Open-Access Mega-Journals: Research in Progress

Stephen Pinfield and Simon Wakeling
University of Sheffield, UK

Claire Creaser, Jenny Fry, Valérie Spezi (Loughborough University)
Peter Willett (University of Sheffield)
The Mega-Journals Controversy

Positive views:

• Richard Wellen (2013) identifies OA mega-journals as having (some of) the characteristics of “disruptive innovation” with the potential to contribute to major change
• Jean Claude Guédon (2015) in commenting on the future of scholarly communication, stated, “Subsidized mega-journals would be the best system...”

Negative views:

• John Hawley (quoted in Butler, 2008) voiced the fear that PLOS ONE would be a “dumping ground” for “sub-standard” content – a criticism levelled at all mega-journals
• Declan Butler (2008) labelled PLOS ONE a “cash cow” sustained through “bulk publishing”
• Kent Anderson (2010) criticised them for dispensing with the valuable filtering of conventional journals
Defining ‘Mega-Journals’

• Fully-open access
  – Often with an APC-based business model

• Large scale
  – e.g. PLOS ONE (launched in 2006) – now the largest journal in the world, 31,404 articles in 2013 (in Scopus)
  – but many mega-journals are newer and are not large scale (yet)

• Wide scope
  – e.g. PLOS ONE and Scientific Reports cover all science, technology and medicine (STM) disciplines, SAGE Open covers all humanities and social sciences (HSS)
  – AIP Advances covers all of Physics

• Particular approach to quality control
  – Pre-publication peer review based on scientific ‘soundness’ rather than ‘subjective’ assessments of ‘novelty’, ‘importance’, or ‘interest’
  – Post-publication metrics – the scientific community ‘decides’ novelty and importance by use, citation, etc
Mega-Journal Growth

- *PLOS ONE* launched in 2006
- Other titles launched mostly from 2011
- Output dominated by *PLOS ONE* but *PLOS ONE* showing a decline 2013-15
- Nature’s *Scientific Reports* increasing over the same period; on course to overtake *PLOS ONE* monthly outputs soon
- Other titles growing (if at all) more slowly

Open-Access Mega-Journals Project

- 2-year collaboration between Sheffield and Loughborough universities (Nov 2015-Oct 2017)
- Funded by AHRC (Arts and Humanities Research Council)
- Investigating: “The principal characteristics of the emergent open-access ‘mega-journal’ phenomenon and its significance for the academic research community and beyond”
- Using quantitative and qualitative methods

http://oamj.org/
Among mega-journals publishing 2013, *Scientific Reports* has the lowest proportion of infrequently cited articles.

Question: Why do all these journals which operate soundness-only peer review policies have such different citation distributions (and JIFs)?

- Subject variations?
- *De facto* differences in peer review practices?
- The result of cascade from other journals from the same publishers?
- Publisher and journal reputation?

Cumulative citation distributions for 7 OAMJs (articles published in 2013)
Acknowledgements: Open-Access Mega-Journals Project

University of Sheffield
- Stephen Pinfield (PI)
- Simon Wakeling (RA)
- Peter Willett (Co-I)

Loughborough University
- Claire Creaser (Co-I)
- Jenny Fry (Co-I)
- Valérie Spezi (RA)

http://oamj.org/
@OAMJ_Project