Open Science From Theory to Practice



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Open Science in theory

- unlimited access: making research elements available to all at any time
- digital: ICTs as novel opportunities to collect and mobilize outputs
- **good**: improves the content of science and researchers' working conditions
- **global**: reaches all with an interest in research, no matter their location
- equal: makes previously inaccessible resources available to those who may use them

Leonelli "Open Science from Theory to Practice"

The direction of travel



Transparency Reproducibility

OS Implementation

Inclusion

Open Science in practice

- access for responsible use: access unhelpful without skills, infrastructure, governance, administrative support to foster use
- critical and constructive scrutiny of how digital platforms can support existing and future work: not all research/knowledge can be digitalised
- good for some and not others: need to explicitly address inequity in which OS tools serve diverse research traditions
- global impact through local solutions
- from equity to fairness: which research goals are best served by current OS solutions, and how can system can be re-balanced to address other research needs and goals?

Inverting the direction of travel



Ways forward

- recognize danger of overgeneralized standards and principles, including openness
 - support community-specific, value-laden criteria for research quality
 - foster narrative/qualitative assessment over quantitative metrics
 - seek and highlight existing role models for each field
- resist hyperspecialisation and entrenched discrimination
 - reward transdisciplinary exchange as key to reliable knowledge
- identify and share burdens of OS implementation
 - incentivize long-term strategies, venues and infrastructures
 - international collaboration
 - research support (admin, data curation, research design)