

Data Skills Training for Zimbabwean Academic Librarians

Gwanda State University, Zimbabwe

19 – 20 July 2023

WORKSHOP REPORT

By Ndhlovu Phillip, Gwanda State University Library

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1. Introduction

This report provides a summary of the “Data Skills Training Workshop for Zimbabwean Academic Librarians” which was held at Gwanda State University, Epoch Mine Campus, Filabusi, Zimbabwe from the 19th to the 20th of July 2023. The workshop was sponsored by the International Association for Social Science Information Services and Technology (IASSIST) and hosted by the Gwanda State University Library. The training workshop's main objective was to increase librarians' knowledge of research data management and their capacity to assist researchers in this area. The workshop's target audiences were academic librarians in Zimbabwe who were interested in learning more about how to manage research data and establishing research data management services. Twenty-four participants drawn from 12 universities in Zimbabwe attended the workshop. Thirty-eight percent of the participants were female while 62% were male. The training provided an opportunity for academic librarians to be equipped with essential knowledge and skills needed to collaborate effectively with researchers on data management. The workshop covered various aspects of research data management such as policy formulation, data management plans, collection, organization, documentation, and storage and security of data.



Figure 1: Workshop Participants, Day One.

2. Background

The Gwanda State University Library responded to the 2023 IASSIST event call for proposals. This was after realizing that, academic librarians in Zimbabwe have not yet fully realised their potential in research data management (RDM), despite the general perception that librarians are a viable source for helping researchers with RDM. Given this background, the event brought together academic librarians from Zimbabwean universities who were charged with research data management responsibilities for the purpose of receiving training in research data management (RDM).

3. Aims

The training workshop's main aims were to;

- Increase knowledge of research data management and increase librarians' confidence in supporting researchers in this area.
- Encourage participants to be active members of the IASSIST

3.1 Objectives

The objectives of the workshop were to assist participants to be better able to;

- i. Understand the goals and objectives of the IASSIST
- ii. Understand the varied nature, types and formats of research data
- iii. Describe the activities involved in managing and sharing research data
- iv. Advise on expectations from research funders
- v. Assist researchers with data management and DMPs by pointing to available support



Figure 2: Workshop Participants, Day 2

4. Facilitators

The workshop had 7 facilitators and two of them from EIFL delivered their presentations using the Zoom conference platform. The facilitators' bios are as indicated in the table below.

	Name	Designation	Organisation
1	Mr. P. Ndhlovu	Deputy Librarian	Gwanda State University
2	Mr. Bosun Obileye	Regional Community Engagement Specialist for Africa	DataCite
3	Dr. Josiline Chigwada	Post-Doctoral Fellow	University of South Africa (UNISA)
4	Dr. Notice Pasipamire	Acting Dean - Faculty of Communication and Information Science	National University of Science and Technology (NUST)
5	Dr. Elisha Mupaikwa	Senior Lecturer	National University of Science and Technology (NUST)
6	Iryna Kuchma	Open Access Programme Coordinator	EIFL
7	Milica Ševkušić	Open Access Coordinator / Librarian	EIFL / Institute of Technical Sciences of the Serbian Academy of Sciences and Arts.



Figure 3: Facilitators

5. PROCEEDINGS

DAY ONE

Official Opening and Participants Expectations

Mr. Phillip Ndhlovu, the deputy librarian at the Gwanda State University, welcomed the participants and stressed the significance of staying current with developments in the field of librarianship, particularly in relation to research data management. After allowing all participants to introduce themselves, Mr Ndhlovu expressed his hope that all in attendance would find the workshop beneficial.

The workshop's official opening speaker who is the Vice Chancellor at the Gwanda State University, Professor Doreen Zandile Moyo, highlighted that handling research data is crucial given its fragility and importance to the advancement of knowledge. Additionally, she emphasised how important data is to the research process and how it is crucial to the continuity and veracity of research work. After acknowledging the sponsorship of the IASSIST, Prof. Moyo encouraged all participants to fully take advantage of the training opportunity.



Figure 4: Vice Chancellor- Gwanda State University-

The participants voiced the following expectations regarding the workshop:

- To learn about the basics of research data management, such as data curation, preservation, and sharing.
- To gain practical hands on skills on research data management
- To develop skills in data management planning and implementation.
- To gain an understanding of the legal and ethical considerations of research data management.
- To be able to support researchers with research data management best practices in their research projects.
- To network with other librarians interested in research data management.

Session 1 - Goals and objectives of the IASSIST

The first session of the workshop focussed on goals and objectives of the IASSIST and was facilitated by Mr. P. Ndhlovu. He explained the three communities mainly supported by the association, current membership patterns by region and sector as well as benefits of being a member of the IASSIST. In addition, Mr Ndhlovu also emphasized the IASSIST early professional fellows program and the reduced rate offer of USD\$25 available to people from lower income countries as defined by the World Bank.

In the ensuing discussion, it was apparent that only 6 participants out of 24 were aware of the IASSIST. Some participants confused the association with the International Association of Science and Technology (IAST). Participants expressed willingness to be members of the association after considering the benefits and the reduced offer for members from developing countries.

