Open Science Training Coordinators

Community of Practice

www.openaire.eu/cop-training

Reimagining Educational Practices for Open (REPO)

Sharing best practices in open science training: from online to hybrid and beyond

Open Science FAIR, 21 September 2021, 16.30-18.00 CEST

Helen Clare, Jisc/EOSC Synergy, helen.clare@jisc.ac.uk
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…sharing, collaborating, contributing, coordinating

Open Science Training Coordinators

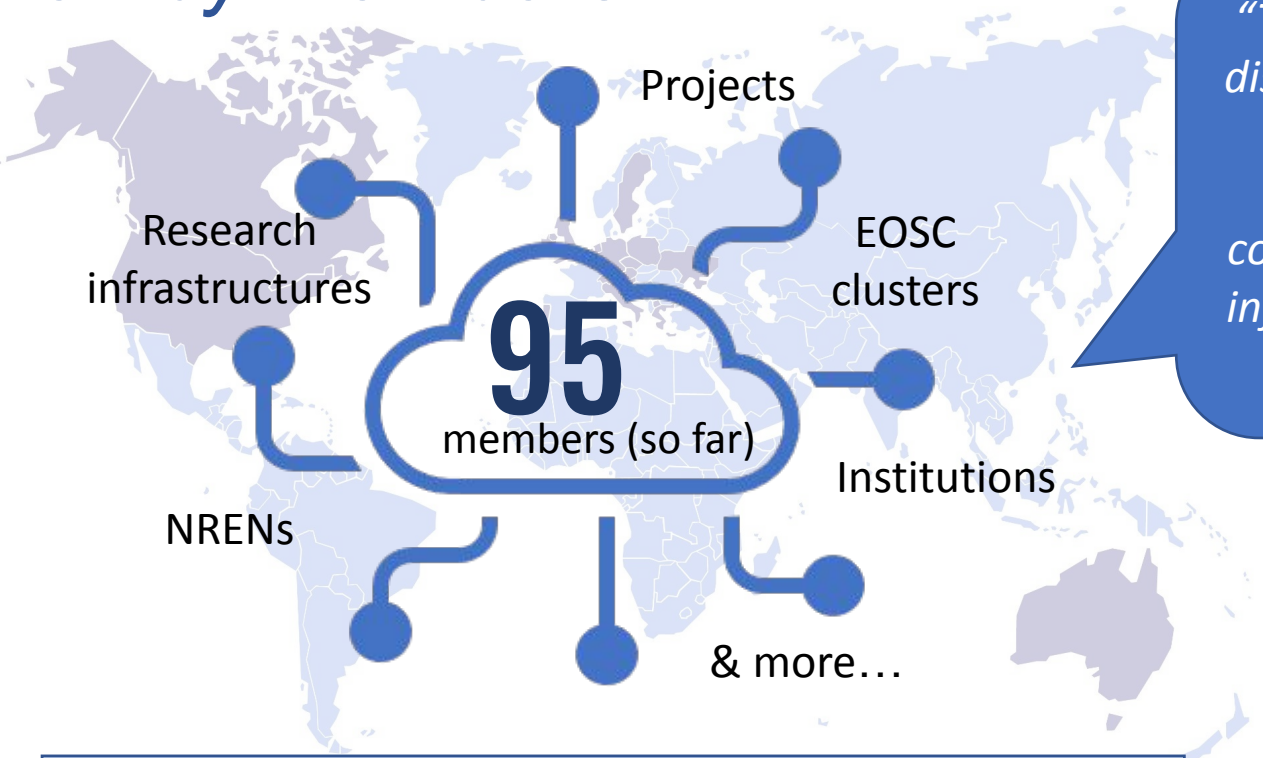
Community of Practice

www.openaire.eu/cop-training

Owned and driven by members…

Set up in **2018**

OpenAIRE



"The CoP can be regarded as a discipline transcending network of trainers and training organisers. We have built a community. We are exchanging information and best practices."
CoP member, 2020

Slack channel

Google Group

36 monthly meetings **77** pages of notes! **7** events

20+ countries

Map credit: adapted from Al MacDonald @F1LT3R

Reimagining Educational Practices for Open (REPO)

Understand and normalise current global Open Scholarship practices, including training but also culture change, especially post-COVID

Community engagement - understanding the global landscape

Building an inclusive global OS training network - join us!

Activities include:

- Dialog with the OS community
- A survey to gather emerging best practices
- Assessment tools to map and support community dynamics

FORCE11
The Future of Research Communications and e-Scholarship

https://bit.ly/REPO-home

ALFRED P. SLOAN FOUNDATION

EOSC Synergy Online Open Science Training Handbook

EOSC Synergy - a regional European Open Science Cloud project

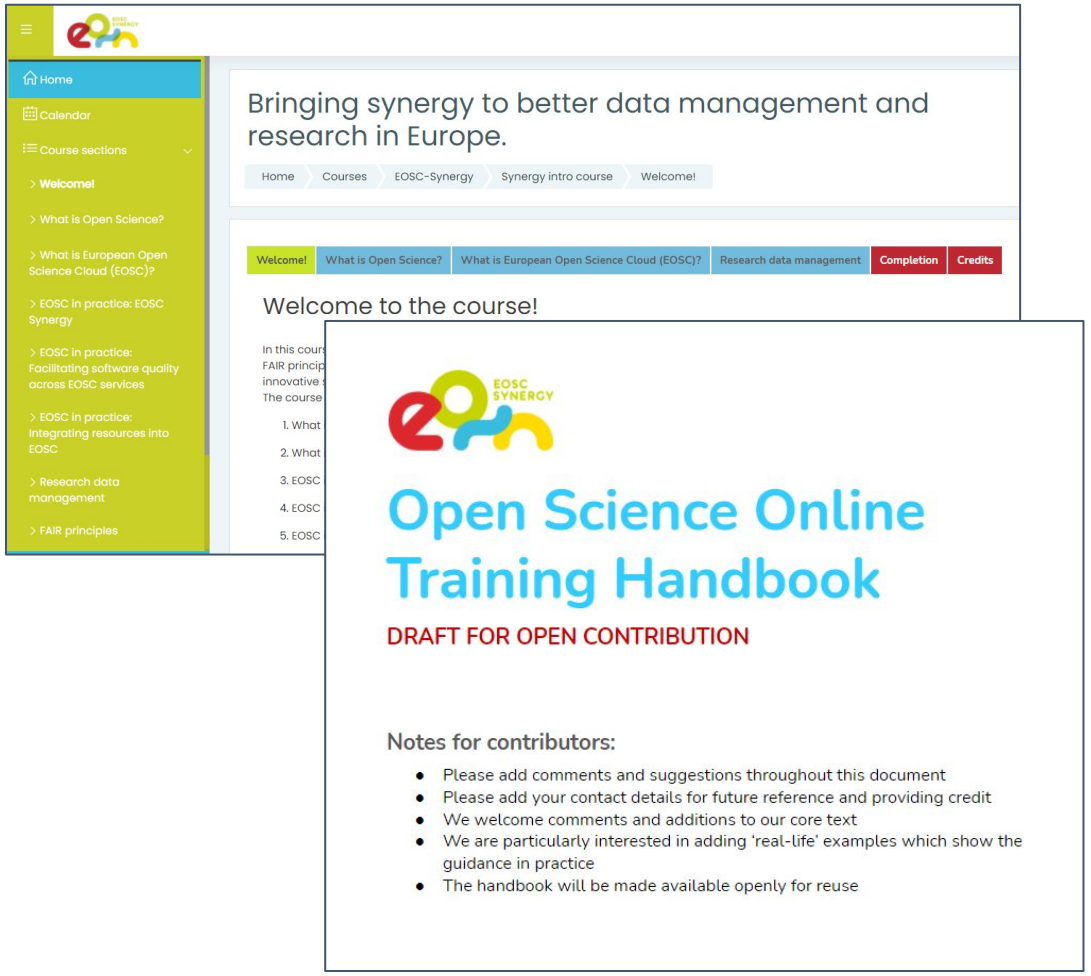
We have a learning platform to promote our service training and good practice in online training

We have a fully reusable exemplar course

Our handbook aims to be a companion to the FOSTER Open Science Training Handbook

It's a work in progress - we would like to include your tips, experiences and examples from this session

- View and comment on the handbook here



Workshop programme

Welcome and introduction

Short talks

Breakouts - sharing experience

Feedback from breakouts

Summary and next steps for online training communities

About you

How many of you run training?

