

Open Science

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What is Open Science?

"In a nutshell, Open Science describes an on-going movement in the way research is performed, researchers collaborate, knowledge is shared, and science is organised. It affects the whole research cycle and its stakeholders, <u>enhances science</u> by facilitating more **transparency**, **openness**, **networking** and **collaboration**"

Source: OpenAIRE https://www.openaire.eu/what-is-open-science 30/1/2020



Open Science Policies and Statements



- > European Commission: Specific platform and recommendations
- > Funders: H2020
- > Organizations: LERU (2018), LIBER (2018)...

- National Plans: Spanish Science law (2011), Open Science Statement (CRUE 2019)
- URB Universitat Autònoma de Barcelona
- > Institutional Open Access Policy https://dd.uab.cat/record/89641 (2012)
- > Institutional **Research** Data Policy(Foreseen 2020)

Benefits

Greater access to scientific inputs and outputs can increase scientific productivity through reducing duplication, allowing more research from the same data and multiplying opportunities for domestic and global participation in the research process.

Open science can reduce delays in the re-use of scientific research including articles and data, and promote a swifter path from research to innovation to produce new products and services.

Science, often publicly funded, should be publicly accessible to promote a greater awareness among citizens and to build public trust and support for public policies and investments in research. Open science also promotes citizen science in experiments and data collection.



Open access to scientific outputs allow for greater evaluation and scrutiny by the scientific community which means more accurate replication and validation of research results. Openness to data contributes to maintain science's self-correction principle.

Science plays a key role in today's knowledge economies

and increased access to research results, including data, can positive impact not only scientific systems but also innovation.

Open science promotes collaborative efforts and faster knowledge transfer for a better understanding of global challenges and wicked problems.



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Source: http://www.researchsupport.uct.ac.za/why-open-science

Benefits for researchers

Greater visibility and reach

➤ Increased efficiency







Source: https://pixabay.com/es/vectors/multitud-masapersonas-sombras-306135/

Collaboration/networking



Source: Opensource.com

"Open Science represents a paradigma shift in the way science is conducted that involves performing all stages of scientific research with an open vision"

Font: Abadal, E. i Anglada, Ll. Ciencia Abierta: Cómo han evolucionado la denominación y el concepto. Anales de Documentación, 2020, vol. 23, nº1,. Disponible en: <u>https://revistas.um.es/analesdoc/article/view/378171</u>

Openness throughout the entire research cycle

Stages of scientific research	Openness
Hypothesis	Consider funder's requirements
Data collection	Clarify usage rights Ensure that you give credit through citations
Processing	Use open source software and open interfaces
Long-term preservation	Use right services
Publication and distribution	Use institutional repositories Use open evaluation Ensure links between publications and data Publish metadata with an open license
Reuse	Clear citations

The library supports your role as a researcher

- Provide research data information: Data Management Plan, Repositories ...
- Deposit publications and datasets
- Provide information literacy education
- □ Ensure compliance with regulations
- Verify and enrich metadata quality
- Organize training courses and information







"Science must be opened, because science opens everything else"

Source: Open Science https://twitter.com/openscience/status/799537171086635009



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