Trends in Research Assessments Systems Internationally



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PRESENTATION OUTLINE







RESEARCH ASSESSMENT - A GLOBAL PHENOMENON

- Australia.
- Finland.
- Hong Kong.
- New Zealand.
- Romania.
- ■Sweden.
- Italy.
- France



- Czech Republic.
- Denmark.
- Norway.
- United Kingdom
- Germany
- Holland.
- Poland
- Spain
- Ireland





History of UK Research Assessment

- The first UK national exercise was in 1986 every 5-7 years since.
- In 2001 and 2008 = the Research Assessment Exercise (RAE).
- Assessed Outputs (Publications), Research Environment (grants, PhD completions) and Research Esteem.
- In 2014, 2021 and 2029, renamed the Research Excellence Framework (REF).
- In REF2014 it included data on Research Impact, outputs and environment.
- These are assessed and scored by panels of experts.
- Results determine the allocation of government research funding to universities.
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RATIONALE FOR UK RESEARCH ASSESSMENT

- To inform the selective allocation of <u>non-hypothecated</u> public funding for research.
 - UK Gov Funds £2 Billion per year until next REF
 - Research Councils £4 Billion per year until next REF
- To provide accountability for public investment in research and produce evidence of the benefits of this investment (Impact).
- To provide benchmarking information and reputational yardsticks, for the HE sector and for public information.
- To provide a rich evidence base to inform strategic decisions about national and international research priorities.
- To create strong performance incentive for HEIs/researchers.







REF 2014 What Was Assessed

Panels assessed the Overall Quality of each submission





REF 2021 What Was Assessed

Panels assessed the Overall Quality of each submission



RAE 2029 What Will Be Assessed

Panels assessed the Overall Quality of each submission







Research Assessment OUTPUTS

REF Outputs Criteria



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Originality

- innovative research methods, techniques
- new or complex problems
- new empirical material
- advance theory or analysis, policy, practice

Significance

- development of intellectual agenda
- theoretical, methodological, substantive
- potential significance (recent output)

Rigour

- intellectual precision
- robustness/appropriateness of concepts, analyses
- integrity, coherence, consistency



Outputs: Scoring Criteria and Definitions

The criteria for assessing the quality	of outputs are
originality, significance and	rigour

- **Four star** Quality that is world-leading in terms of originality, significance and rigour
- **Three star** Quality that is internationally excellent in terms of originality, significance and rigour but which falls short of the highest standards of excellence
- **Two star** Quality that is recognised internationally in terms of originality, significance and rigour
- **One star** Quality that is recognised nationally in terms of originality, significance and rigour
- **Unclassified** Quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment

Research Assessment **IMPACT**

Research Impact

Guidance on Advancement Achievement and Assessment

Hugh P. McKenna

D Springer

Ensuring that your research is impactful



Ulster University Phipps, D.J., Cummings, J. Pepler, D., Craig, W. and Cardinal, S. (2016) The *Co-Produced Pathway to Impact* describes Knowledge Mobilization Processes. *J. Community Engagement and Scholarship*, 9(1): 31-40.

Research Impact An Effect on, Change or Benefit on...



McKenna, H.P. (2015) Research assessment: The Impact of impact *International Journal of Nursing Studies*. **52** (1) pp. 1-3.



Criteria for how Impact Case Studies are assessed and scored

Reach: the <u>extent and/or breadth of the</u> <u>beneficiaries</u> of the impact, as relevant to the nature of the impact. (It will not be assessed in geographic terms, nor in terms of absolute numbers of beneficiaries).

Significance: is the degree to which the impact has enabled, enriched, influenced, informed or changed the products, services, performance, practices, policies or understanding of commerce, industry or other organisations, governments, communities or individuals.





ASSESSING RESEARCH IMPACT?

The criteria for assessing impacts are reach and significance	
Four star	Outstanding impacts in terms of their reach and significance.
Three star	Considerable impacts in terms of their reach and significance.
Two star	Some impacts in terms of their reach and significance.
One star	Limited impacts in terms of their reach and significance.
Unclassified	The impact is of either no reach or no significance; or the impact was not eligible; or the impact was not underpinned by research produced by the submitting unit; or nil submission.
0	0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Research Assessment ENVIRONMENT

Research Environment: Assessment criteria

Vitality

 The extent to which a unit provides an encouraging and facilitating environment for research and supports a research culture characterised by intellectual vigour, innovation and positive contribution within respective discipline(s) and profession(s).

Sustainability

 The extent to which the research environment is capable of continuing to support and develop the research activities of the submitting unit and discipline(s). Panels will consider the environment data within the context of the information provided in the environment overview statement, and within the context of the

disciplines concerned.



