The RDA/EOSC Future Cross-Disciplinary Outputs in the EOSC environment

Keep an eye out for these bulletins to get the idea of the impact of the RDA/EOSC Future Open Calls programme. In this August issue, we look at the recent outputs of four more cross-disciplinary projects, and the common thread of engaging researchers in Open Science. The Ambassador work has also continued in this theme and is presented in this issue.

The RDA EOSC Future Open Calls programme has created a vibrant community around RDA and EOSC and we are now seeing in the final stages many rich outputs, engaging different communities in the EOSC environment, leveraging RDA's Recommendations and Outputs.

Our Ambassadors have also worked tirelessly as a network to promote Open Science and awareness of RDA and EOSC among their disciplines. Many of them are working on data challenges that need to be solved to assist the pathway to engagement in Open Science and EOSC.

For more information on the awardees, see the dedicated RDA webpages 🔗.

Four Highlights from the Cross-Disciplinary projects

1. REPOPSI (Open Repository for Psychology Outputs)

What was the challenge?

There was a need to optimize an institutional psychology repository to make it more relevant and FAIR and to incorporate it as an EOSC provider. The plan was to to do this by implementing a number of RDA's outputs: a) FAIR Data Maturity Model, b) Core Trust Seal Standard, and c) FAIRsharing standards.

What did the project achieve?

The project built technologies to improve the repository's FAIR activities. By conducting a self-assessment, they applied the FAIR principles and enriched the repository's metadata, workflows, controlled vocabularies and search capabilities. A concerted effort was also placed on promoting and disseminating results, The project also worked on increasing the number of REPOPSI records in order to increase the impact of the repository use and completeness. The project worked on improving the TRUST-worthiness of the repository and apply FAIR principles.

What was the impact?

For EOSC, Trustworthy and FAIR research data repositories are an essential part of the Open Science landscape. It aligns with the vision to enable FAIR management of research cycle outputs. This project demonstrated how RDA recommendations can be leveraged to improve one repository but also demonstrate how it can be applied in other areas. The project widened EOSC engagement and RDA adoption in a South-Eastern country in Europe. The team worked in the Serbian language and held a number of workshops contributing to national Serbian Open Science activities. REPOPSI is now registered in the EOSC portal and marketplace, increasing the relevance and visibility of Serbian Psychology outputs at a global level.

More information: EOSC in practice story   Publications

2. Data Standards from an interdisciplinary perspective: the experiences of Gdansk University

What was the Challenge?

What are the data sharing practices of different disciplines? Do they differ hugely and what are the challenges? There is a need to improve the collaboration of institutional players to assist and convince researchers of FAIR practices. Four scientific disciplines were chosen that do not have robust data management practices. Sharing data is often difficult due to copyright issues, and their characteristics are comprehensive, which makes their analysis challenging and very interesting. It was concluded that these disciplines often work together, which allows generating and sharing of interesting cross-disciplinary data sets.

What did the project create?

A number of vibrant posters have been created (available on the project page) that summarise the main data sharing challenges in the four fields examined. The team examined adding metadata fields such as Geolocation or Ethical Board committee. The projct also leveraged a number of RDA outputs (such as the Data Science skills for Early Career researchers), and spent time applying for Core Trust Seal 🔗 which they consider a vital cog in the wheel of getting their repository FAIR.

What was the impact?

A better understanding of data sharing practices in the four fields identified as having less advanced Open Science practices. The project also worked on improving metadata of outputs, and a deeper understanding of researchers' attitudes at an institutional level.

More information: Project Page

3. Whyqd: Less Data Wrangling

What was the challenge?
We live in an era where governments and research sector release more data that can be conceivably managed or process. This is an opportunity as now there are many data sources. However, how many can be replicated? Tabular data is often poorly documented and transformation into useful research can produce errors.

What did the project create?
Whyqd is an open-source toolkit that compiles source data, schemas, crosswalks into a searchable database, creating matches for reuse. The tool matches source data with accessible transformations and robust transparency. Much of the work Gavin carried out was data import and creating schemas and setting up an API for external integration of data outputs. A scheduler was set up to support data imports from remote network locations as well as an API-based for bulk data export.

What was the impact?
Contributing to the Open Science landscape by easing the data journey to help interoperability and data transformation. You can find Gavin's tool on the EOSC portal. Improving data accessibility is a process and Whyqd can provide an entry point for that. Gavin's next steps are to work with the RDA Handing of Research Data IG 🔗 to promote Whyqd as a hand's-on solution.