How many of you have run open science training?

Describe your experience with delivering online open science training (pick one)

Short talks

Welcome and introduction

Short talks

Breakouts - sharing experience

Feedback from breakouts

Summary and next steps for online training communities

Short talks

The Principles of Open Research Data Publication Taught Through Game-Based Learning
Samuel Simango, Stellenbosch University

ORION Open Science - Open Science MOOC and Train the Trainer MOOC
Dr Luiza Bengtsson, Max Delbrück Center for Molecular Medicine, Berlin

SSHOC online bootcamps
Ellen Leenarts, Data Archiving and Networked Services, The Hague / SSHOC project

Short talks

The Principles of Open Research Data Publication Taught Through Game-Based Learning - Samuel Simango (Stellenbosch University)

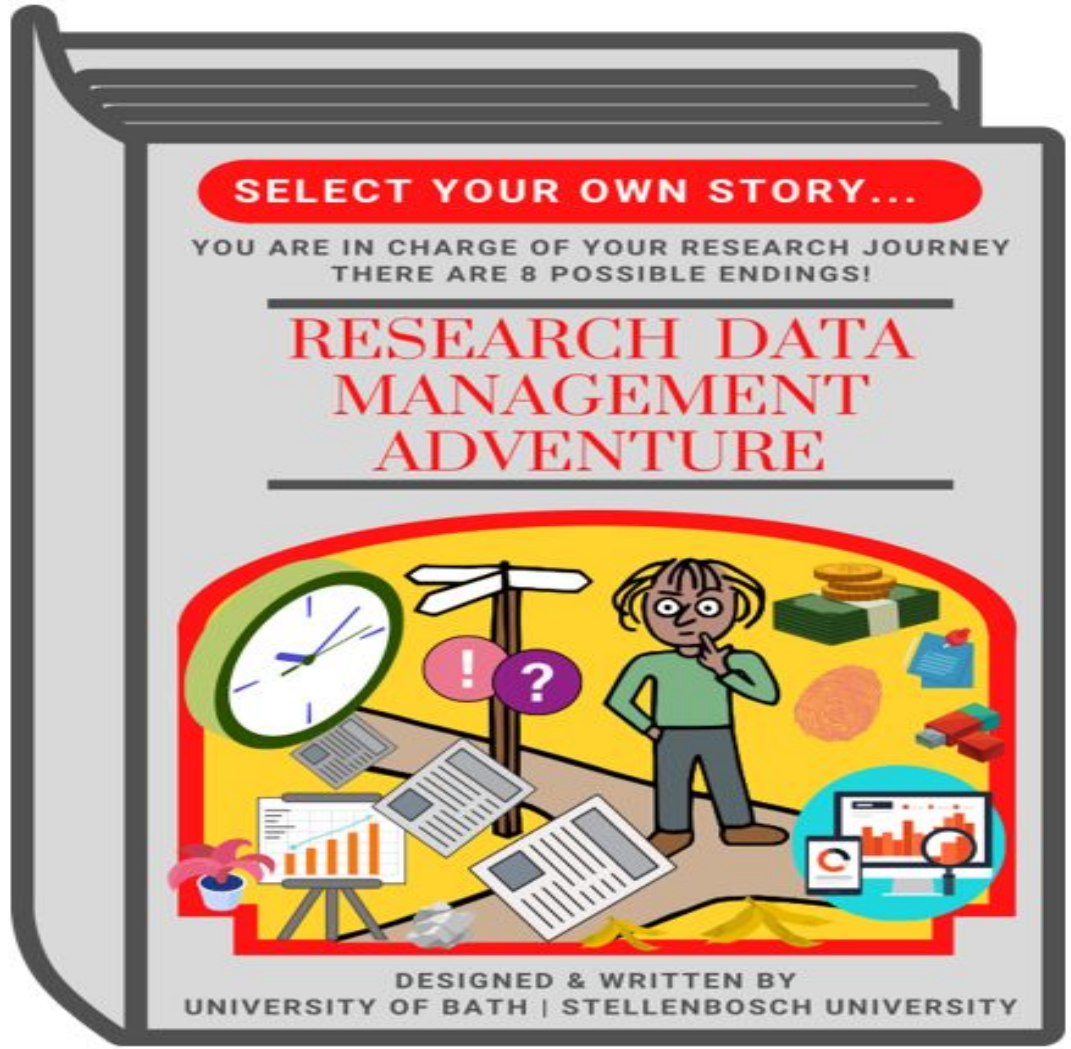
The Principles of Open Research Data Publication Taught Through Game-Based Learning

OPEN SCIENCE FAIR

SEPTEMBER 20 - 23, 2021

Fostering local and global open science communities

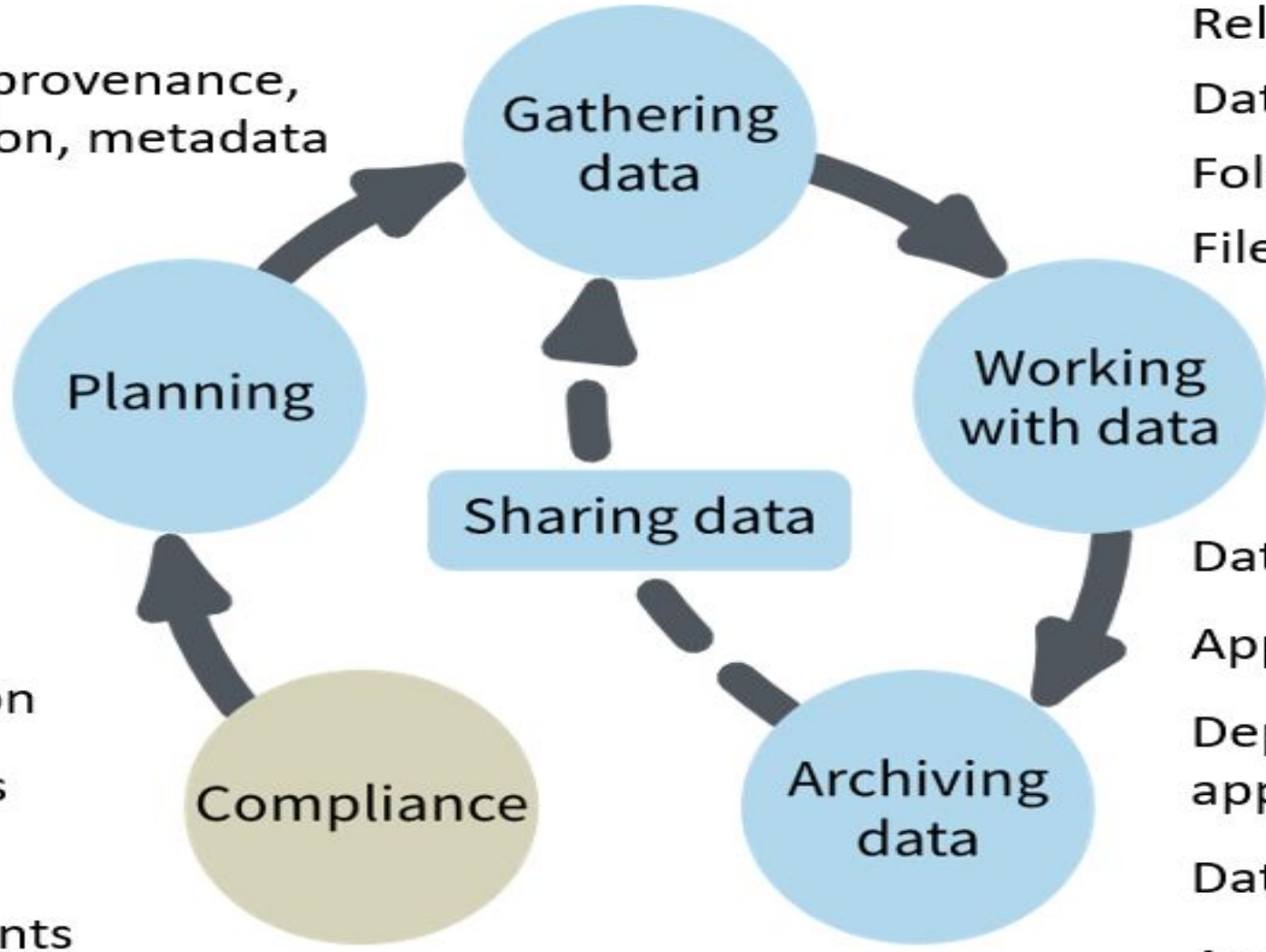
Samuel Simango
Manager: Research Data Services
Stellenbosch University Library and Information Services
E-mail: ssimango@sun.ac.za



