Open Peer Review on Qeios

Research Output Management

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Potential competing interests: No potential competing interests to declare.

The product of conducting research is research output. Research output management refers to the process of organising and documenting the diverse range of outputs generated during the research lifecycle. It recognises that research extends beyond the mere accumulation of data and emphasises the importance of managing not only the data but also the analytical processes, tools, and knowledge structures employed during analysis.

Research is traditionally subject to meticulous documentation, spanning from the initial study design to the final results. Primary outputs include, but are not limited to, experimental designs, literature selection procedures, results obtained from literature studies, input data for models, updates to protocols, observations made during experiments, and resulting data in various forms, ranging from raw to processed and summarised data. Secondary outputs include reporting such as deliverables, articles, training materials, and other forms of communication that convey the outcomes and insights derived from the research.

Managing this vast amount of data and information generated is the essence of research output management, which must be done carefully as part of the research process. It underlines the importance of not only data management but also activities such as data handling, integration, and mapping. By incorporating these aspects into a research output management plan, researchers can effectively manage and enhance the value of research outputs.

We note that data management is just one step in research output management, and we conclude that adhering to the FAIR (Findable, Accessible, Interoperable, and Reusable) principles [1][2] should apply equally to data and other research outputs. Furthermore, we observe that research objects are a solution to make research output FAIR [3] and RO-Crate a specific choice of FAIR solutions [4].

By expanding the concept of research data management to research output management, we foster a more holistic approach to managing research outputs throughout the research process.

References

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