Session 2 - Introduction to RDM

Dr. J. Chigwada presented on the basic concepts of research data management and the role of librarians. She started off by defining research data management as organising, storing, preserving and sharing data. Dr. Chigwada then moved on to discuss the importance of research data management in academic research. Using some short videos on RDM, she explained that most researchers do not know how to manage their research data properly, which can lead to problems such as loss or destruction of data, and poor quality output when it comes time for publications or other outputs from their work. She also noted that many researchers do not have any training in research data management, and therefore lack the skills needed to be effective managers of their own data. The concluding part of the session focussed on the research data life cycle and defined the stages of a research project and requirements for data management from the beginning of a research study to its conclusion.

Session 3 - Stakeholders in RDM

The third session was also led by Dr. Chigwada and focused on stakeholders and how they can contribute to research data management. This was a lively session with a lot of input from the participants. A discussion was held on the identity of various stakeholders, their roles as well as how these roles interact with one another. This was done by splitting the participants into three groups and instructing them to consider the following issues: What skills are necessary for RDM for academic librarians? What functions do academic librarians perform in RDM? Who are the stakeholders of RDM? Participants thought about these questions individually first, then shared their responses with their group, and finally, their group shared with the other groups. On a flip board, ideas from each group were compiled and then shared with all the participants.

Session 4 - Data management plans

Mr. Bosun Obileye, the Regional Engagement Specialist in Africa for DataCite took the lead in the concluding session of the first day. He began by defining a data management plan and its importance. He then moved to highlighting a number of online tools for assisting with the process of coming up with a data management plan. These include Angos by OpenAire, DMP Online by DCC, Data Stewardship Wizard and the Practical Guide to the International Alignment of Research Data Management. Using a model template for a RDM plan he demonstrated section by section how to write up a data management plan. A practical assignment was given to participants on writing up a data management plan using the online template provided by the digital curation centre (DCC).



Figure 5: Participants following Workshop Proceedings

DAY TWO

Session 1 - Roles and Skills for RDM Capacity Building

This webinar-based session was led by EIFL Open Access Coordinators, Iryna Kuchma based in South Africa and Milica Ševkušić based in Serbia. They concentrated on what librarians should do to stay current and how to acquire RDM skills. Iryna Kuchma emphasised that because research and how it is conducted are constantly evolving, individuals responsible with supporting it must also stay current in research data management. A number of resources with potential to assist librarians to stay current in the area of RDM were highlighted and include;

- UK Data Archive
- Research Data Netherlands
- FOSTER Open Science
- OpenAire
- Research Data Alliance and
- OpenPlato

During this session, there were a lot of questions from the audience for the presenters. Most participants were interested in learning about the obstacles they face in their home nations when attempting to support researchers with RDM as well as their solutions to those obstacles.

Session 2 - DataCite's Global Access Program for Africa

DataCite's Regional Engagement Specialist for Africa, Mr. Bosun Obileye, gave a presentation on the Global Access Program (GAP) for Africa. After giving an overview of DataCite, Mr Obileye explained that GAP is a program that aims to improve equity, access to, and adoption of persistent identifier (PID) infrastructure for communities in under-represented countries, including all African countries. The participants learned about the benefits of using PIDs to improve the visibility and interoperability of research outputs. They also learned about the resources and support that are available through the GAP to help them adopt and use PIDs. The webinar was a valuable opportunity for Zimbabwean librarians to learn about the GAP and how it can help to improve the visibility and interoperability of Zimbabwean and African research outputs. Mr Obileye concluded by emphasising that the GAP is a significant initiative that has the potential to make a real difference in the way that research data is managed and shared in Africa.

Session 3 - RDM policies

The session on research data management policies focused on the importance of data management policies in research projects. The session's facilitator, Dr. N. Pasipamire, began by going through some of the factors that should be taken into account when formulating a research data policy. With input from the participants the following considerations were agreed upon;

- The policy should be aligned with the institution's or organization's overall data management strategy.
- The policy should be informed by the best practices for research data management.
- The policy should be developed in consultation with researchers, data stewards, and other stakeholders.
- The policy should be regularly reviewed and updated to reflect changes in research practices and technologies.

Thereafter, Dr. Pasipamire led a discussion of the various sections of a research data management policy. He was quick to point out that, the sections may differ depending on the nature of the research data management policy. According to him, a research data management policy typically covers the following sections;

- **Scope:** defines the types of data covered by the policy, such as raw data, processed data, and metadata.

- **Responsibilities:** identifies who is responsible for managing research data, such as researchers, data stewards, and data archivists.
- **Data management planning:** describes the process for creating a data management plan, which is a document that outlines how research data will be managed throughout the research lifecycle.
- **Data collection and storage:** specifies how research data should be collected and stored, such as the format and location of the data.
- **Data access and sharing:** sets out the rules for who can access and share research data, such as whether the data will be made publicly available.
- **Data security and privacy:** describes how research data will be protected from unauthorized access, use, or disclosure.
- **Data quality:** defines the standards for data quality, such as the accuracy and completeness of the data.
- **Data preservation:** describes how research data will be preserved over time, such as through archiving or backup.
- **Data auditing and compliance:** describes how the research data policy will be enforced and monitored.