The	criteria for assessing the environment are vitality and sustainability*
Four star	An environment that is conducive to producing research of world-leading quality, in terms of its vitality and sustainability
Three star	An environment that is conducive to producing research of internationally excellent quality, in terms of its vitality and sustainability
Two star	An environment that is conducive to producing research of internationally recognised quality, in terms of its vitality and sustainability
One star	An environment that is conducive to producing research of limited quality, in terms of its vitality and sustainability
Unclassified	An environment that is not conducive to producing research of 1 star quality; or nil submission.

Research Assessment Is Changing

Visible

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Publications Impact (e.g. policy) New products/services Awards and prizes Leadership

Emergent leadership

Management

Building collaborations/ stakeholder relationships

Panels/committees

Peer review

Mentorship and supervision

Public Engagement

Efficiencies in products/ services/speed to market

UK Research and Innovation Invited talks/media Successful grants/funding Data sharing Reduced costs Increased sales/exports/ profits/IP protection

Data access/preparation/curation

Team working

Accessibility, inclusivity, integrity initiatives

Co-creation of priorities/plans

Finding, accessing and working with research users

with research users Unsuccessful grants/papers/ funding/impact (efforts)

Reduced carbon

Developing expertise



International collaboration, the training of early career scientists and engagement with the public are essential aspects of scientific quality, but are rarely captured by traditional metrics such as publication and citation rates.

Research Culture

Research culture encompasses the behaviours, values, expectations, attitudes, and norms of our research communities. It influences researchers' career paths and determines the way that research is conducted and communicated (Royal Society, 2022).

A positive research culture.is reflected in autonomy and freedom; care and collegiality; collaboration; equality, diversity and inclusion; integrity and ethics; and openness and transparency, zero tolerances of inappropriate behaviour, a safe and supportive research environment, fair opportunities for career advancement, and common courtesy and kindness. (Science Europe, 2022)

RESEARCH CULTURE FRAMEWORK

How research is managed and undertaken

- Effective research governance and management
- Achieving the highest levels of research integrity
- Actively promoting sustainability

How people are supported

- Employment and conditions
- · Recognition and assessment
- Embedding professional and career development
- Ensuring inclusive and healthy working environments

How research ensures value

- Taking an open approach to research
- Communicating research
- Realising impact

How individuals engage with others

- Providing effective leadership and management
- Empowering individuals
- Building collegiality

Research culture:

The behaviours and values that enhance research culture

Report to UKRI on Research Culture Initiatives in the UK, 2023





Research Culture

A toxic research culture is reflected in bullying and harassment, poor employment terms and conditions, inadequate equality, diversity and integration practices, breeches of research integrity, and an almost pathological pursuit of higher league table positions, H-indices and impact factors. (McKenna, 2023)



McKenna, H.P. (2023) <u>Toxic Research Cultures: The What, Why and How</u>. International Journal of Nursing Studies. <u>Vol</u> 138



Stop Publish or Perish Culture and the Dictatorship of the Algorithm

Research assessments is a highly competitive, longhours research culture, bullying goes unnoticed and no attention to researcher wellbeing (LERU, 2022)



Stop using bogus proxies for quality such as number of publications, citations, and where papers are published.



Coalition for Advancing Research Assessment

- CoARA was set up in December 2022 to make research assessment fairer, respect diversity of research roles, making more use of qualitative methods and cease the inappropriate use of quantitative metrics
- In 2023, CoARA doubled its membership to 600 organisations in 40 countries, set up a governance structure, 12 Thematic Working Groups and 15 national chapters.
- The 15 Chapters form country hubs for coordinating actions and for mutual learning.
- The 12 thematic Working Groups focus on reforming areas of research assessment.



Agreement on Reforming Research Assessment 2021

Principles and Commitments:

- ethics and integrity;
- scientific freedom;
- organisational autonomy;
- independence and transparency;
- focus on quality;
- recognition of impacts;
- recognition of the diversity of research activities, practices and outputs;
- promotion of criteria and processes that respect the variety of disciplines, research types and career stages;
- valorising diversity in research roles and careers;
- gender equality, equal opportunities and inclusiveness.

European Commissions Reports April 16th 2024



There has been much work done on open science, ethics and gender equality in recent years but other contributions are missing. There is a lack of concrete activities focusing on qualitative assessment. This can reveal valuable insights into the types of challenges research stakeholders are facing in informing their assessment and should be further explored. More systematic, collaborative, and transnational addressing of this in more depth would bring particular value (European Commission Apr 16th 2024 page 12)

AUSTRALIA

Australian Research Quality Framework (RQF) developed to demonstrate and justify public expenditure on research.

