FOSTER

Open science training

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How to encourage and support researchers to move beyond simply being aware of open science approaches to being able to apply them in their research workflows?

https://www.fosteropenscience.eu
Roadmap for Implementing Open Science Training Practices in Research Institutions

March 28, 2018

In this policy briefing FOSTER outlines six practical actions to be implemented by research institutions to support a cultural change towards Open Science.

1. Promote change by advocating the skills acquisition & learning.
2. Support change through access to training materials & courses.
3. Motivate change by providing recognition & reward.

https://zenodo.org/record/1209175#XaHIXWZS
Roadmap for Implementing Open Science Training Practices

Integrate open science content in researcher training by embedding training modules focused on practical skills into ongoing educational programmes on a regular and standardized basis from as early as possible.

Tailor open science resources to research disciplines.

10.5281/zenodo.1209175
1. Importance
Data should be considered legitimate, citable products of research. Data citations should be accorded the same importance in the scholarly record as citations of other research objects, such as publications.[1]

2. Credit and Attribution
Data citations should facilitate giving scholarly credit and normative and legal attribution to all contributors to the data, recognizing that a single style or mechanism of attribution may not be applicable to all data.[2]

3. Evidence
In scholarly literature, whenever and wherever a claim relies upon data, the corresponding data should be cited.[3]

4. Unique Identification
A data citation should include a persistent method for identification that is machine actionable, globally unique, and widely used by a community.[4]

5. Access
Data citations should facilitate access to the data themselves and to such associated metadata, documentation, code, and other materials, as are necessary for both humans and machines to make informed use of the referenced data.[5]

6. Persistence
Unique identifiers, and metadata describing the data, and its disposition, should persist -- even beyond the lifespan of the data they describe.[6]

7. Specificity and Verifiability
Data citations should facilitate identification of, access to, and verification of the specific data that support a claim. Citations or citation metadata should include information about provenance and fixity sufficient to facilitate verifying that the specific timeslice, version and/or granular portion of data retrieved subsequently is the same as was originally cited.[7]

8. Interoperability and Flexibility
Data citation methods should be sufficiently flexible to accommodate the variant practices among communities, but should not differ so much that they compromise interoperability of data citation practices across communities.[8]
FAIR DATA PRINCIPLES

Ah!

Findable

Accessible

How do you open a .XSBQ file?

Interoperable

Reusable
Hands-on & interactive
Roadmap for Implementing Open Science Training Practices (2)

Support and promote open science skills acquisition. The young generation of scientists and researchers is a major audience for training. Supervisors and researchers guide their mentees and are therefore an important target group to recognize the value of open science training, too.

10.5281/zenodo.1209175
Roadmap for Implementing Open Science Training Practices (3)

Recognize and reward open science skills. Students and researchers are more likely to make an effort to gain skills if these are deemed relevant for their career progression. Stakeholders across the research lifecycle should reward early career researchers by including open science practices in evaluation processes and awarding efforts with credits or other formal certificates.

10.5281/zenodo.1209175
Materials to re-use

https://www.fosteropenscience.eu/

Open Science Toolkit - courses to re-use

What is Open Science?
This introductory module will help you to understand what open science is and why it is something you should care about.

Best Practice
This module introduces policies and other environmental factors that influence good practice in open research.

Open Peer Review (OPR)
This module will introduce you to OPR and let you know how you can get started with it.

Data Protection and Ethics
This module helps you to get to grips with responsible data sharing.

Licensing
This module helps you to find the best license for your open research outputs.

Open Data
In this module, you'll focus on which data you can share and how you can go about doing this most effectively.

OSS and Workflows
This module introduces Open Source Software (OSS) and workflows as an emerging but critical component of Open Science.

Open Innovation
This module will show you how Responsible Research and Innovation is accelerated through Open Science.

Open Access Publishing
This module will help you become skilled in Open Access publication in the wider context of Open Science.

Preprints
This module introduces the practice of sharing preprints and helps you to see how it can support your research.

https://www.fosteropenscience.eu/toolkit
Open Science courses

Answering burning questions of researchers

Where relevant, discipline specific examples (CRG, GESIS, DARIAH-EU)

Interactive content (gamification, quizzes)

Reviewed by community

https://www.fosteropenscience.eu/toolkit
Badges

5 learning paths
Effort 2-4 hours
Complete a set of courses & get a badge

https://www.fosteropenscience.eu/learning-paths
Learning paths

The Reproducible Research Practitioner

The Open Peer Reviewer

The Open Access Author

https://www.fosteropenscience.eu/learning-paths
OPEN SCIENCE TRAINER BOOTCAMP
BECOME A SUPER TRAINER!

http://www.eifl.net/blogs/diy-open-science-training

https://www.fosteropenscience.eu/node/2570
Training the trainers

Building a community of trainers

https://www.fosteropenscience.eu/trainers-directory

Resources to support trainers community

→ Open Science Training Handbook

Living book open for contributions & translations


https://www.fosteropenscience.eu/trainers-materials
Support materials categories:

