Towards Open Access Institutional Repositories in Zambian HEIs

Abel M’kulama <abel.mkulama@unza.zm>
Lighton Phiri <lighton.phiri@unza.zm>

Department of Library and Information Science
University of Zambia

October 30, 2018
Key Questions

• What is 'Scholarly Communication'?
  • The Conventional Method
  • Open access method

• What are 'institutional repositories (IRs)'?

• Why HEA must mandate academic institutions to establish IRs?
  • Enforcing IR establishment in Zambia

• Implementation and implications IRs?
Scholarly Communication

- The "process of sharing, disseminating and publishing research findings of academics and researchers so that the generated academic contents are made available to the global academic communities" (UNESCO, 2015b).

- Process involves:
  - "registration,
  - certification,
  - awareness,
  - archiving and
  - rewarding" (Jones, 2007)
Scholarly Communication Methods (1)

- Channels of Scholarly Communications
  - Academic Journals
  - Conference Proceedings
  - Research Monographs
  - Research Reports
  - Working Papers
  - Theses and Dissertations
  - Patents/ Standard

UNESCO (2015)
Scholarly Communication Methods (2)

- **Traditional/Conventional Method**
  - How academic and scientific research was disseminated prior to electronic publishing and online digital documents.

- **Open Access**
  - **Green**: (E-print archives, Open archives, Self archiving and Institutional repositories)
  - **Gold**: The business Model/Open Access journals
Situation Analysis

- **Structural problems with scholarly publishing**
  - Serials crisis
    - "a spiralling effect of constant increase in subscription cost of many scholarly journals and exponential hike of online access fees of e-journals..."
  - Impact barriers
    - Authors give away their content and want to achieve impact not income; want to disseminate research widely
    - but publishers want to restrict circulation based on subscriptions
  - Access barriers
    - Researchers want easy access to the literature
    - But most researchers do not have easy access to most of the literature
Online Visibility of Zambian Scholarly Output (1)

Zambian research output is not visible online [...]
Online Visibility of Zambian Scholarly Output (2)

Journals vs Articles: Journals

Global justice: Theory, Practice, Rhetoric
ISSN: 1835-6842 (Online)
http://www.theglobaljusticenetwork.org
Peer review
Subject: Political science: Political science (General)
Date added to DOAJ: 29 Sept 2017
Record Last Updated: 31 Jan 2019

Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan
ISSN: 2502-471X (Online)
http://journal.un.ac.id/index.php/jppp/
Blind peer review
Subject: Education: Education (General)
Date added to DOAJ: 13 Apr 2017
Record Last Updated: 13 Apr 2017

Journal of Problem Solving
ISSN: 1932-6246 (Online)
http://docs.lib.purdue.edu/jps/
Double blind peer review
Subject: Philosophy, Psychology, Religion: Psychology: Consciousness, Cognition
Date added to DOAJ: 3 Aug 2006
Record Last Updated: 20 Feb 2018

Revista Adm.Made
ISSN: 1518-9929 (Print); 2237-5139 (Online)
http://revistadminmade.estudios.it/index.php/adminmade/index
Double blind peer review
Subject: Social Sciences: Commerce: Business

https://doaj.org
### Online Visibility of Research Impacts Rankings

<table>
<thead>
<tr>
<th>Ranking</th>
<th>World Rank</th>
<th>University</th>
<th>Det.</th>
<th>Country</th>
<th>Presence Rank*</th>
<th>Impact Rank*</th>
<th>Openness Rank*</th>
<th>Excellence Rank*</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>2524</td>
<td>University of Mauritius</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>2566</td>
<td>Suez Canal University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>2577</td>
<td>Université Abou Bekr Belkaid Tiemcen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>2598</td>
<td>University of Zambia</td>
<td></td>
<td></td>
<td>424</td>
<td>8780</td>
<td>3826</td>
<td>1884</td>
</tr>
<tr>
<td>61</td>
<td>2629</td>
<td>Jomo Kenyatta University of Agriculture and Technology</td>
<td></td>
<td></td>
<td>648</td>
<td>5217</td>
<td>2558</td>
<td>2805</td>
</tr>
</tbody>
</table>

Research output is also a key topic for Webometrics, but including not only formal (e-journals, repositories) publications but also informal scholarly communication. Web publication is cheaper, maintaining the high standards of quality of peer review processes. It could also reach much larger potential audiences, offering access to scientific knowledge to researchers and institutions located in developing countries and also to third parties (economic, industrial, political or cultural stakeholders) in their local community.

We intend to motivate both institutions and scholars to have a web presence that reflect accurately their activities. If the web performance of an institution is below the expected position according to their academic excellence, university authorities should reconsider their web policy, promoting substantial increases of the volume and quality of their electronic publications.

http://www.webometrics.info
Open Archives

• 'Open' = freely accessible and/or interoperable
  • Open Archives Initiative (OAI):
  • "develops and promotes interoperability standards that aim to facilitate the efficient dissemination of content."
  • OAI Metadata Harvesting Protocol
    • allows metadata from different archives to be harvested and collected together in searchable databases
• creates the potential for a global virtual research archive
Self Archiving

- **Author self-archiving**
  - "...an umbrella term often applied to the electronic posting, without publisher mediation, of author-supplied research."

- **Institution self-archiving**
  - Institutions may post articles on behalf of authors
Institutional Repositories

- Institutional repositories (IRs): "digital collections that preserve and provide access to the intellectual output of an institution."