More information: **project website**   **Science Business Article**

4. Operationalising RDA-CODATA Schools for Research Data Science (SoRDS)

What was the challenge?
More work is needed to attract more instructors and attract more funding and hosts in order to consolidate and promote the work of these valuable schools that support the implementation of Open Science.

What did the project create?
The outputs are organized in four areas:
1. Supporting the processes of the schools Costing spreadsheet 🔗
   a. A template 🔗 for MoUs to help hosts clarify roles and formal relationships,
   b. Formalising Terms of References 🔗 and helping volunteers understand what they are signing up to,
   c. Dissemination materials 🔗 to explain the benefits of these courses to both funders and hosts.
1. A Moodle platform (registered users only) as a testbed for teaching materials. It was tested in May and June.
2. "Curriculum Maintenance" to ensure that the materials and their metadata stay up to date. This was supported by a curriculum review sprint with 20 attendees and this also developed user pathways.
3. Updating the website and setting up Customer Relations Software. The work is all documented in GitHub repositories. 🔗

What was the impact?
The outputs created will further support the events of SoRDS. The updated website will allow more information more findable and allow any host to reuse it. This will contribute to EOSC's support for open science practices.

More information: **Project Page**

Building Bridges: The Domain Ambassador Network

Laura Morales

Laura Morales is the Ambassador for Migration Studies. Her outreach work has focused on getting to the main academic events and promoting the work of RDA and EOSC and the benefits they bring to the research processes. One of her observations in her domain is that research processes are still far from FAIR so she has been promoting each of the principles in separate parts of her presentations with clear examples of implementation from her field, e.g what repository to deposit in, which vocabularies are most relevant, importance of DOIs, and access licenses for datasets. She ran a session called "Everything you wanted to know about OS but were afraid to ask" at the Migration Studies Annual Conference (IMISCOE) in July 2023. You can see her latest **outreach poster** and read Laura's **latest blog** on the topic. Laura has an **excellent collection** of her ambassador outputs on Zenodo, including a number of informative presentations on Open Science targeted at her Migration Studies community.
Check also Laura's **ambassador page.**

Marek Cebecauer

Marek Cebecauer, Ambassador for Material Science, has worked tirelessly to build a **relevant guide** for RDM in his discipline, make Open Science more relevant to his discipline and tailoring it to resonate with scientists in the material sciences domain. It focuses on DMPs, gives pointers to openly licensed eLab Notebooks, FAIRtools and Metadata. Marek will keep developing it in the near future and you can view it **here**.

Marek also worked to create his RDA disciplinary page, **Engineering and Technology.** This new page points to relevant RDA groups, and gives an overview of the main data challenges. You will also find a link to the new disciplinary **InfoSheet.**

See all of Marek's outputs **here.**

Find out more about the RDA/EOSC Future Domain Ambassadors

Find out more about the EOSC Future Open Call Projects!

Find out more about the value of RDA for Disciplines!

Building Bridges: The Domain Ambassador Network

Pedro Mendes

Pedro Mendes is the Ambassador for Catalysis. Pedro worked to make a "Crash course for Open Science" 🔗 in his Ambassadorship and trained over 50 young scientists in Open Science. Pedro believes this outreach and attendance at many events really does make a difference to the understanding of the steps needed to push the Open Science agenda in chemistry among senior and junior researchers alike. You can see Pedro's spotlight 🔗 and his updated disciplinary page 🔗 under chemistry, as well as a relevant disciplinary InfoSheet. 🔗

Stefanie Jurburg

Stefanie Jurburg is the Ambassador for Microbial Ecology. She is also active in the Global Young Academy and organised monthly lectures on Open Science as part of her ambassadorship, "Open Science First Fridays Lecture Series" 🔗 which attracted a wide range of researchers from around the world and she included a session on ChatGPT and Open Science. 🔗 Stefanie was busy with a Datathon working on increasing equitable data collection practices in the biodiversity field. Stefanie also connected her outputs to GBIF which will make her data resources available to non-specialists in the life sciences. She updated her disciplinary page 🔗 under the life-sciences section.

In other news....Relevant "EOSC in Practice Stories"

Collaborative Knowledge Sharing: a case study on EU FAR project 🔗

Enabling Interdisciplinary Research in the European Science Cloud through Metadata Standards 🔗

Enhancing FAIRness and TRUSTworthiness in the REPOPSI open repository 🔗