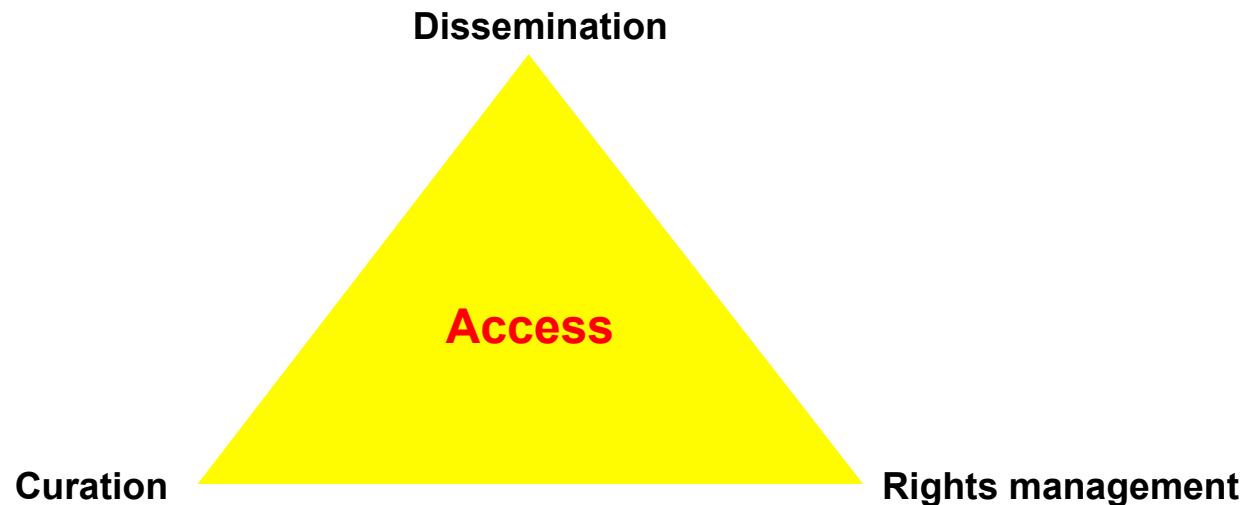
"Well begun is half done"

(Aristotle, 320 BC)

Curation approach largely determined by available infrastructure

- Obtain a sense of requirements based on your mission and objectives (content formats, language, file sizes)

- Survey what infrastructure you have available (e.g. Collaboratorio) and affordances for collaboration (bear in mind challenges of institutional platform focus)

- Identify external (cloud-based) solutions to address institutional infrastructure deficits

- Formalise collaborative arrangements with platform and private, external infrastructure owners (MoUs where possible)

- Key sustainability questions around long tail of curatorial activity (who will look after and liaise after project end date)

Long-term timeframe and sustainability analysis

- Retention principles (what are you going to curate and keep and how long will you archive it for)?

- What institutional/funder support is available to you?

- What are your funders' expectations in this regard?

- Who will be responsible after the project end date?

- What usage data and analytics will you collect over time to demonstrate efficacy?

Once you have the foundation of your curatorial approach established, you can begin "getting your house in order" and curating your actual content for optimal sharing and visibility.

Within this context, operational openness (Open Access, Open Research) is a means to:
- Collaboration (internal and external)
- Research capacity development
- Boosting visibility (and citation) of research and researchers

It is useful for you to establish a content model, and to map the composite elements to the infrastructure where different content types will reside.

ROER4D content model
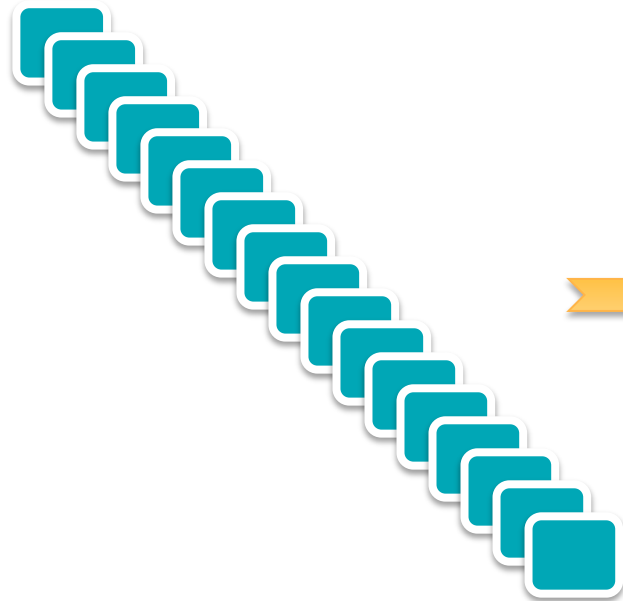
18 sub-projects producing wide range of project outputs