UNIVERSITY OF
BATH

UNIVERSITEIT
STELLENBOSCH
UNIVERSITY

Research data management



Consent for data handling
Recording provenance, configuration, metadata

Reliable storage
Data security
Folder structure
File naming

Data management plans
Software management plans

Data documentation
Appraisal and selection
Depositing data in an appropriate archive
Data access statements
Access and retention schedules

Legislation
Contracts
Policies
Agreements

The development process of THE RESEARCH DATA MANAGEMENT (RDM) ADVENTURE GAME

SOURCE: Samuel Simango

Tip of the Iceberg

RDM Adventure Game

Research Data Management

Data management planning

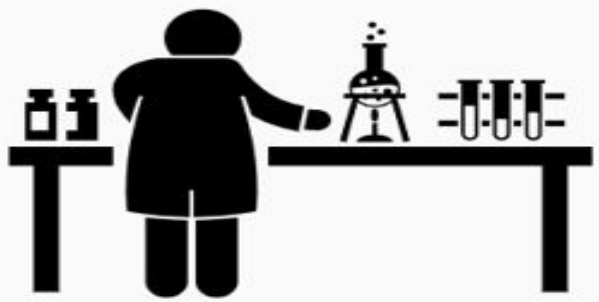
Data literacy

Data archiving

Targeted Audience

Postgraduate Students

Early-Career Researchers



Simulated Activities

a) Storyline
b) Tasks
c) Challenges
d) Points awarded

a) Storyline
b) Tasks
c) Challenges
d) Points awarded

a) Storyline
b) Tasks
c) Challenges
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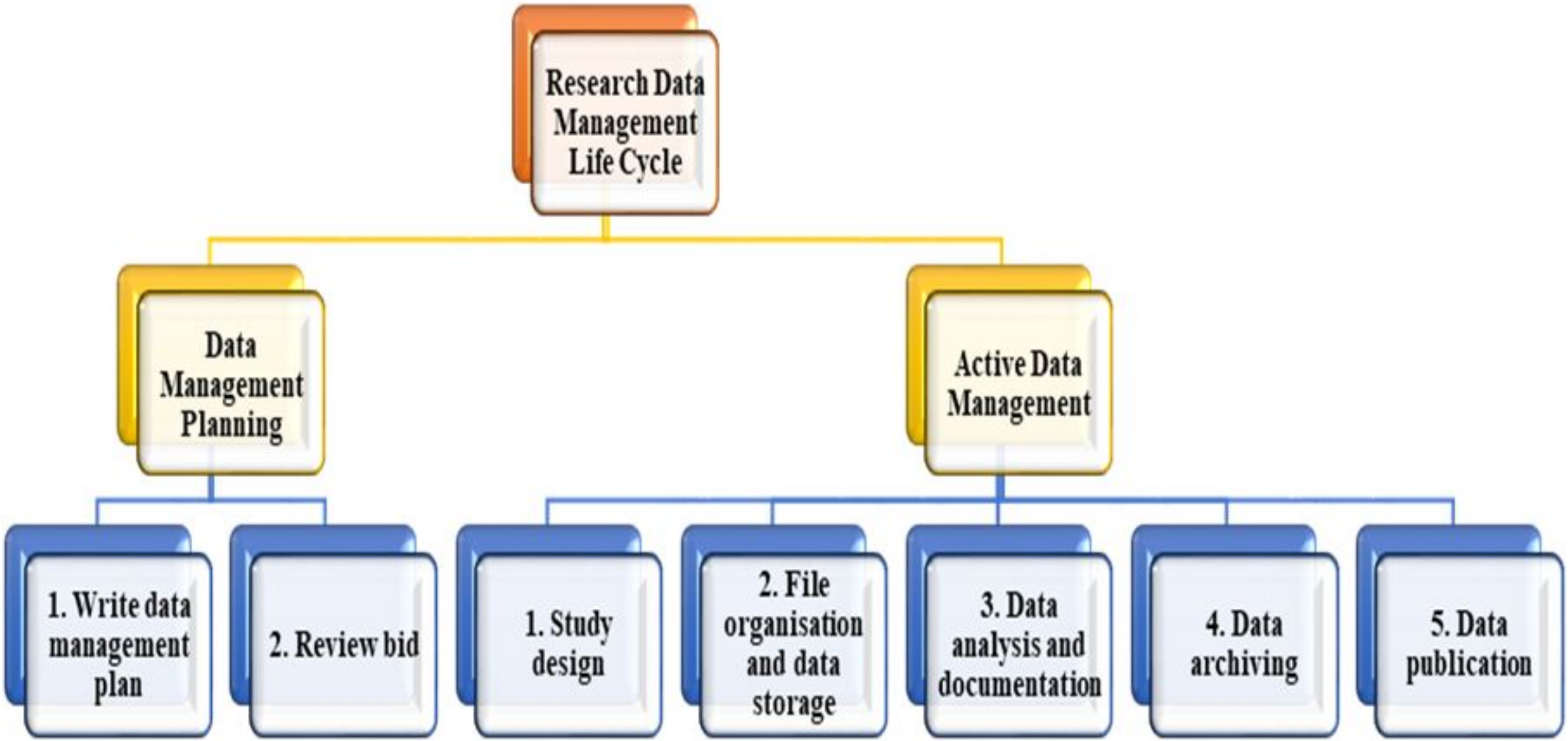
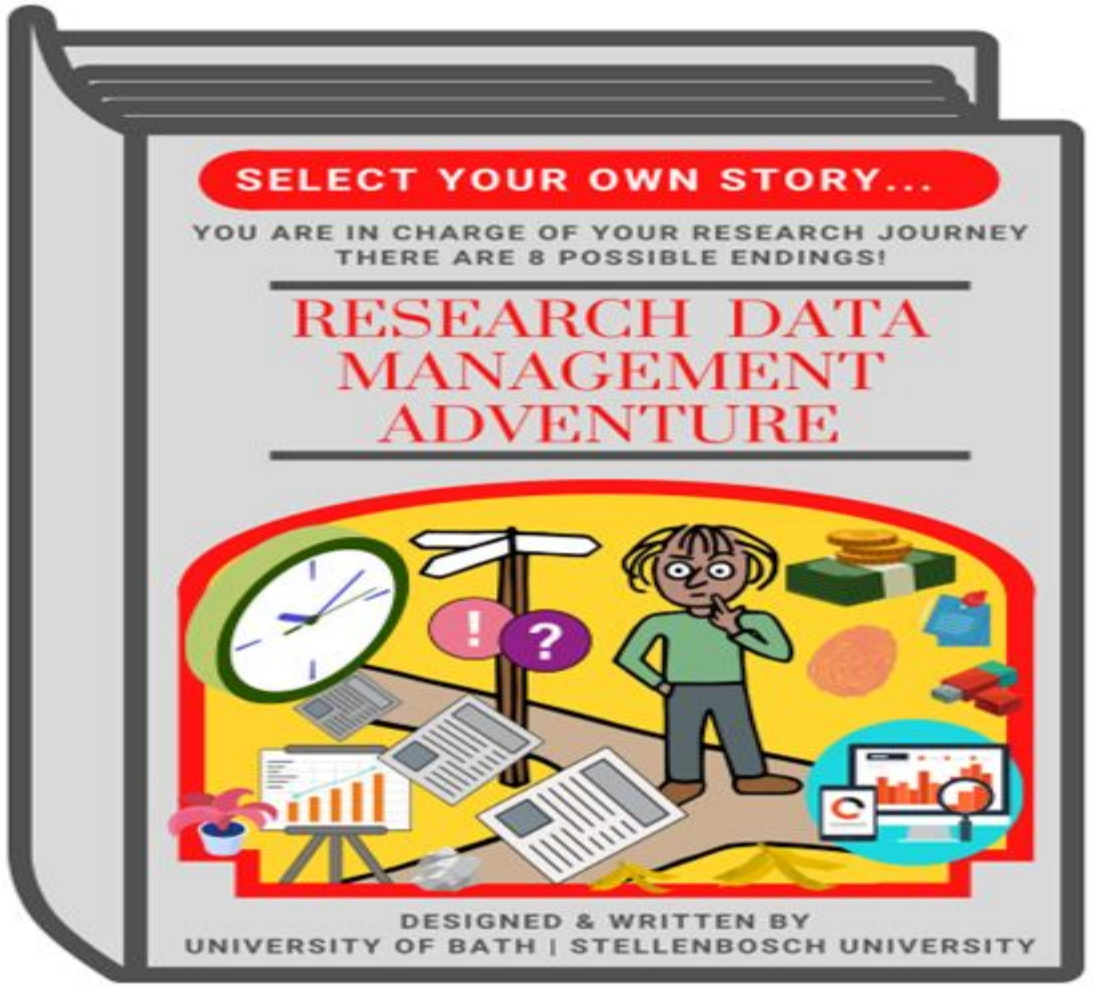
a) Storyline
b) Tasks
c) Challenges
d) Points awarded


