Incorporating Impact into the National Assessment of Research

26 June 2013

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Incorporating Impact Into the National Assessment of Research

- 2012 Excellence in Research Australia (ERA) - results and implications
- What ERA can teach us about impact assessments
- Sector engagements on research impact assessment in Australia
The Objectives of ERA

- Establish an *evaluation framework*;
- Provide a *national stock-take* of discipline-level research;
- Identify *excellence* across the full spectrum of research performance;
- Identify *emerging research areas and opportunities for further development*;
- Allow for *comparison* of Australia’s research *nationwide* and *internationally* for all discipline areas.
Quality: ERA 2010 Ratings

ERA ratings (4-digit)

- 170 (1738 UoEs)
Quality: ERA 2012 Ratings

ERA ratings (4-digit)

2012 (1681 UoEs)
Variation at Four-digit Level: STEM v HASS

**Mathematical Studies (01) and Language, Communication and Culture (20)**

Number of Universities Rated at World Standard or Higher

- **0101-Pure Mathematics** - 2012
  - At World Standard: 6
  - Above World Standard: 6
  - Well Above World Standard: 2

- **0102-Applied Mathematics** - 2012
  - At World Standard: 7
  - Above World Standard: 11
  - Well Above World Standard: 2

- **0103-Numerical and Computational Mathematics** - 2012
  - At World Standard: 3
  - Above World Standard: 1
  - Well Above World Standard: 1

- **0104-Statistics** - 2012
  - At World Standard: 2
  - Above World Standard: 6
  - Well Above World Standard: 1

- **0105-Mathematical Physics** - 2012
  - At World Standard: 3
  - Above World Standard: 3
  - Well Above World Standard: 1

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- **2001-Communication and Media Studies** - 2012
  - At World Standard: 5
  - Above World Standard: 6
  - Well Above World Standard: 2

- **2002-Cultural Studies** - 2012
  - At World Standard: 10
  - Above World Standard: 7
  - Well Above World Standard: 4

- **2003-Language Studies** - 2012
  - At World Standard: 1
  - Above World Standard: 2
  - Well Above World Standard: 1

- **2004-Linguistics** - 2012
  - At World Standard: 7
  - Above World Standard: 5
  - Well Above World Standard: 2

- **2005-Literary Studies** - 2012
  - At World Standard: 9
  - Above World Standard: 3
  - Well Above World Standard: 5
## Interdisciplinary activity

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Legend:
- **20-29%**
- **30-39%**
- **> 40%**
Quality is multidimensional

- Quality in ERA is multidimensional
- Publishing profile, income sources, background statements and applied measures all contribute to understanding the UoE
- Applied/researcher-led research is recognised in ERA
- Quality underpins evaluation across the spectrum of research activity
ERA is multidimensional

• Citation data
• Peer assessment
• HERDC Category income 2-4
• Research Commercialisation income
• Patents
• Plant breeder’s rights
• NHMRC endorsed guidelines
• Non-traditional research outputs (extended trial in ERA 2012)
Income and Quality

HERDC income Cat 1-3 by rating - 2010

2010

ERA rating

- National Competitive
- Other Public
- Industry
Income and Quality

HERDC income Cat 1-3 by rating - 2012

- National Competitive
- Other Public
- Industry

ERA rating
Patent/Relative Citation Impact by ERA 2012 Rating (4-digit)

High impact?

High impact and high quality?

High quality?
Research Commercialisation Income/Relative Citation Impact by ERA 2012 Rating (4-digit)

High impact?

High impact and high quality?

High quality?
Mapping Engagement:

Linkage Projects vs. Discovery Projects

Strength in scheme:
- Total LP + DP $\$: $450m$
- $200m$
- $50m$
Engagement by Cohort
Strength in Linkage and Discovery Schemes

Group of Eight

Non-Aligned
Innovative Research Universities

Regional Universities Network
Australian Technology Network

Discovery
Linkage
ERA as a measure of impact
ERA as a measure of impact

Can (and should) we measure impact as a separate quantity?
Discussion Paper

• Outcomes
  – providing an evidence base for decision making by universities, government and industry, including universities and businesses outside Australia;
  – promoting engagement both between university researchers and potential users of university research, as well as within the university sector;
  – promoting the research outcomes and engagement strategies of Australia’s publicly funded universities both domestically and internationally;
  – providing an evidence base for benchmarking standards within the university sector; and
  – linking outcomes to funding allocations.
Discussion Paper

• Principles

  ─ Provide useful information to universities
  ─ Minimise administrative burden
  ─ Encourage research engagement and collaboration, and research that benefits the nation
  ─ Involve research users
  ─ Collect and assess at the institution level, with some granularity by discipline

• Departmental Discussion paper 19 June – seeking submissions by Friday 16 August 2013.
University system

$\rightarrow$ Salaries
researchers
technicians

$\rightarrow$ Buy
equipment, books, ICT

Papers

Patents

TRANSLATION

New Government Policy

New Research Paradigm

Spin-off Company
Case 1:

Case 2:

Case 3:
Translation and Usage.

The Translation Industry

- Researchers
- Translation ‘Specialists’

New Government Policy
New Research Paradigm
Spin-off Company
Effect of Measurement & Feedback

-ambda

$\text{Evalu}'$
Universities are multi-dimensional

We need a better and more complete description of activity.
Do we need to measure?

• ARC is a funder of research.
  – Bottom up approach

• **Research Impact Principles**

• Release of the PFRA work on the ARC website:  
ARC’s next steps

• Embedding impact into *some* funding rules
• Identifying common, agreed reporting of impact
• Public consultation led by Department

• Enable a possible future assessment of impact using common data and language
• ERA 2015...
Should we be worried about impact?

We shouldn’t be:

- Every aspect of the modern world is shaped by research. The impact of research is everywhere.

**BUT**

- Need to take care not to over-engineer
- Need to disentangle contributions
- Need to cope with diversity
- Need to avoid perversity

- Need to be clear about the **WHY!**
Thank you