### TRANSPARENCY 2025: NEW IDEAS TO PROMOTE TRANSPARENCY IN RESEARCH

Chair: Associate Professor Tracey Bretag, University of South Australia

Panel members:

Dr Ginny Barbour, Director, Australasian Open Access Strategy Group

Dr Maura Hiney, Head of Post-Award & Evaluation Health Research Board Ireland

Professor Frederick Leung, Professor in Mathematics Education, University of Hong Kong

# From closed to transparent by 2025 - shining light on the research process

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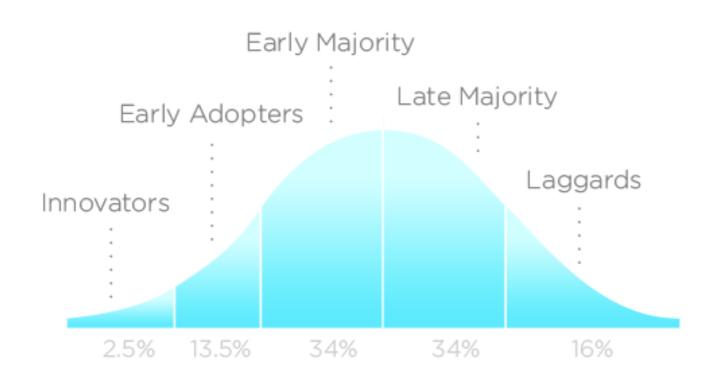


Transparency is key to integrity and innovation in the future research ecosystem

An interconnected, equitable, accountable, global scholarly ecosystem of well-curated, interoperable research articles, data and software supported by diverse open publishing models.

### Where do we need transparency?

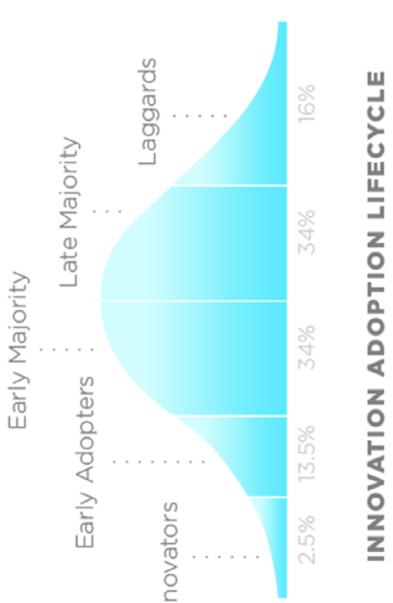
三	Planning	Ethical review processes  FAIR (Findable, Accessible, Interoperable, Reusable) principles  Registration
Q	Research process	Design and analysis  Data management  Conflicts of interest  Authorship/contributorship
	Publication	Reporting Peer review Open access Open data and code
	Post publication	Robust, collaborative, accountable and open post-publication review  Materials, data and code sharing  Incorporation into policy and practice



How do we get more transparency in research?

INNOVATION ADOPTION LIFECYCLE

### Long-term, diverse approaches



Make it required: Policies



Make it rewarding: Incentives



Make it normative: Hiring criteria



Make it easy: Provide support A CARPENTRIES



Make it possible: Provide tools



Adapted from Brian Nosek:

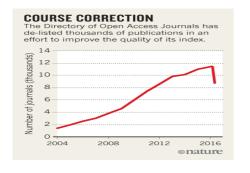
Shifting Incentives from Getting It Published to Getting it Right <a href="https://osf.io/bxjta/">https://osf.io/bxjta/</a>

### Transparency in research 2025: A funder's perspective

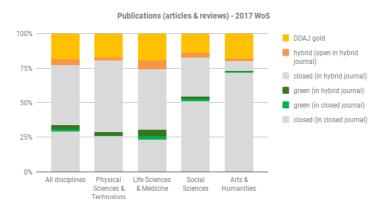
Dr Maura Hiney
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### Open access to publications



- Funders worried about the rise in poor quality and predatory
  journals in the future, our guidelines will stipulate that researchers
  must check the bone fide of a journal in DOAJ before submitting
- Funders are worried about the cost of open access with exorbitant APCs eating into project costs Capping APCs will be vital
- We will need to develop sanctions for researchers who use unacceptable journals or publish in closed journals
- OA publication already mandatory for many funders BUT encompasses green to gold routes and compliance rates only about 50%



NEWS - 04 SEPTEMBER 2018

Radical open-access plan could spell end to journal subscriptions

Eleven research funders in Europe announce 'Plan S' to make all scientific works free to read as soon as they are published.

- Plan S about to change how we evaluate funding applications Move to open publishing platforms (such as HRB Open Research, Wellcome Open Research) and open peer review/post-publication peer review
- Other than Plan S how can we incentivize researchers to be open access especially in the HSS?



