Excellence in Research for Australia

ERA 2010 and ERA 2012
Australian Catholic University
17 August 2011
Objectives of ERA

- Establish an **evaluation framework** that gives government, industry, business and the wider community assurance of the excellence of research conducted in Australia’s institutions;

- Provide a **national stocktake** of discipline-level areas of research strength and areas where there is opportunity for development in Australia’s higher education institutions;

- 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 nationally and **internationally** for all discipline areas.
ERA Development 2008-2010

• Several major rounds of consultation
• Indicator Development Group (specialist sub-groups)
• Ranked journals and conferences consultation
• Discipline specific indicators
• Full trial in 2009 of PCE and HCA
  – test of systems, processes
  – feedback from sector, RECs, peer reviewers
• Esteem indicators
• First full ERA evaluation in 2010
The ERA Unit of Evaluation

- The **baseline** - the Discipline in an institution = Four-digit Field of Research Code (ANZSRC) eg.,
  \[2101\] Archaeology

- The **higher perspective** – the division in an institution = Two-digit Field of Research Code (ANZSRC) eg.,
  \[21\] History and Archaeology

- The ERA Unit is **not** about the department nor the individual researcher
ERA 2010 Process Overview

<table>
<thead>
<tr>
<th>Volume &amp; Activity</th>
<th>Ranked Outlets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citation Analysis</td>
<td>Esteem</td>
</tr>
<tr>
<td>Research Income</td>
<td>Applied Measures</td>
</tr>
</tbody>
</table>

Peer Review

International Benchmarks

Research Evaluation Committees
Why a matrix approach to indicators?

- Not all indicators are suitable for all disciplines
- Pick and choose what is right for each discipline
- The indicator suite must ensure comparable quality across a range of indicator types
ERA 2010 Reviewers

- Expert review and specialist disciplinary knowledge were essential – not a mechanical process
- 8 Research Evaluation Committees
- 149 Australian and international REC members
- 500+ Peer Reviewers from Australia and overseas
- REC members also conducted peer review
Stages of evaluation

• Every UoE evaluated by at least three REC members (plus peer reviewers)
• Independent evaluation in the first instance followed by exchange of views
• All evaluations were advice to the full Committee
• All UoEs discussed at the final evaluation meeting
• All final ratings decisions of the Committee as a whole
# The ERA 2010 Rating Scale

<table>
<thead>
<tr>
<th>Rating</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The Unit of Evaluation profile is characterised by evidence of outstanding performance <strong>well above world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>4</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>above world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>3</td>
<td>The Unit of Evaluation profile is characterised by evidence of average performance <strong>at world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>2</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>below world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>1</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>well below world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
</tbody>
</table>
ERA 2010 at a glance

• All 41 eligible institutions participated

• 2435 units of evaluation assessed at the two- and four-digit level

• Over 330,000 research outputs and 55,000 researchers represented
ERA 2010 outcomes: context

• ERA is a retrospective evaluation of research performance: 2003-2008 for research outputs, 2006-2008 for other data

• The ERA unit of evaluation is the discipline within the institution, not individual researchers or institutional units

• ERA does not rank institutions or units; each UoE is evaluated on its merits against the rating scale
Reading the national results

86% of assessed UoEs received a rating at or above world standard (i.e. rating of 3 or above).

Of all assessed UoEs at the four-digit FoR code level (58 UoEs), the average rating is 3.4. See Section 1 for two-digit FoR code average rating.

<table>
<thead>
<tr>
<th>Mathematical, Information and Computing Sciences</th>
<th>Mathematical Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>% assessed UoEs rated at or above world standard</td>
<td>86%</td>
</tr>
<tr>
<td>FTEs</td>
<td>880</td>
</tr>
<tr>
<td>Research outputs</td>
<td>8,659</td>
</tr>
<tr>
<td>Research income $</td>
<td>104,624,740</td>
</tr>
<tr>
<td>UoEs assessed</td>
<td>58</td>
</tr>
<tr>
<td>Esteem count(s)</td>
<td>106</td>
</tr>
<tr>
<td>Patent(s)</td>
<td>1</td>
</tr>
<tr>
<td>Research commer. income $</td>
<td>22,368,469</td>
</tr>
<tr>
<td>Average National Rating</td>
<td>3.4</td>
</tr>
<tr>
<td>Rating:</td>
<td>1  2  3  4  5  Total</td>
</tr>
<tr>
<td>Distribution:</td>
<td>1  7  25  16  9  58</td>
</tr>
</tbody>
</table>

There were seven UoEs which received a rating of 2.