**OS PRIMERS**
Getting started on Open Science good practices – OA & RDM
www.openaire.eu/os-primers

**GUIDES**
22 how-to’s on practicing OS and on using OpenAIRE services
www.openaire.eu/guides

**USE CASES**
7 use cases narratives with scenarios of OS services offered by OpenAIRE
www.openaire.eu/use-cases

**FACTSHEETS**
Quick references on OS in H2020 topics and on OpenAIRE services.
www.openaire.eu/openaire-h2020-factsheets

**FAQs**
Quick answers to OS practices and OpenAIRE services issues.
www.openaire.eu/faqs

**CHECKLISTS**
Practical steps to perform specific tasks covering less of the relevant background.
www.openaire.eu/checklists

**www.openaire.eu/support**
Available via the new portal: reused, referenced in institutions, research communities resources.
New guides coming soon…

OPEN REPOSITORY OPEN
Apply the right license to your repository. Content should also be licensed. Repositories should recommend the best OS licenses but...

NEW GUIDE FOR REPOSITORY MANAGERS
www.openaire.eu/guides

SENSITIVE DATA
What is Sensitive Data and how to prepare it for storage and sharing safely.

NEW GUIDE FOR RESEARCHERS
www.openaire.eu/guides

HOW CAN IDENTIFIERS IMPROVE THE DISSEMINATION OF YOUR RESEARCH OUTPUTS?
Connect all your research products with your person identifier

NEW GUIDE FOR RESEARCHERS
www.openaire.eu/guides

DATA FORMATS FOR PRESERVATION
What you need to know when creating a Data Management Plan?

NEW GUIDE FOR RESEARCHERS
www.openaire.eu/guides

HOW TO FIND A TRUSTWORTHY REPOSITORY FOR YOUR DATA
Where will the data and associated metadata, documentation and code from H2020 projects be deposited?

NEW GUIDE FOR RESEARCHERS
www.openaire.eu/guides
Community of Practice
informal network to share training experiences

The Community of Practice for Training Coordinators (CoP) is an informal network to share training experiences initiated by a group of people who coordinate training programmes of research and e-infrastructures. This initiative of starting a Community of Practice for training coordinators aims to map out the training activities of various pan-European, EOSC-related initiatives and strengthens their training capacity by improved alignment, sharing experiences and good practices, initiating cross-infrastructure training activities.

Background: One of the outcomes of the EU-IDAT project final conference was to set up several training workshops across Europe. At the EU-IDAT and conference the team, including OpenAIRE, proposed to continue collaboration, independent of projects, in a bottom-up initiative for a Community of Practice for training coordinators. The idea was welcomed at the education and training group of the RDA and OpenAIRE has taken up coordination activities.

Find more information about the Community of Practice here.

Activities
On 6 September 2018 the CoP was launched with a first online call. This call was followed up by a monthly call ever since. The CoP calls are about exchanging news about training relevant topics such as the EOSC training portal, new training offerings by projects or infrastructures, how to create badges, curricula, etc. As a member you receive an invite to the monthly calls.

During the CoP in October 2018 the CoP organised a first face-to-face meeting “Have a CoP of 1 in our valley” (see here). At the Open Science Fair in Porto (September 2018) and the RDA Meeting in Helsinki (October 2018) the CoP is planning to meet again.

Membership
Since the start of the Community of Practice in September, the training coordinators from several projects including projects preparing the European Open Science Cloud, where already present, e.g. EOSCpilot, EOSC-Hub. The CoP is for training coordination at community, projects and research infrastructures. In the list below the current members are listed with their affiliation, project or research infrastructures.

Virtual meetings
Slack channel
How to become a member
Current members
OpenAIRE
EOSC-Hub
EOSCpilot
FAIRsFAIR
SSHOC
FREYA
CESSDA
CINES
FIT4RRI
FOSTER
ELIXIR
EOSC-Life
RDA
DARIAH
LIBER
EGI
CODATA
GÉANT
ARDC
DCC

www.openaire.eu/cop-training
RDA in Lithuania

RDA is an international volunteer member-based organisation and as such encourages the initiative and support of its members across the globe to animate their community on a national level. RDA Europe national node is part of the RDA Europe support programme whose aim is to interact with researchers and innovators in the local language, offering them a platform for exchange of information pertinent to the RDA and their activities and in strict compliance with RDA's guiding principles of Openness, Transparency, Consensus-based, Community driven, Harmonisation and Non-profit. The national pages should not be interpreted as an official representation of the Research Data Alliance in any country or any organisation unless this is specifically stated.

If there is an RDA National Group set up in your country, once your account is active you will be subscribed to receive information and news from that group. If you wish to unsubscribe, you can easily do that by editing the settings in your profile.

Node Coordinators: Ieva Cesviciute, Gintare Tautkeviciene

This is a working area dedicated to the RDA activities, updates and events in Lithuania.
Thank you! Questions?

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Youtube: FOSTER Open Science

https://www.facebook.com/fosteropenscience/

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