Research Data Management Life Cycle
Data Management Planning
Active Data Management
1. Write data management plan
2. Review bid
1. Study design
2. File organisation and data storage
3. Data analysis and documentation
4. Data archiving
5. Data publication

How could the game be used?

Interactive Training
Virtual Training



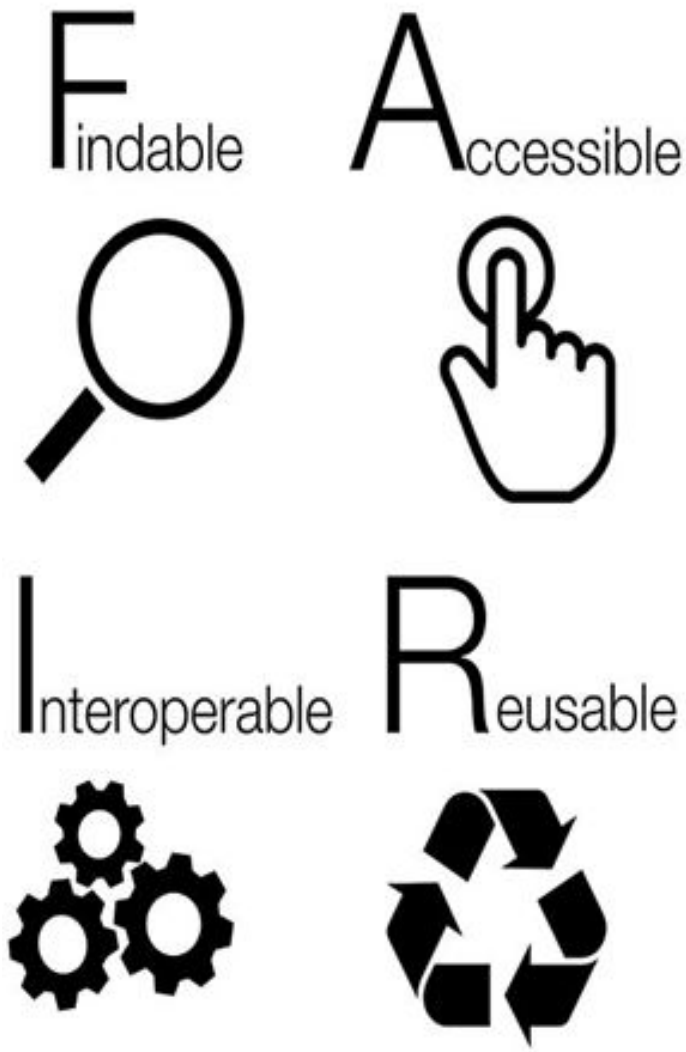
Would you like to **resume your earlier game**, or start a new **Research Data Management Adventure**?

Users ▾ by Country

COUNTRY	USERS
South Africa	554
United Kingdom	241
United States	87
France	40
Germany	30
Netherlands	24
Canada	11

View countries →

The Game's Relevance to the Concept of FAIRness



FAIR Principles

Compliance

Findability

Resource and its metadata are easy to find by both, humans and computer systems. Basic machine readable descriptive metadata allows the discovery of interesting data sets and services.

- **F1.** Resource is uploaded to a public repository.
- **F2.** Metadata are assigned a globally unique and persistent identifier.

Accessibility

Resource and metadata are stored for the long term such that they can be easily accessed and downloaded or locally used by humans and ideally also machines using standard communication protocols.

- **A1.** Resource is accessible for download or manipulation by humans and is ideally also machine readable.
- **A2.** Publications and data repositories have contingency plans to assure that metadata remain accessible, even when the resource or the repository are no longer available.

Interoperability

Metadata should be ready to be exchanged, interpreted and combined in a (semi)automated way with other data sets by humans as well as computer systems.

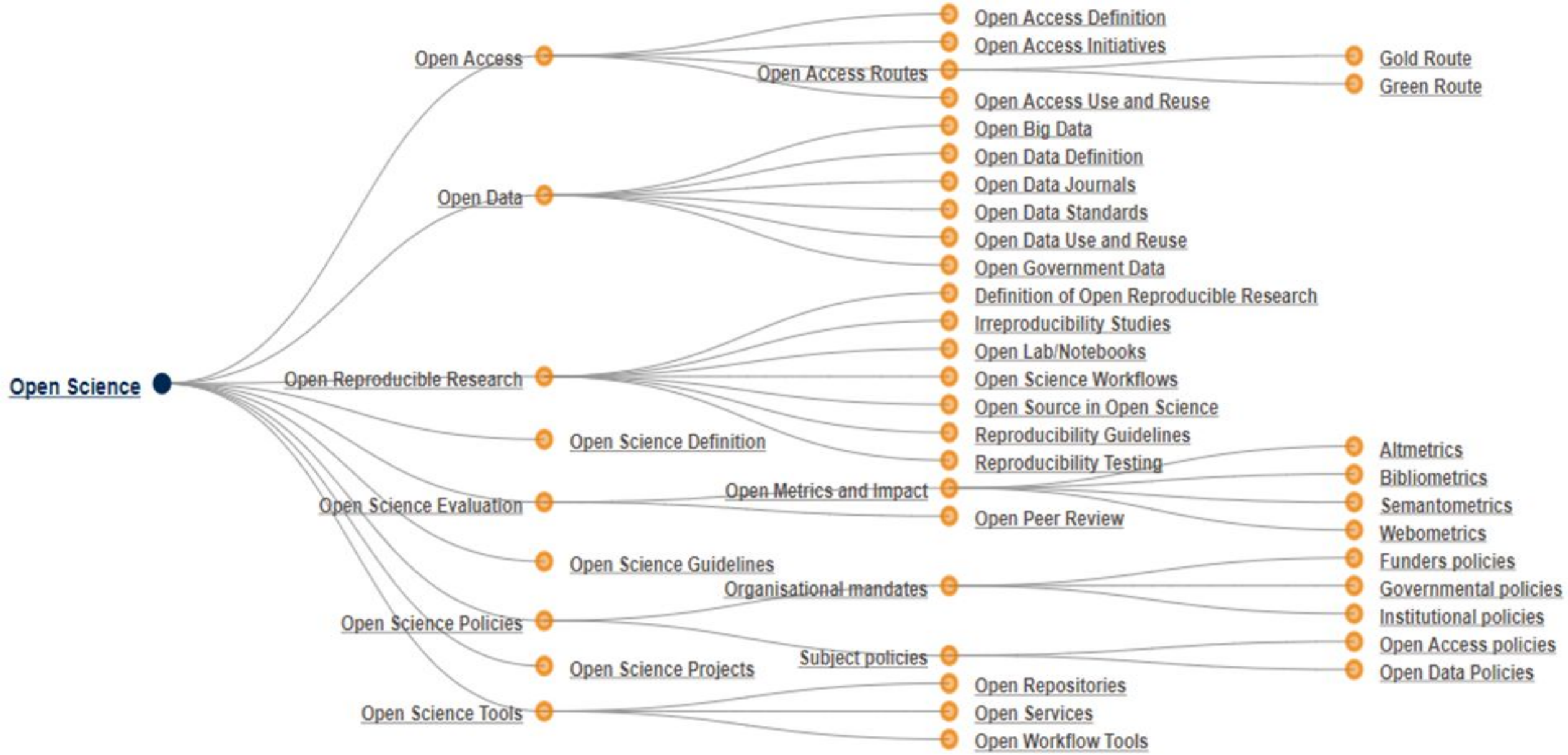
- **I1.** Resource is uploaded to a repository that is interoperable with other platforms.
- **I2.** Repository meta- data schema maps to or implements the CG Core metadata schema.
- **I3.** Metadata use standard vocabularies and/or ontologies.