The RQF pioneered the impact case study assessment but new government in 2007 stopped its implementation

ERA focused on outputs, grants, PhDs etc, but in 2018 it introduced an Engagement and Impact Assessment approach. Not linked to funding

2023 – ERA was halted while the Government reconsidered – watching CoARA with great interest. – Now a signatory.

Member of CoARA



NEW ZEALAND

- Four previous assessments in 2003, 2006, 2012 and 2018. The 2026 has been postponed recently.
- Academics > 0.2 FTE must complete a research portfolio submitted to Tertiary Education Commission.
- Focus on individuals rather than teams or departments.
- Peer Review panels score A, B, C or R.
- A = Research outputs are leading-edge in rigour, originality and significance; and in the reach and significance of their impact.
- Unpopular with academics -time-consuming and funding did not go to staff who earned it, but 'swallowed' by universities.



Hong Kong

Hong Kong follows the UK's approach to research assessment- but one exercise behind.

The University Grants Committee had five such RAEs in 1993, 1996, 1999, 2006 and 2014.

2020, Hong Kong RAE has included research impact-reflecting UK REF2014. RAE 2026 =2021

Hong Kong RAE uses UK assessors and UK consultants . Would the opposite be acceptable?

Will the increasingly Beijing influence on Hong Kong bring an end to the current RAE model?

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SWEDEN

- In 2014, the Swedish Research Council evaluated the quality of health research in 7 County Councils across Sweden –(ALF Regions)
- From 2019, 20 percent of the ALF funding was to be linked to quality assessment. using three peer reviewed panels::
 - the scientific quality (ALF Panel 1);
 - the clinical significance and societal impact (ALF Panel 2);
 - the prerequisites of the clinical research (ALF Panel 3).
- Three quality ratings were used:

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• Very High Quality, Good–High Quality and Inferior Quality -



ITALY

- 3-Year RAE (VTR), first launched in 2004, to assess performance of university research and public research agencies across scientific fields.
- 20 panels comprise 151 peer reviewers of outputs, most from Italian universities, but many from abroad.
- Three bodies:
 - National Committee of Guarantors for Research
 - National Agency for the Evaluation of the University and Research Systems (ANVUR)
 - **REPRISE**, Register of Expert Peer-Reviewers for Italian Scientific Evaluation
- ANVUR evaluates the quality of research activities and the results of determine the funding allocation.
- Move from assessment of bibliometrics to society impact.







POLAND

- Poland has had national assessments every 4 years since 1991,
- New element is impact assessment as in UK REF, with case studies.
- In last exercise, universities were focusing on outputs and did not realise that impact was worth more.
- Impact accounts for 20%, Outputs 70% cent, and Research Funding 10%.





IRELAND

- Science Foundation Ireland (SFI) is Ireland's largest scientific funding agency.
- Its strategy "Agenda 2020" is to be the best in the world at creating impact from excellent research, showing value for money invested.
- While publications continue to be at the core of all funding decisions, in recent years impact has gained equal focus
- Encouraged by the SFI's focus on research impact, many Irish universities have developed Impact Frameworks,
- Nov 2022 report *More than publications: maximising societal benefit from health research.*





SPAIN

- From 1989, research assessment introduced because Spanish research funding is dependent on the public sector.
- The Government created the CNEAI, the National Commission for the Evaluation of Research Performance.
- Like REF, the CNEAI has research performance reviews every six years.
- From 2019, it rewarded researchers who show "evidence of impact and influence" of their research "on social and economic matters".

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- The Standard Evaluation Protocol (S.E.P.). assessed research in Dutch universities every six years, focusing on JIFs, and citations
- Researchers were dissatisfied with quantitative assessment, seeing it as "one-sided" and not reflecting the true nature of research activity.
- In December they complained that publication-based metrics of quality were wrong and undermines the "meaning that science has for society"...
- Going forward, universities and research funders have committed to judge scientists on educational and social impact.



General Points to Note

UK model has been adopted by many countries (Poland, Sweden Hong Kong, New Zealand)

- Research assessment is very political
- Competition between universities poach from other university from journal papers and citations to societal impact.
- The use of impact case studies to provide a qualitative and quantitative description of impact.
- The move away from the starting point of economic impact to impact on culture, health, quality of life etc.
- More research on how to conduct qualitative assessment
- Move away from bibliometrics to research culture.
- Most countries do not tie the performance in research assessment with funding allocation but changing slowely.
- Move to CoARA membership with Country Chapters & Thematic Groups. CoARA needs to become more global.
- Research unpopular with Academic staff better than alternative.

Research Assessment