### Open access to data



#### Open Data

Open Data is research data that is freely available on the internet permitting any user to download, copy, analyse, re-process, pass to software or use for any other purpose without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself.

Open Data has the potential to speed up the research process while simultaneously improving our confidence in the results.

BUT the access, use and curation of this huge and growing body of data presents many challenges ahead in terms of the ability of researchers and institutions to curate complex datasets and make such that they align with the FAIR (findable, accessible, interoperable, reusable) principles:

- O The cost of training and employing data stewards with appropriate skill-sets and ensuring that there are opportunities for career progression within the data field
- Requiring data management plans all very well, but do the researchers understand what is needed and have they access to adequate infrastructure to implement their DMP
- Ensuring that open access data is not misused move towards a governed access model (e.g. Scottish Public Benefit Panel)
- Rewarding people for good data management practice credit in applications, other rewards?
- O Getting public buy-in on decisions about data to drive policy and regulatory change
- $\circ$  Ensuring the quality of the data circles back to training, infrastructure etc.



### Open access to the research process

We've moved from believing that engagement with the public or patients is 'to', 'about' or 'for' them, to advocating for public and patient involvement in research ('with' or 'by' them) – this is not just crowd funding or citizen science!

#### **PPI and KEDS Initiatives**

- Public reviewers of research applications soon to be part of scoring criteria
- PPI training for researchers to help them understand on to do this
- Expectation of PPI in relevant awards, across research design, conduct, dissemination and implementation
- Knowledge exchange initiatives to add end-user value to research outputs

#### The future for PPI

- Make PPI mandatory in both grant applications and reported outcomes but include this as a legitimate cost in awards
- Continue to support researchers and institutions to implement PPI in their research (but only for a while – institutions need to pick up this baton)
- Collect evidence for the benefits of PPI in improving implementation and utilization
- Funder engagement with the public to prioritize investment (e.g. James Lind Alliance) deliberate democracy!



### The biggest challenges for funders

Understanding what initiatives will effect cultural change in the research community around ownership of research and outputs, and the benefits of data sharing and transparency.





## Challenges in achieving transparency in educational research Frederick Leung, the University of Hong Kong

### **Principles of Research Integrity @ HKU**

"All members of the University ... must comply with the following principles of research integrity:

- be accountable and accept responsibility for all aspects of their research;
- honesty in the conduct and communication of research;
- objectivity and openness;
- due diligence and duty of care;
- fairness in giving credit and appropriate acknowledgement; and
- responsibility for nurturing students and early-career research colleagues."

(http://www.rss.hku.hk/integrity/rcr/policy)

### Principles related to transparency in research

- Honesty "Honesty is required in presenting research goals and intentions, and in reporting procedures and findings. Such presentation and reporting must be full and fair."
- **Objectivity** "Objectivity of research requires maintenance of accuracy in the collection and reporting of data. Conclusions must be based on verifiable facts, and researchers should be impartial and be as transparent as possible (notwithstanding mindful of the secrecy requirement in filing of patents and know-hows) in the handling of data. Research findings should be made accessible to the research community for verification."
- Fairness "All researchers ... must be fair in giving credit for the work of other researchers who participate in the research."

### Special challenges in educational research

### Open science?

- Many education researchers are still skeptical about publishing in open-access journals
- Open data: the process of publication of findings in educational research is typically long – fear of other researchers publishing based on the data before the researchers who collected the data
- Some data are voluminous, "thick", multimedia difficult to share

### Communication

- Many results of educational research are of interest to the public keep research findings accessible, avoid using specialist/technical vocabulary
- Need to educate the public on how to interpret results of educational research

### Qualitative educational research

- Subjectivity in interpretation of data
- Citing of data in support of conclusion
- What is "data"?
- Solution –describe the process as clearly as possible and let the readers judge whether the interpretation is reasonable or not, i.e., be transparent!

### QUESTIONS FROM THE CHAIR

Based on experience in your own context, what are some particular challenges which need to be addressed so that transparency in research can be achieved?

How might transparency in research contribute to better **policy** decision-making and outcomes?

# Much research is avoidably 'wasted' because of flawed research design, non-publication or poor reporting?

 How would transparency in research improve this situation? What institutional structures need to be established so that researchers are willing and able to share their data?

If we are to increase transparency in research across the research lifecycle, is it the **culture** of research or the **incentives** for research that are most important to change and who needs to lead these changes?

How can we harness or mould **online debate post publication** – with its often challenging
tone – to promote a **supportive culture** that
promotes transparency?

Will the move away from traditional publishing to the type of model being developed by F1000 (postpublication transparent peer review) protect us from some of the worst excesses of poor quality or predatory journals that are bringing open access into disrepute?

### QUESTIONS FROM THE AUDIENCE