Australian Government
Australian Research Council

ERA 2012
Excellence in Research for Australia

Curtin University
Edith Cowan University
Murdoch University
The University of Western Australia

March 2013
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 *nationally* and *internationally* for all discipline areas.
History of ERA

- Consultation 2008–2010
- ERA 2009 Trial
- ERA 2010
- ERA 2012
- Future ERA - 2015
Consultations for ERA 2012

- *ERA Public Consultation* – 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 processes
Consultation Topics

- Metrics methodology – expert committees
- Discipline-specific indicators
- Ranked journals and conferences
- Low volume threshold
- Submission rules including researcher eligibility
- Reporting of outcome data
Key changes for ERA 2012

• Expansion and strengthening of *Peer Review*
• *Reassignment Exception*
• Consistent *Low Volume Threshold* for Peer Review Disciplines
• *Ranked journals and conferences* not used
• *Movement* from Citation Analysis to Peer Review Disciplines
• *Non-traditional* Research Outputs in social sciences
• Restructure of *clusters*
• Attribution of *Applied Measures* to individuals and institutions
## ERA Process Overview

<table>
<thead>
<tr>
<th>Indicator Suite</th>
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<tbody>
<tr>
<td>Citation Analysis and/or Peer Review</td>
<td>Publishing Profile</td>
</tr>
<tr>
<td>Volume and Activity</td>
<td>Research Income</td>
</tr>
<tr>
<td>Applied Measures</td>
<td>Esteem</td>
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*Note - There are no weightings*

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The **ERA 2012 National Report** presents data submitted as part of a comprehensive assessment by discipline of the research quality and research activity within Australia’s higher education institutions.
Stages of Evaluation

Stage 1
REC Members evaluate assigned material and record preliminary evaluations in SEER

Stage 2A
REC Members are given access to the preliminary evaluation outcomes for 4-digit UoEs from other REC Members and Peer Reviewers’ evaluations for moderation. REC Members complete preliminary evaluation of 2-digit UoEs.

Stage 2B
REC Members are given access to the preliminary evaluation outcomes for 2-digit UoEs from other REC Members and Peer Reviewers’ evaluations for moderation.

Stage 2C
REC Members are given view only access to moderated 2- & 4-digit evaluations to prepare for Stage 3 meeting.

Stage 3
REC Members meet to finalise all UoEs

Web: arc.gov.au  |  Email: info@arc.gov.au
Peer Review

- Peer review is used for some disciplines
- In 2012 peer review was identified as an indicator for EHS, EC, HCA, parts of MIC and EE
- Peer review is only one “indicator” on the Dashboard
- Institutions identify **30% of outputs** for the peer review pool – best works for the discipline
- REC Members undertake expert review of the Dashboard **including** peer review of research outputs.
- Peer Reviewers **only** evaluate research quality based on peer review outputs, and their reports go back to REC Members
- **No ratings** on individual research outputs
- **Peer Reviewer Handbook** is available online
Key ERA 2012 Documents

The following ERA 2012 documents are all publicly available and provide detailed information about various aspects of the ERA 2012 evaluation:

- ERA 2012 Evaluation Handbook
- ERA 2012 Peer Reviewer Handbook
- ERA 2012 Submission Guidelines
- ERA 2012 Discipline Matrix
- ERA 2012 Journal List
- ERA Rating Scale
- ERA Indicator Principles
- ERA-SEER 2012 Technology Pack
- ERA-SEER 2012 Business Rules
ERA 2012 outcomes
Scale of ERA 2012

- All 41 eligible institutions submitted data
- Over 413,000 unique research outputs and 60,000 researchers represented
- 2,323 units of evaluation assessed at the two- and four-digit level
- 147 Research Evaluation Committee (REC) members and close to 900 Peer Reviewers contributed evaluations
- All aggregated data presented in the ERA 2012 National Report.
2010 to 2012: Growth

Bigger and more productive

↑ research publications/outputs (up 24%)
↑ researchers and related staff (up 9%)
↑ patents (up 16%) and esteem measures (up 11%)
↑ Competitive grant ($3.75 billion, up 18%) and other public sector income ($2.39 billion, up 25%)
ERA 2012: All Broad Fields of Research (Two Digit FoR codes)
Number of Universities Rated at World Standard or Higher

At World Standard | Above World Standard | Well Above World Standard
---|---|---
01 Mathematical Sciences | 11 | 8 | 3
02 Physical Sciences | 10 | 4 | 6
03 Chemical Sciences | 15 | 4 | 5
04 Earth Sciences | 4 | 9 | 6
05 Environmental Sciences | 10 | 9 | 4
06 Biological Sciences | 15 | 10 | 3
07 Agricultural and Veterinary Sciences | 9 | 10 | 4
08 Information and Computing Sciences | 12 | 5 | 2
09 Engineering | 9 | 8 | 5
10 Technology | 4 | 4 |
11 Medical and Health Sciences | 13 | 5 | 8
12 Built Environment and Design | 13 | 3 |
13 Education | 11 | 4 | 1
14 Economics | 7 | 5 | 4
15 Commerce, Management, Tourism and Services | 5 | 5 | 2
16 Studies In Human Society | 5 | 1 |
17 Psychology and Cognitive Sciences | 17 | 3 | 5
18 Law and Legal Studies | 10 | 8 | 5
19 Studies In Creative Arts and Writing | 15 | 9 | 2
20 Language, Communication and Culture | 15 | 8 | 5
21 History and Archaeology | 12 | 6 | 6
22 Philosophy and Religious Studies | 12 | 5 | 3

Number of Australian Universities

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Output by Staff Classification

03 Chemical Sciences

- % Staff: 12 - 11 - 15 - 22 - 28 - 12
- % Outputs: 32 - 14 - 12 - 12 - 8 - 21

13 Education

- % Staff: 9 - 12 - 27 - 39 - 7 - 7
- % Outputs: 21 - 19 - 26 - 17 - 2 - 15
ERA – The future
ERA – Looking Ahead

• Minister has announced **ERA 2015**
• Expand ERA metrics: research application, knowledge exchange and collaboration
• Expand eligible research outputs to include a greater range of applied outputs
• Focus on pathways to impact
• As with existing ‘quality’ indicators, approaches must be tailored to fit the field of research concerned
• Consultation with the sector will be critical
Further information

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