Reusability

Data and metadata are sufficiently well-described to allow data to be reused in future research, allowing for integration with other compatible data sources. Proper citation must be facilitated, and the conditions under which the data can be used should be clear to machines

- **R1.** Metadata are released with a clear and accessible usage license.
- **R2.** Metadata about data and datasets are richly described with a plurality of accurate and relevant attributes.

The Game's Relevance to the Concept of Openness



The SSH Training Discovery Toolkit provides an inventory of training materials relevant for the Social Sciences and Humanities.

Use the search bar to discover materials or browse through the collections. The filters will help you identify your area of interest.

Search for sources and items

Search

Research Data Management Adventure

Item

The objective of the RDM Adventure Game is to demonstrate and teach good practice in research data management and assist researchers in understanding good practices related to RDM. The specific learning outcomes focus on the following aspects:

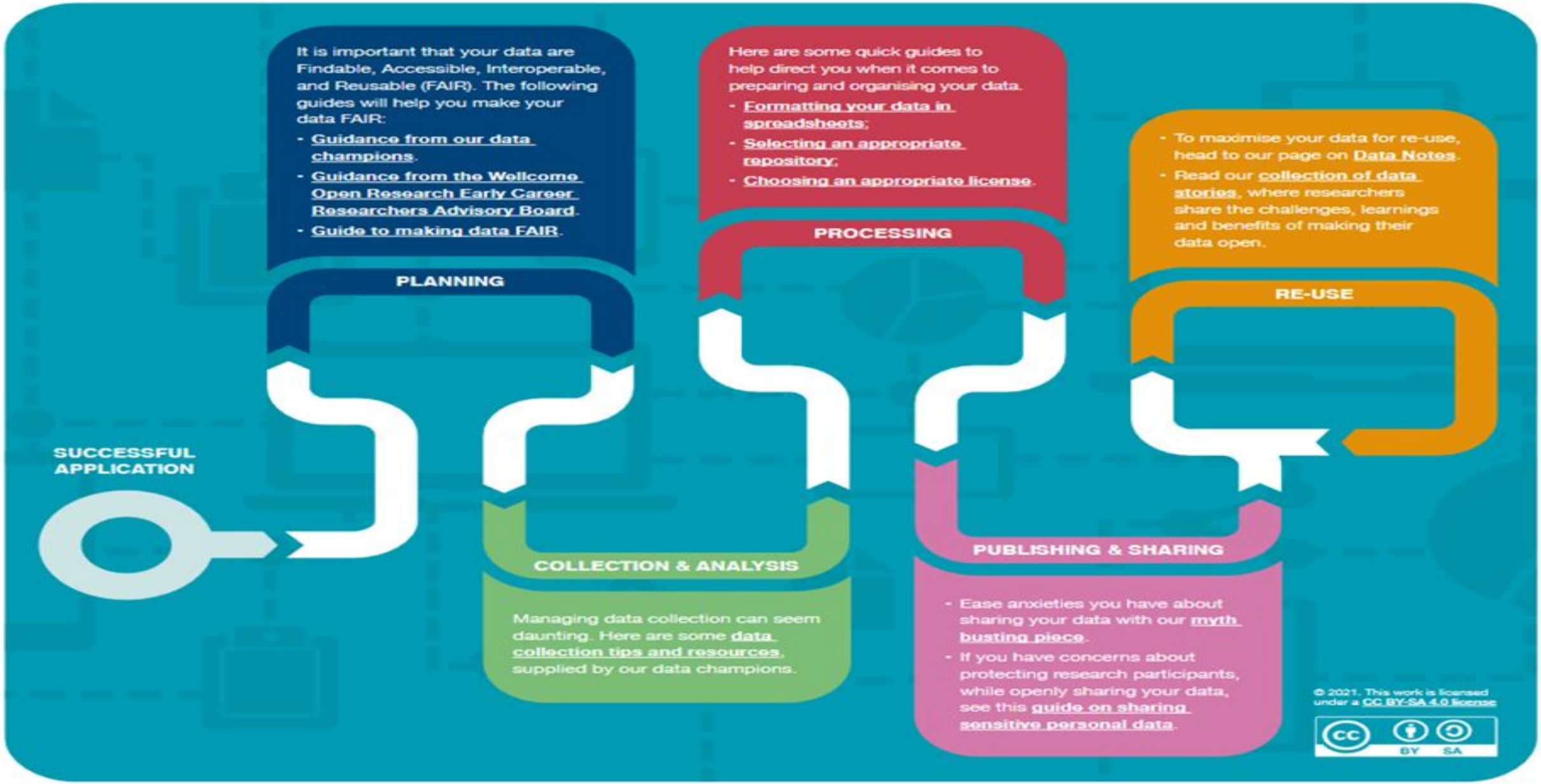
1. Data management planning
2. Designing participant information sheets and consent forms
3. Choosing appropriate equipment for research projects
4. Acquiring suitable third-party research data
5. Organising research data
6. Storing research data appropriately
7. Analysing and documenting research data
8. Preparing research data for archiving
9. Publishing research data

The Game itself is available at https://rdm-games.gitlab.io/rdm-adventure/

Access point
News Item on the Game

Source of item
RDM services @ Library & Information Service

Collections
Training Discovery Toolkit



Wellcome Open Research

Have a go at the **Research Data Management Adventure Game**, helping you work through a project from its very beginnings to its closing stages.

Resources

Policy Implementation Tools

RESOURCE: **Research Data Management Adventure Game**
FOR PROFIT: No
DESCRIPTION: The Research Data Management Adventure Game is a text-based role-playing interactive fiction serious game, based on the data management challenges of a research project. The game takes the form of an online choose-your-own-adventure format in which game players take a simulated research project through the following processes: data management planning, data collection/generation, data organisation, data description and research publication, while encountering data management challenges along the way.
RELEVANCE TO FUNDERS: The Research Data Management Adventure Game is a fun, engaging way to demonstrate good practice in research data management.

For More Information

Research Data Management Adventure Game:

https://rdm-games.gitlab.io/rdm-adventure/

Source code:

https://gitlab.com/rdm-games/rdm-adventure

Contact Us

- Alex Ball (University of Bath)
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- Samuel Simango (Stellenbosch University)
  ssimango@sun.ac.za
- Nushrat Khan (University College London)
  nushrat.khan@ucl.ac.uk

Short talks

ORION Open Science - Open Science MOOC and Train the Trainer MOOC -
Dr Luiza Bengtsson, Max Delbrück Center for Molecular Medicine, Berlin