Welcome to the University of Zambia Research Repository Online

This service, being maintained by the University Library, increases the visibility of UNZA's research; help reach a worldwide audience through exposure to search engines such as Google and begins the process of digitally preserving the University's intellectual output. For further details about this Institutional Repository and open access please see University library website.

Communities in UNZA Repository

Select a community to browse its collections.

African Digital Health Library (ADHL) - Zambia [40]

The African Digital Health Library (ADHL), Zambia node, makes available health related content ranging from theses, dissertations, and Ministry of Health reports from Zambia.

http://dspace.unza.zm/xmui
Why institutional repositories?

**Situation analysis**
- structural problems in scholarly publishing
  - Serials crisis, Impact barriers and Access barriers
- e-print repositories a possible solution

**Benefits**
- for the researcher
- for the institution
- for the research community
Why Mandate IRs Adoption in Zambia (1)

- Quality assurance
- Facilitate the dissemination of research—applied research—output to a much wider audience.
- Raising profile and prestige of academics and institutions in Zambia
- Increases competitiveness
- Reduces institutional cost
While research is an HEA non-core requirement for private HEIs, IRs provide measurable metrics [...]
Why Mandate IRs Adoption in Zambia (3)

Registered Private HEIs

- **Africa Open University**
  - Reg No: HEA/059
  - Reg Date: June, 2017
  - Mode: ODL
  - PLot No. LN-1002/20/1, Masaiti Road
  - P.O. Box 230045, Skyway, Ndola, Zambia
  - Phone: +260 971 054 108 / 0 971 054 110

- **Africa Research University**
  - Reg No: HEA/001
  - Reg Date: February, 2016
  - Mode: FT and ODL
  - Contacts: Suite 142, Carousel Centre
  - Corner of Lumumba Road
  - P.O. Box 32481, Lusaka
  - Phone: +260 955 885672

- **African Christian University**
  - Reg No: HEA/011
  - Reg Date: March, 2016
  - Mode: FT and ODL
  - Contacts: Plot No. 3773213, off Lake Road, Twin Palm, Woodlands
  - P.O. Box 320161, Lusaka, Zambia
  - Phone: +260 965 009 228 / 0 978 559 228

- **Ambassador International University**
  - Reg No: HEA/060
  - Reg Date: August, 2016
  - Mode: FT
  - Contacts: Off Great East Road
  - Rufunsa
  - P.O. Box 166, Chongwe, Zambia
  - Phone: +260 972 842 608

- **Cavendish University**
  - Reg No: HEA/003
  - Reg Date: February, 2016
  - Mode: FT and ODL
  - Contacts: Corner of Great North and Washama Road Villa Elizabeth
  - P.O. Box 34625, Lusaka, Zambia
  - Phone: +260 211 333600 / 167

---

- Preliminary analyses suggest that of the 66 HAE public and private HEIs accredited by HEA, only two have functional IRs
  - The University of Zambia and Copperbelt University have functional IRs
It is presently difficult to determine and verify Zambian HEIs research output.
Profile Zambian research output on the world stage, like the multitudes of other countries:
This obviously has implications on the overall ranking of Zambian HEIs.

We're happy to present several data visualizations to give an overall sense of the county of publication landscape.
Why Mandate IRs Adoption in Zambia (6)

1) Publicly profile research output (especially postgraduate output)

2) Most countries have national platforms/portals that showcase research output

http://www.netd.ac.za
Dissemination:

1) A number of federated services can be implemented by harvesting content to IR. E.g. National ETD portal [...] 

2) HEA could have simple/basic tools created to harvest content for reporting

http://lis.unza.zm:8081/portal
Enforcing adoption and implementation

- HEA to adopt IRs as quality assessment tool
- HEA to be part of the key stakeholders to develop a national open access policy:
  - Mandate all higher education institutions to have OA policies aligned with the national policy.
  - Mandate open access to all publicly funded research.
  - Mandate all higher education institutions to have IRs and online journals.
Implementation of IRs

• Institutional ‘OA’ policy/mandate to be used as a driving force.
  • Decide on content to curate.

• There are numerous Free and Open Source IR software tools available.
  • Installation, configuration and administration.
  • Local expertise exists to help institutions install and configure IRs.

• Institution IT departments can easily handle installation and configuration, while libraries would manage ingestion of content and IR management.
Implications of IR Adoption (1)

• Sensitise academic staff in HEIs on the value of IRs.
  • OA influences citation count.
  • Some HEIs in Zambia, e.g. UNZA, have started using citation count as metrics for assessing performance of academics.

• Training institution staff on how to work with IRs.
  • Library staff would require training in workflow management.
  • IT support staff would require training on administration of IRs.
Citation counts are taken into account when deriving more reliable metrics such as h-index:

Reputation of researchers measured by such metrics
Conclusions

- The UNZA’s Department of Library and Information Science will be hosting an OA and IR implementation workshop in the next coming weeks
- There is a need to initiate works on a national Open Access Policy
- Policy and technology are not panaceas.
  - Policy implementation and a mandate could potential facilitate implementation of OA and IRs
  - Studies would need to be conducted


Thank you for your attention!
Open Access and Institutional Repositories in Zambian HEIs

Abel M’kulama <abel.mkulama@unza.zm>
Lighton Phiri <lighton.phiri@unza.zm>

Department of Library and Information Science
University of Zambia

October 30, 2018