A total of 58 UoEs were assessed for Mathematical Sciences at the four-digit FoR code level.
ERA 2010 submissions

- Institutional data submission smoother than Trial
- Institutional repositories generally functioned well
- Definition of research – still outputs being submitted which did not meet the definition in the view of the Committees; these are not eligible and should not be submitted
- Selection of peer review items – breadth of work in the 20%
- Supporting statements for NTROs and Portfolios
Beyond ERA 2010

• Extra SRE funding was contingent upon ERA 2010 participation

• ERA 2010 results have informed mission-based compact negotiations between the Government and institutions
Consultations for ERA 2012

• ERA Public Consultation (March -April 2011) – open consultation on issues including reporting, indicators, eligibility, discipline matrix

• Outreach sessions with institutions and peak bodies

• Detailed feedback from ERA 2010 REC members and peer reviewers

• Feedback from institutions on submission processes

• Comment period on draft Submission Guidelines and Discipline Matrix (July 2011)
Changes to journals and conferences

• Refined journal and conference indicator for ERA 2012
• Ranks will not be used, instead outputs profiled by most frequent journals and conferences in the UoE, with drilldowns available as in 2010
• ARC will still produce a journal list – will not include rankings but will include FoR codes for citation analysis
• Strong feedback that ranked lists were having negative consequences in the sector
• ARC analysis suggested a refined indicator would produce improved results while removing negative consequences
The refined journal indicator

<table>
<thead>
<tr>
<th>University of X</th>
<th>1801</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Journal title</strong></td>
<td><strong>Papers</strong></td>
<td><strong>Contribution</strong></td>
</tr>
<tr>
<td>1 Journal of Law and Medicine</td>
<td>27</td>
<td>6%</td>
</tr>
<tr>
<td>2 Public Law Review</td>
<td>27</td>
<td>6%</td>
</tr>
<tr>
<td>3 Australian Journal of Administrative Law</td>
<td>24</td>
<td>5%</td>
</tr>
<tr>
<td>4 Law in Context</td>
<td>18</td>
<td>4%</td>
</tr>
<tr>
<td>5 Australian Journal of Family Law</td>
<td>15</td>
<td>3%</td>
</tr>
<tr>
<td>6 Company and Securities Law Journal</td>
<td>12</td>
<td>3%</td>
</tr>
<tr>
<td>7 Torts Law Journal</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>8 Contemporary Issues in Law</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>9 Law and Policy</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>10 International Journal of the Legal Profession</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>11 Australian Journal of Corporate Law</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>12 Australian Journal of Labour Law</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>13 Journal of Judicial Administration</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>14 Federal Law Review</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>15 Australian Journal of Legal Philosophy</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>16 Forensic Science International</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>17 Legal Theory</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>18 Revenue Law Journal</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>19 AIAL National Lecture Series on Administrative Law</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>20 Intertax: international tax review</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>465</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Please note that this is not based on any university's submission to ERA 2010*
Interdisciplinary research

• Journal articles with ≥66% content in a discipline can be apportioned to that discipline
• Approach was successfully trialled in 2010 for Mathematics
• Allows stronger recognition of interdisciplinary and applied research
• Aligns journals with other output types
Raising the threshold

• Low volume threshold for peer review disciplines raised to 50 apportioned weighted outputs (maintaining the 5:1 weighting for books)
• Threshold remains the same for citation analysis disciplines
• Aligns all disciplines at 50 outputs
• Recognises strong feedback from sector and from 2010 evaluators
• ERA units need sufficient volume
Low volume scenarios

In both cases, all outputs will be assessed at the two-digit level.
Eligibility of fractional staff

• Fractional staff: minimum 40% appointment at ERA census date
• Those below 40% can still submit with by-line or similar requirement (similar to existing approach for casuals)
• Addresses concern about ERA-driven “poaching”
• Recognises that in many cases those below 40% are legitimately employed – their outputs can still be submitted
Other changes for ERA 2012

- Patents, plant breeder’s rights and registered designs assigned to individuals now eligible for submission
- Cluster structure revised in the light of information from ERA 2010
- Some adjustments to indicator sets used in the discipline matrix (e.g., ICT disciplines)
- Construction of the pool of outputs for peer review
ERA 2012 – still to do

- Recruitment of Research Evaluation Committees
- Expansion of peer reviewer pool (including internationals)
- Further enhancement of the peer review indicator (nomination of outputs, reporting by reviewers)
- Selection of citation data provider (approach to market)
Further information

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- Hotline: 02 6287 6755