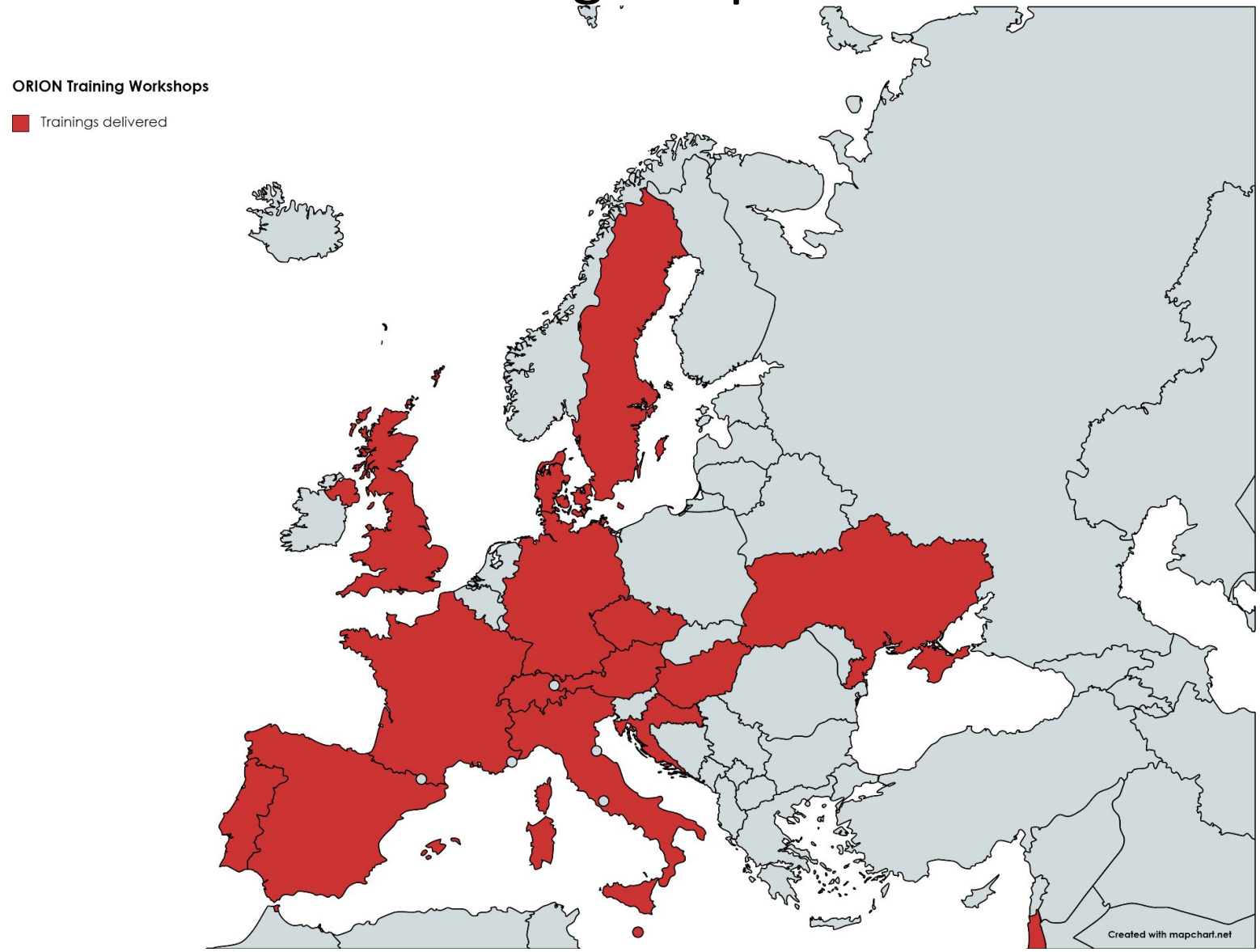
Open Science Training

Dr. Luiza Bengtsson, September 2021

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 741527 and runs from May 2017 to April 2021.

MDC MAX DELBRÜCK CENTER FOR MOLECULAR MEDICINE IN THE HELMHOLTZ ASSOCIATION

Online & Offline Training in Open Science & RRI



ORION Training workshops in Europe in 16 different countries from January 2019 to September 2021
Image created with mapchart.net

WORK PACKAGE 4: TRAINING OUTPUTS & RESOURCES

Live Workshops
off and online

Interactive live Workshops
Full-Day (8)
Half-Day (6)

Lunch Lectures & Talks
Lectures running under 3-hours
(30)

MOOCS
OER

ORION MOOC for Open Science in the Life Sciences
2 x 6 week live runs
(>300 participants)

Stand alone self-paced OER

ORION Open Science Train-the-Trainer MOOC
1 x 3 week live run
(21 participants)

Stand alone self-paced OER

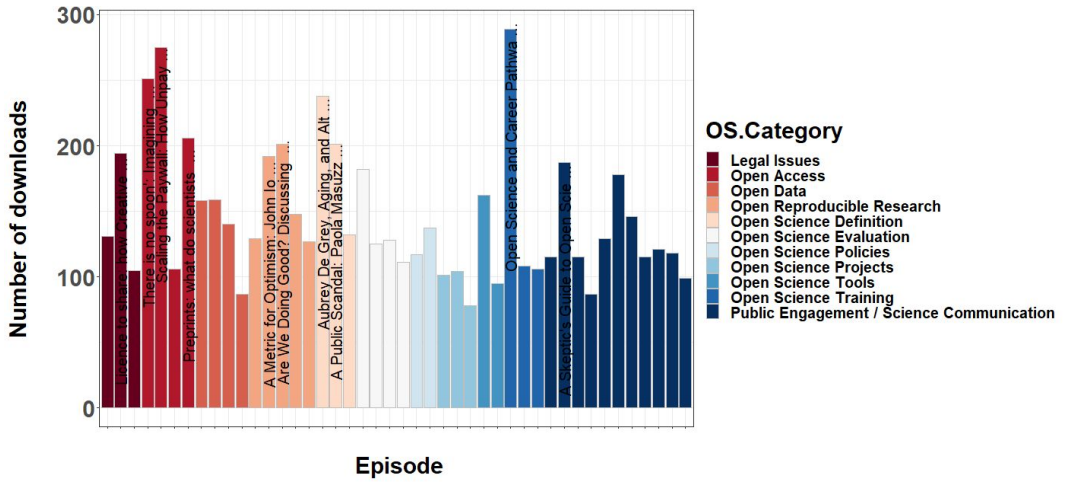
ORION MOOC for Open Science in the Life Sciences

- 6 Modules across 6 weeks
  - Module 1: Open Access P1
  - Module 2: Open Access P2
  - Module 3: Data Management
  - Module 4: FAIR and Open Data
  - Module 5: Sci Comm and Public Engagement
  - Module 6: Reflection and Action
- Expert Contributors
- 300+ participants
- 25% Completion Rate (above average)

Podcast
OER

ORION Open Science Podcast
44 episodes
Ca. 7.400 Downloads

The ORION Open Science Podcast
▶ 7,452 | 44



WORK PACKAGE 4: TRAINING RESOURCES LEGACY…. TO BE CONTINUED

zenodo

Search | Upload | Communities

Communities created and curated by Zenodo users

ORION

Showing 0 to 2 out of 2 communities.

Sort by

ORION Open Science Podcast View

From data sharing to citizen science and from peer review to professional development the podcasts explore the good, the bad, and the ugly of the current scientific system, and what Open Science practices can do to improve the way we do science. ...

Curated by: ORIONOS

ORION Open Science Training Resources View

The ORION MOOC for Open Science in the Life Sciences 2.0 ran live twice: in 2019 and 2020. It will be available as a self-paced course after March 24th 2020 here: bit.ly/30UaTZs The MOOC collected a range of Open Science resources (you can find them...

ORION Open Science Training Resources

All versions

Found 14 results. < 1 >

Sort by: Most recent, asc.

Access Right
- Open (14)

File Type
- Mp4 (6)
- Pdf (4)
- Pptx (2)
- Png (1)
- Wav (1)

Keywords
- Open Science (13)
- Open Access (9)
- RRI (7)
- Academic Publishing (7)
- Open Data (7)
- Research Data Management (7)
- Research (6)
- Life Sciences (5)
- Data (4)
- FAIR (4)

November 9, 2020 (v1) | Video/Audio | Open Access — View

Open Science Café

Harris, Emma; Pirttivaara, Marja; Khadaroo-McCheyne, Nathan; Franssens, Lies; Nimptsch, Katharina; Flynn, Katherine; Patarcic, Inga; Farran, Emily; Anderson-Glenna, Mary; Carlton, Stephen; Hankins, Jonathan; Mayor, Luis; Chigwada, Josiline; Kreicbergs, Janis; Ingram, Zoe; Bengtsson, Luiza;

Event for Berlin Science Week 2020: a series of 20 minute talks on Open Science topics by graduates of the ORION Open Science Train-the-Trainer course and guests. Talks: Open Science: A History Citizen Science 'SMOVE': A Citizen Science Project Open Data Open my

Uploaded on November 9, 2020

July 28, 2020 (v1) | Poster | Open Access — View

Scenario Questions

Harris, Emma;

Scenario Questions for Open Science Topics

Uploaded on July 28, 2020

March 12, 2020 (v1) | Video/Audio | Open Access — View

Three Golden Rules of Open Science Training

Harris, Emma;

Presentation and talk recorded for the Open Science Conference 2020 by Dr Emma A Harris about the lessons learned from Open Science training undertaken as part of the H2020 ORION Open Science Project.