Micro-data

Reports

Book chapters

Policy briefs

Instruments

Methodologies

Presentations

Visualisations

Blog posts

Bibliographies

Appendices

Content curated and shared on GoogleDrive, institutional repositories, Zenodo, publisher websites, and project website

Metadata is key in terms of boosting findability

- Metadata framework will be determined by infrastructure you use

- Certain sharing and publication platforms (e.g. repositories) will have greater affordances for adding rich metadata

- Consider which metadata and platforms are significant to your discipline

- Platform analytics and unique resource identifiers are useful for tracking content use (Altmetrics)

- Devise strategies for collecting metadata at various opportunities (reporting, etc.) so that you are not too reliant on author input at moment of publication

- Optimal to have a combined repository (rich metadata) and website (shopfront) approach

3. Packaging and disseminating your research

◆ considering format

◆ content aggregation

◆ metrics and usage data

When addressing dissemination activity, ask yourself…

- Which channels are most conducive to communications activity (websites, repositories, collaboration platforms)?

- What you would like to measure (website analytics, repository downloads, citations, mentions in social media, etc.)?

- Are there any cultural or language dynamics you need to consider? Does your audience operate in the same "research tradition"?

- Are there any ethical or privacy issues you need to consider?

- What makes this work special, is there something similar happening in the field that you can link to, and are there any existing communication efforts within your research community that you can leverage?

- What kind of narrative or "story" can you establish around your work (considering historical trajectory and the literature)?

Keep an eye on copyright issues

- Scan content for third-party copyright material and replace or seek permissions

- Consider licensing cohesion if integrating third-party Creative Commons-licensed content

- Ensure cohesion with ethical and contractual requirements

Dissemination approach

- Deposit and describe content in chosen repositories and platforms, linking back to "shopfront" website

- Content collection may be fragmented across various platforms and institutional environments. Reflect complete collection via project website

- Link to discipline-specific aggregation platforms, bibliographic services and academic databases (e.g. arXiv, AGRICOLA, CAB Abstracts,Copernicus, GeoRef, GoPubMed, SSRN, RePEC)

- Track content usage via analytics and Altmetrics tools

- Profile content via social media

- Remember that the process is ongoing and interative

Key challenges

- Researcher buy-in (lack of confidence, sensitivity around data ownership, protection of publication opportunity, time constraint)

- Managing linguistic and cultural diversity, as well as differing research traditions

- Identifying appropriate communal platforms and infrastructure for cross-institutional collaboration

- Managing project timeframe constraints (how to address the long tail of curation and dissemination activity)

- Knowing how to write and how to reference for your chosen audience

Some useful resources

Accessibility, Sustainability, Excellence: How to Expand Access to Research Communications
https://www.acu.ac.uk/research-information-network/finch-report

Curation for Participation: An Eight-Step Guide to Curating Open Scholarly Content
https://open.uct.ac.za/handle/11427/8431

Creative Commons South Africa: Licensor Guidelines
https://open.uct.ac.za/bitstream/handle/11427/9045/CC_Guidelines_092014TS.pdf?sequence=1

Communications in Science: Pressures and Predators
http://science.sciencemag.org/content/342/6154.toc

Measuring Impact: A Five-Step Guide for Scholarly Units
https://open.uct.ac.za/handle/11427/12936

Scholarly Communication and the Continuum of Electronic Publishing
http://arxiv.org/abs/cs/9903015

Some Scholarly Communication Guidelines
https://repositorium.sdum.uminho.pt/bitstream/1822/11599/1/scholar.pdf

Open Content Licensing: A Three-Step Guide for Academics
https://open.uct.ac.za/handle/11427/12937