The session was concluded by asking participants to write up different sections of a research data management policy in pairs and then presenting in front of the entire group.

Session 4 – Data repositories

The session on data repositories was facilitated by Dr. E. Mupaikwa. He defined a data repository as a manageable collection of databases with corresponding metadata which allows for the storing and sharing of data. Examples of data repositories highlighted by Dr. Mupaikwa included data warehouses, data lake, data marts, metadata and data cubes. He then explained that data repositories are essential to increasing the information value of research and aiding reproducibility of research findings. The presentation also touched on benefits and disadvantages of data repositories as well as common characteristics.

Specific examples of data repositories which were considered during this session include;

- Figshare,
- Mendeley data,
- Open Science Framework,
- Harvard Dataverse (<https://dataverse.harvard.edu/dataverse/harvard>),
- Fedora Commons,
- Zenodo,

- Dspace and
- ePrints

The session wrapped up by a hands on exercise of uploading research data using the figshare data repository.

6. Workshop Evaluation

At the end of the training event, evaluation questionnaires were given to attendees to determine how satisfied they were with the instruction and how likely they were to put what they had learned to use. All participants filled in the evaluation forms. The results indicated that 96% of the participants were satisfied with the quality of the training activity. Eighty-nine percent (89%) of the participants indicated that it was either likely or certain that they would apply some of what they had learned, while 96% said that it was either likely or certain that their institution or employer would benefit from their participation in the training.

7. Sponsorship Recognition

IASSIST Sponsorship was recognised in the following ways: -

- Participating universities were advised through written invitations that the IASSIST would cover the cost of the training workshop.
- The IASSIST logo was included in the event program of proceedings.
- The University Vice Chancellor, Professor D Z Moyo, verbally acknowledged IASSIST sponsorship in her opening speech of the training workshop.
- IASSIST branded promotional materials were designed for the event. An IASSIST banner was displayed throughout the training workshop. Participants were each given a workshop bag and T-Shirt branded with the IASSIST logo.
- To further acknowledge the sponsor, the Wifi Password for the participants was given the name IASSIST.
- A training session was dedicated on IASSIST goals and objectives in order to shade more light on the reasons for the sponsorship.
- All the facilitators verbally acknowledged the IASSIST sponsorship during their training sessions.
- University social media platforms and websites were used to publicise the event.
- Certificates of participation branded with the IASSIST logo were given to all participants and facilitators.

8. Final remarks

The Gwanda State University Library would like to thank the IASSIST for sponsoring the training workshop. We would like also to acknowledge Hayslett, Michele Matz our IASSIST event liaison for offering practical helpful suggestions for making the training event a success. The workshop advanced the IASSIST objective of building and supporting a network of excellence for the delivery of data services by increasing awareness and strengthening research data management services at university libraries in Zimbabwe. Colleagues in university libraries in Zimbabwe have established opportunities for the exchange of good professional practises in research data management.

ANNEX A: WORKSHOP PROGRAMME

DAY 1	TIME	<i>Day 1 – Chair (E. Mupaikwa)</i>
	8:15 – 8:30	Registration
	08:30 – 9:00	Welcome Remarks and Introductions
	9:00 - 09:15	Official Opening (GSU Vice Chancellor)
	09:15 -10:00	Goals and objectives of the IASSIST Mr. P. Ndhlovu
	10:00 -10:30	<i>Tea</i>
	10:30 - 11:30	Introduction to RDM <ul style="list-style-type: none"> • Research data cycle • RDM cycle
	11:30 – 12:45	Role of the Librarian in RDM Discussion, where are we in our libraries? Dr. J. Chigwada
	12:45 - 14:00	<i>Lunch</i>
	14:00 – 15:00	Stakeholders in RDM Group discussion on Stakeholders Dr. J. Chigwada
	15:00 - 15:15	<i>Tea Break</i>
	15:15 – 16:15	Data management plans (Mr Bosun Obilye) <ul style="list-style-type: none"> • DMP online practicals (DMPonline (dcc.ac.uk)) DMP tool practicals (DMPTool)
	16:15 – 17:00	<i>Report Back Session</i>
DAY 2		<i>Day 2 – Chair (J. Chigwada)</i>
	8:15 – 8:30	Registration
	8:30 – 9:30	Roles and Skills for RDM Capacity Building Iryna Kuchma [Online]
	10:00 - 10:30	<i>Tea</i>
	10:30 – 11:30	DataCite's Global Access Program for Africa – Mr Bosun Obilye (Regional Engagement Specialist Africa DataCite)
	11:30 – 12:45	RDM policies <ul style="list-style-type: none"> • Who should be involved? • Craft a draft policy for your institution • Presentations from participants • Feedback on presentations Dr. N. Pasipamire
	12:45 – 14:00	<i>Lunch</i>
	14:00 – 15:00	Data repositories – (Dr E. Mupaikwa) <ul style="list-style-type: none"> • Requirements • How to develop one • Other data repositories
	15:00 - 15:15	<i>Tea</i>
	15:15 – 17:00	Practicals: looking at data repositories Dr E. Mupaikwa