Uploaded on March 12, 2020

February 28, 2020 (v1) | Video/Audio | Open Access — View

Strategies for Culture Change and Resources for Best Practice in Open Science: Slides https://osf.io/fqypv

Mellor, David;

OpenLearn create — Create and publish your own free courses

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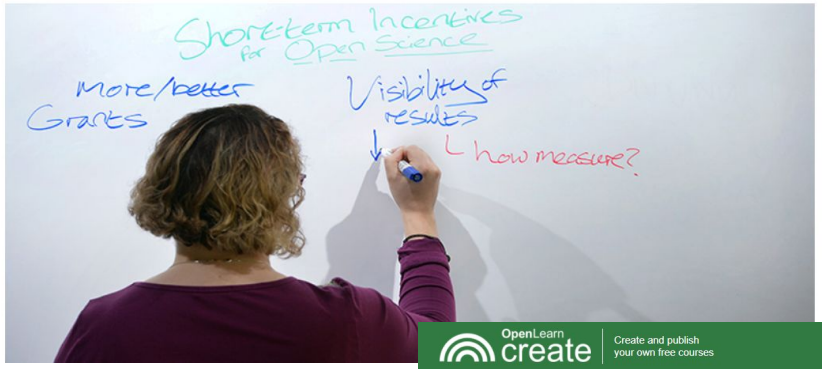
Courses ▸ OER ▸ ORION Open Science Train-the-Trainer MOOC

Course

ORION Open Science Train-the-Trainer MOOC



About this course

10 hours study

Level 1: Introductory

Ratings ★★★★★

5 out of 5 stars

Sign up to get more

You can start learning at any time. By signing up and enrolling you can track your progress and earn a Statement of Participation upon completion, all for free.

ORION open science

OpenLearn create — Create and publish your own free courses

Search for free courses and collections

Home | Get started | Create a course | Free courses | Collections | Sign up / Sign in

Courses ▸ OER ▸ ORION MOOC for Open Science in the Life Sciences 2.0

Course

ORION MOOC for Open Science in the Life Sciences 2.0

Free statement of participation on completion

Course description | Course content | Course reviews

Welcome to the ORION MOOC 2.0 for Open Science in the Life Sciences!

What is this course about?

This course is an introduction to Open Science principles in biomedicine, life sciences and other related research fields. It is intended to help scientists to share their research with the world more effectively.

Who is this course for?

This course is for researchers in biomedicine, life sciences and related research fields interested in

About this course

12 hours study

Level 1: Introductory

Gain a digital badge

Ratings ★★★★★

5 out of 5 stars

Sign up to get more

You can start learning at any time. By signing up and enrolling you can track your progress and earn a Statement of Participation upon completion, all for free.

View this course

Sign up to get more

Share this course

Course rewards

Free Statement of Participation on completion of these courses.

WORK PACKAGE 4: SCIENTIFIC OUTPUTS

Gap Analysis from 2018 and 2020/21 to assess the current state of training in Open Science

Which kind of professional development courses are offered to researchers within the EU-LIFE institutes?
Which of those courses are contributing to the practice and advancement of Open Science?

Method: Program analysis of the training programs from EU-LIFE institutes (2018 and 2020/21 (self assessed data)

Qualitative Research on Program planning and development

How are professional development programs and courses planned, developed and coordinated for junior researchers in the (selected) research institutes?

- Which are the processes, approaches, strategies and instruments used in program planning and program development?
- Which stakeholders are involved and in which way?
- Can different approaches, functions and guiding principles be determined?

Method: Semi-structured expert interview (N=5)

WORK PACKAGE 4: TEAM

Dr. Luiza Bengtsson
WP Leader

Zoe Ingram

Dr. Inga Patarcic

Dr. Emma Harris

Thank you for your attention.
To get in contact, write us an e-mail at
orion@mdc-berlin.de

MDC MAX DELBRUCK CENTER FOR MOLECULAR MEDICINE IN THE HELMHOLTZ ASSOCIATION

Short talks

SSHOC online bootcamps - Ellen Leenarts

Social Sciences and Humanities Open Cloud

WP6: Fostering Communities, Empowering Users and Building Expertise

Sharing best practices in open science training. From online to hybrid and beyond. SSHOC Bootcamps

Ellen Leenarts (DANS) orcid
Contributing: Tatsiana Yankelevich (LIBER) orcid**, Ricarda Braukmann (DANS)** orcid
& the other members of the T6.4 team

Open Science FAIR: 21.09.2021 16.30 - 18.00 CEST

https://www.sshopencloud.eu/training

This project is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

SSHOC
social sciences & humanities open cloud

SSHOC training activities

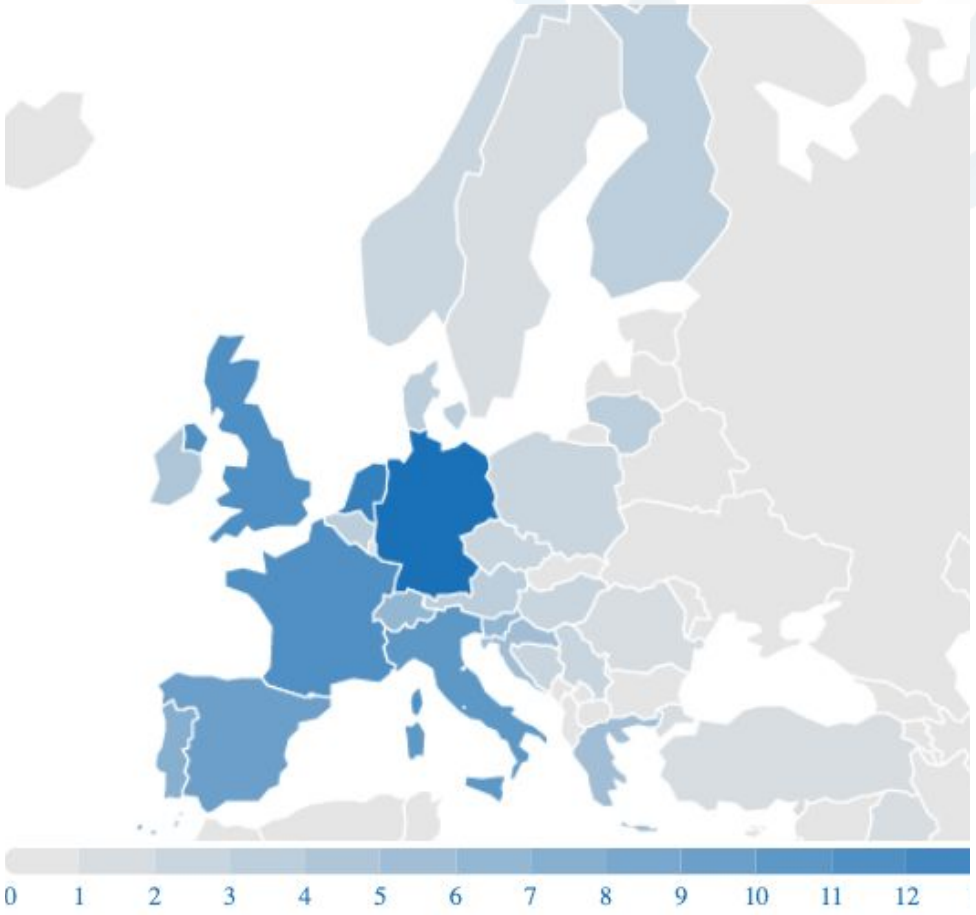
From face to face to online

- SSHOC workshops & bootcamps
- More emphasis for online activities:

  SSH Training Community

From online to hybrid and beyond

- Challenges and tips



Geographical distribution 157 members
SSH Training Community

This project is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

SSHOC
social sciences & humanities open cloud

SSHOC Events: From face to face to online

- Organising online workshops, webinars and bootcamps
  - All are evaluated, reported, learning materials are published online to enable reuse https://www.sshopencloud.eu/training
- Organising train-the-trainer bootcamps were supposed to be:
  - 3 face to face bootcamps (1,5 day at least) co-organised with local partners, co-hosted at conferences
- Moved online
  - From 1,5 days to one session to multiple sessions
  - From co-hosted with training community and conferences to stand-alone
  - 4 online bootcamps were organised - SSH Training community, LIBER/CLARIN, DARIAH/GESIS, CESSDA/UKDA. But also external trainers from FAIRSFAIR.
  - Extra focus on: engaging content, group work and community building

This project is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

SSHOC
social sciences & humanities open cloud

SSHOC Online train-the-trainer bootcamps

Online fatigue:

- Short, well structured sessions using engaging content
  - From one short session to several short sessions, 1-2 days between sessions, group work in between sessions
  - Clear description of exercises, preparation of breakout sessions, fill in sheets for exercises to make it easier and compelling
- Engaging content:
  - interactive tools e.g. for interactive polling introductions, feedback, discussions, other tools for online brainstorming, community building
  - Short energising intermezzo's.
- Group work:
  - exercise in between 2 2-hour sessions

This project is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

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SSHOC Bootcamps

Topics covered:

Discovery of training resources
CESSDA/UKDA Data curation tools
GDPR & social media data
RDM & Open Science games
CLARIN tools and integrated services
Costs of managing data
FAIR data tools
3rd party data
Didactics

international discussions and exchanging knowledge

you have saved me time in giving me ready materials.

