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Title: *How to achieve FAIRER research data by studying evaluation assessment protocols*

Abstract

In this work we propose to study the relationship between recent proposed work for research data evaluation and the FAIR data principles.

The evaluation protocol that we consider includes four steps for data citation, dissemination, use and research impact.

The FAIR data principles include steps to ensure that disseminated data becomes findable, accessible, interoperable and reusable.

In this work we propose to highlight the connections between the different steps of both proposals. The conclusions will enhance both methodologies and will contribute to make FAIRER research data and FAIRER research outputs.

Conference Themes

.Advancing and reforming research assessment (RRA) and Open Science; connections, barriers, and way ahead

.FAIR Data, software & hardware

Keywords

Open Science, research data, evaluation protocols, FAIR principles, research outputs, research assessment

Target audience: Policy makers and funders, researchers, research communities.

Poster content

The FAIR Guiding Principles (2016) [1] for scientific data management and stewardship have been designed to enhance data reusability, that is, to help individuals and machines to find and use the data. The goal was to provide guidelines to improve the Findability, Accessibility, Interoperability, and Reuse of digital assets, conveying the notion of 'long-term care' of valuable digital assets. Increasing accessibility and facilitating reuse extend the impact of existing research work and boost the generation of new research and new knowledge.

More and more often nowadays, scientific data that have been produced in the research process must be disseminated by researchers in order to comply with funders' requirements, as their goal is, as well, to boost the benefits of public

investment in research, which encompasses to increase the quality and efficiency of research, to accelerate the advancement of knowledge and innovation, as well as to improve the reproducibility of the obtained research results. But despite the fast evolution of funder requirements and the spread of FAIR awareness, the percentage of researchers who store data in research data repositories remains low, (EC Research Data report, 2022) [2].

Evaluation protocols to assess research data have been recently proposed (2022). They include four steps to analyze the quality of data citation (Citation), its dissemination process (Dissemination), how reuse is facilitated (Use) and the associated research impact (Research). These four steps: Citation, Dissemination, Use and Research are to be progressively applied in this order. They offer a flexible framework in which evaluators can adapt the proposed steps to a specific evaluation setting, facilitating, thus, to take into account evaluation policy goals such as Open Science guidelines.

This work proposes to highlight the connections between the different steps of both proposals. For example the Citation step in the assessment protocol is closely related with the Findable principle, but it seems that the Research step of the protocol does not seem to fit easily in the FAIR Guiding Principles context. On the other hand, the Dissemination step will contribute to render scientific data Findable, Accessible and Interoperable, and the Use step is tightly related to the Interoperable and Reusable principles.

Our claim is that the conclusions of this study of the relationships between the evaluation protocols and the FAIR Guiding Principles will enhance both methodologies and will contribute to make FAIRER research data and FAIRER research outputs.

References

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