Excellence in Research for Australia

ERA 2010 and ERA 2012
USQ
11 October 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.,
  1905 Visual Arts and Crafts
- The higher perspective – the division in an institution = Two-digit Field of Research Code (ANZSRC) eg.,
  19 Studies in Creative Arts and Writing
- 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

Web: arc.gov.au  |  Email: info@arc.gov.au
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 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></th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Mathematical Sciences</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% assessed UoEs rated at or above world standard</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>86%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FTEs</th>
<th>Research outputs</th>
<th>Research income $</th>
<th>UoEs assessed</th>
<th>Esteem count(s)</th>
<th>Patent(s)</th>
<th>Research commer. income $</th>
<th>Average National Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>880</td>
<td>8,659</td>
<td>104,624,740</td>
<td>58</td>
<td>106</td>
<td>1</td>
<td>22,368,469</td>
<td>3.4</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 (draft has been released for comment)
• 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

Example of the draft refined journal indicator for FoR 1801 for University X

<table>
<thead>
<tr>
<th>Journal title</th>
<th>Papers</th>
<th>Contribution</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal of Law and Medicine</td>
<td>27</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Public Law Review</td>
<td>27</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Australian Journal of Administrative Law</td>
<td>24</td>
<td>5%</td>
<td>17%</td>
</tr>
<tr>
<td>Law in Context</td>
<td>18</td>
<td>4%</td>
<td>21%</td>
</tr>
<tr>
<td>Australian Journal of Family Law</td>
<td>15</td>
<td>3%</td>
<td>24%</td>
</tr>
<tr>
<td>Company and Securities Law Journal</td>
<td>12</td>
<td>3%</td>
<td>25%</td>
</tr>
<tr>
<td>Torts Law Journal</td>
<td>9</td>
<td>2%</td>
<td>28%</td>
</tr>
<tr>
<td>Contemporary Issues in Law</td>
<td>9</td>
<td>2%</td>
<td>30%</td>
</tr>
<tr>
<td>Law and Policy</td>
<td>9</td>
<td>2%</td>
<td>32%</td>
</tr>
<tr>
<td>International Journal of the Legal Profession</td>
<td>9</td>
<td>2%</td>
<td>34%</td>
</tr>
<tr>
<td>Australian Journal of Corporate Law</td>
<td>9</td>
<td>2%</td>
<td>36%</td>
</tr>
<tr>
<td>Australian Journal of Labour Law</td>
<td>9</td>
<td>2%</td>
<td>38%</td>
</tr>
<tr>
<td>Journal of Judicial Administration</td>
<td>9</td>
<td>2%</td>
<td>40%</td>
</tr>
<tr>
<td>Federal Law Review</td>
<td>9</td>
<td>2%</td>
<td>42%</td>
</tr>
<tr>
<td>Australian Journal of Legal Philosophy</td>
<td>6</td>
<td>1%</td>
<td>43%</td>
</tr>
<tr>
<td>Forensic Science International</td>
<td>6</td>
<td>1%</td>
<td>45%</td>
</tr>
<tr>
<td>Legal Theory</td>
<td>6</td>
<td>1%</td>
<td>46%</td>
</tr>
<tr>
<td>Revenue Law Journal</td>
<td>6</td>
<td>1%</td>
<td>47%</td>
</tr>
<tr>
<td>AIAL National Lecture Series on Administrative Law</td>
<td>6</td>
<td>1%</td>
<td>48%</td>
</tr>
<tr>
<td>Intertax: International tax review</td>
<td>6</td>
<td>1%</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Total** 465

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

- Journal articles with $\geq 66\%$ 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

A

In both cases, all outputs will be assessed at the two-digit level

B
Other changes for ERA 2012

• Eligibility of fractional staff (40%)
• 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 (eg ICT disciplines)
• Construction of the pool of outputs for peer review (30%)
ERA 2012 – still to do

- Recruitment of Research Evaluation Committees
- Recruitment and expansion of peer reviewer pool (including internationals)
- Further enhancement of the peer review indicator (nomination of outputs, reporting by reviewers)
- Citation provider has been announced
- Submission Guidelines and technical documentation have been released
Further information

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• Email: era@arc.gov.au

• Hotline: 02 6287 6755