The tools and teaching materials that we can easily repurpose for our instructions. Homework was very helpful to get my mind around the material and thinking about applications. Breakout discussion.

engaged participants!

Good to see real world uses

Resources available:

https://doi.org/10.5281/zenodo.3970799
sshocdariahtrainerrdmbootcamp community
https://doi.org/10.5281/zenodo.4813115

SSHOC
social sciences & humanities open cloud

SSHOC Train-the-trainer bootcamps

What worked well:

- More inclusive… anyone can join regardless of budget not a full conference fee, travel and hotel fee needed, no travel time (no CO2 footprint), remote location

What worked less well:

- Online registration does not mean full commitment…
- Online fatigue
- More events seem to be organised, less focus

- Community building, exchange of knowledge and best practices
  - Increased our efforts in SSH Training Community

This project is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

SSHOC
social sciences & humanities open cloud

SSH Training community

Was supposed to be based on face to face events like the workshops, bootcamps and presence at conferences. Instead we organised monthly calls:

Clear need for online:

- Community building: meeting each other informally and enable co-creation opportunities - “Speed-dating”
- Sharing of knowledge and best practices
  - Across disciplines, experienced/less experienced, geographical location
- Support for the training community itself re. transition from face to face to online (How to organise events online, GDPR compliant)
- Knowledge exchange:
  - (new) tools e.g. for FAIR data and
  - Improving FAIRness training materials
  - (new) services in the SSH marketplace
  - Refreshing pedagogy for online learning
- International members (Europe, US, Middle East, Asia, etc)

This project is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

SSHOC social sciences & humanities open cloud

Challenges from online to hybrid and beyond

- More online will stay because of the clear advantages (inclusiveness, budget, environmental friendly) but
  - We will become used to even engaging online events
  - Attendance will drop
- We need a different engagement strategy
  - Raise commitment e.g. kick off

Hybrid events (face to face and online participation) need special attention:

- Learning outcomes need to be assured for both both audiences
- Same level of participation and engagement with all! Presentations, exercises & group work, discussions. So not: listen-in!
- Consider a training with a mix: face to face as well as online meetings, group work and discussions: let's learn from Australians, Africans
- Technical infrastructure: meeting rooms with conference like equipment; audio and video, individual and collaborative involvement...exciting: ABBAtars, VR
- Complex moderation and tech support: online as well as hybrid
- Beware of privacy issues

This project is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

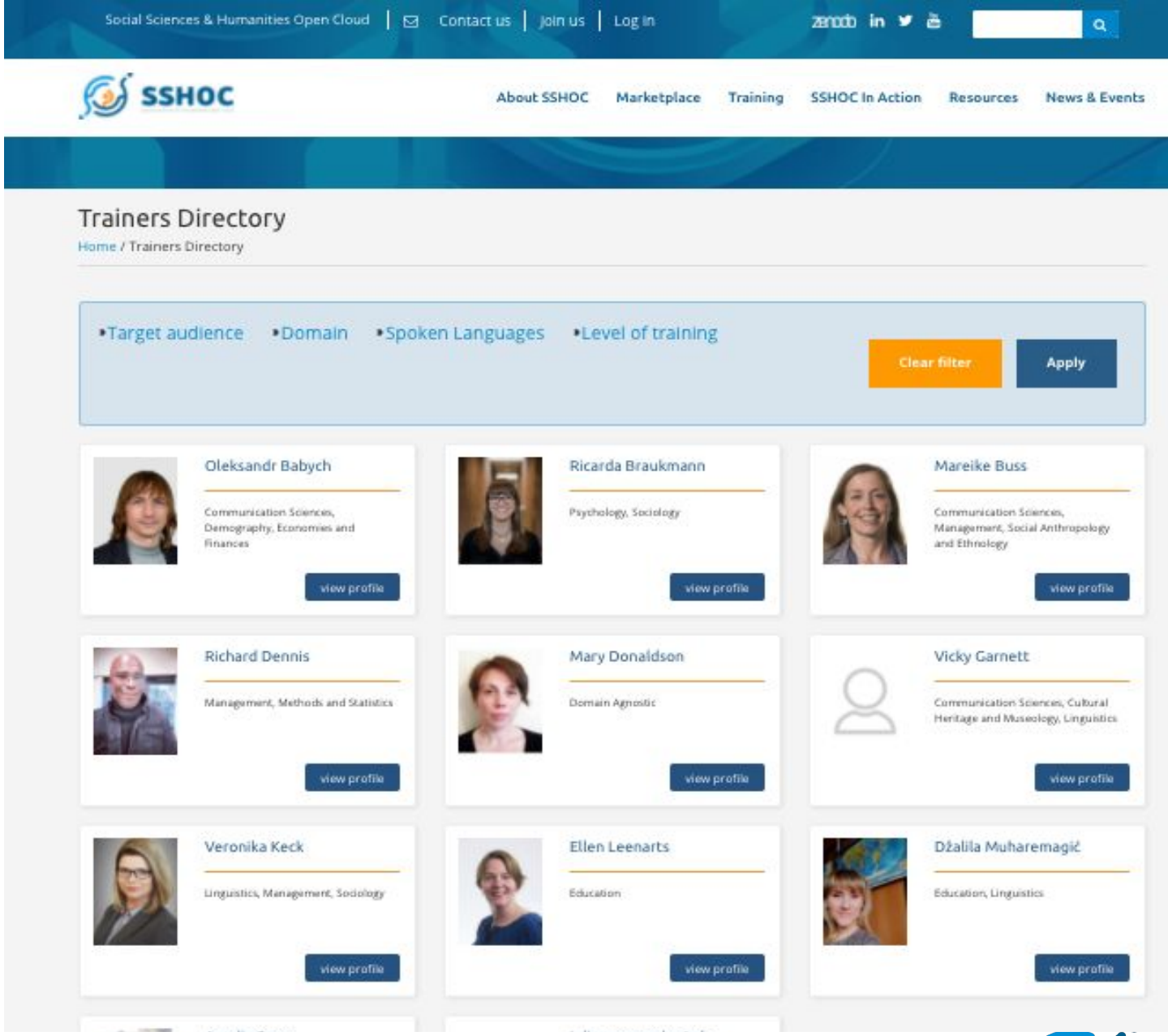
SSHOC
social sciences & humanities open cloud

Let’s collaborate and share ideas in:

- [CoP of training coordinators]
- SSH Training community,
- and introduce yourself as a trainer here:

NEW Trainers directory, **join us**:

https://www.sshopencloud.eu/user/register



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social sciences & humanities open cloud

Thank you!

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Breakouts

Welcome and introduction

Short talks

Breakouts - sharing experience

Feedback from breakouts

Summary and next steps for online training communities

About you

Introduce yourselves and share your background in online OS training

What challenges did you face moving online?

What worked? What didn't?

What does the future look like for your training? Online, f2f, hybrid?

Feedback

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Summary

- We will write a blog post about this session

- Please take a look at the Synergy Open Science Online Training Handbook - comments / additions welcome!
- Take the REPO survey and/or join REPO
- Join the OpenAIRE Community of Practice
- Book on the ORION final conference next week (training covered on 27th)
- Learn more about EOSC Synergy training on Thursday