

# Demonstration of Research Impact

**USAf Dialogue on Research and Innovation  
for Societal and Economic Impact**  
21 September 2023

***Professor Chris Brink***

*Convenor: Hong Kong Research Assessment Exercise 2020 and 2026*

*Emeritus Vice-Chancellor, Newcastle University, UK*

*Past Rector and Vice-Chancellor, Stellenbosch University, South Africa*

# Experience

- **UK Research Excellence Framework (REF) 2014, 2021**
- **Hong Kong Research Assessment Exercise (RAE) 2020, 2026**

Each academic unit at each university had to provide some narrative case studies of the societal impact of its research.

- **Each Impact Case Study had to address two basic questions:**
  - What beneficial change has the research of your unit already brought about in society?
  - And what evidence can you provide of such change?
- **Thousands of such Impact Case Studies now available in searchable databases online:**
  - UK REF 2014: <https://impact.ref.ac.uk/casestudies/>
  - UK REF 2021: <https://results2021.ref.ac.uk/impact>
  - Hong Kong RAE 2020: <https://impact.ugc.edu.hk/>
  - Australian ERA 2018: <https://dataportal.arc.gov.au/EI/Web/Impact/ImpactStudies>
  - Research Impact Canada: <https://researchimpact.ca/kmb-research/case-studies/>

# What is 'Research Impact'?

- **Informal Definition:** 'What difference has your research made?'
- **Formal Definition\*:** "Impact is defined as the demonstrable contributions, beneficial effects, valuable changes or advantages that research qualitatively bring to the economy, society, culture, public policy or services, health, the environment or quality of life, and that are beyond the academia. Impact in this context includes, but is not limited to –
  - positive effects on, constructive changes or benefits to the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding, of an audience, beneficiary, community, constituency, organisation or individuals; or
  - the reduction or prevention of harm, risk, cost or other negative effects."
- **Supplementary Criteria:**
  - Impact = Societal impact (not 'academic impact')
  - Impact ≠ Outreach/Engagement/Community Work
  - Impact is not geographically bound
  - Impact may be planned or unplanned

# Evaluation of Impact

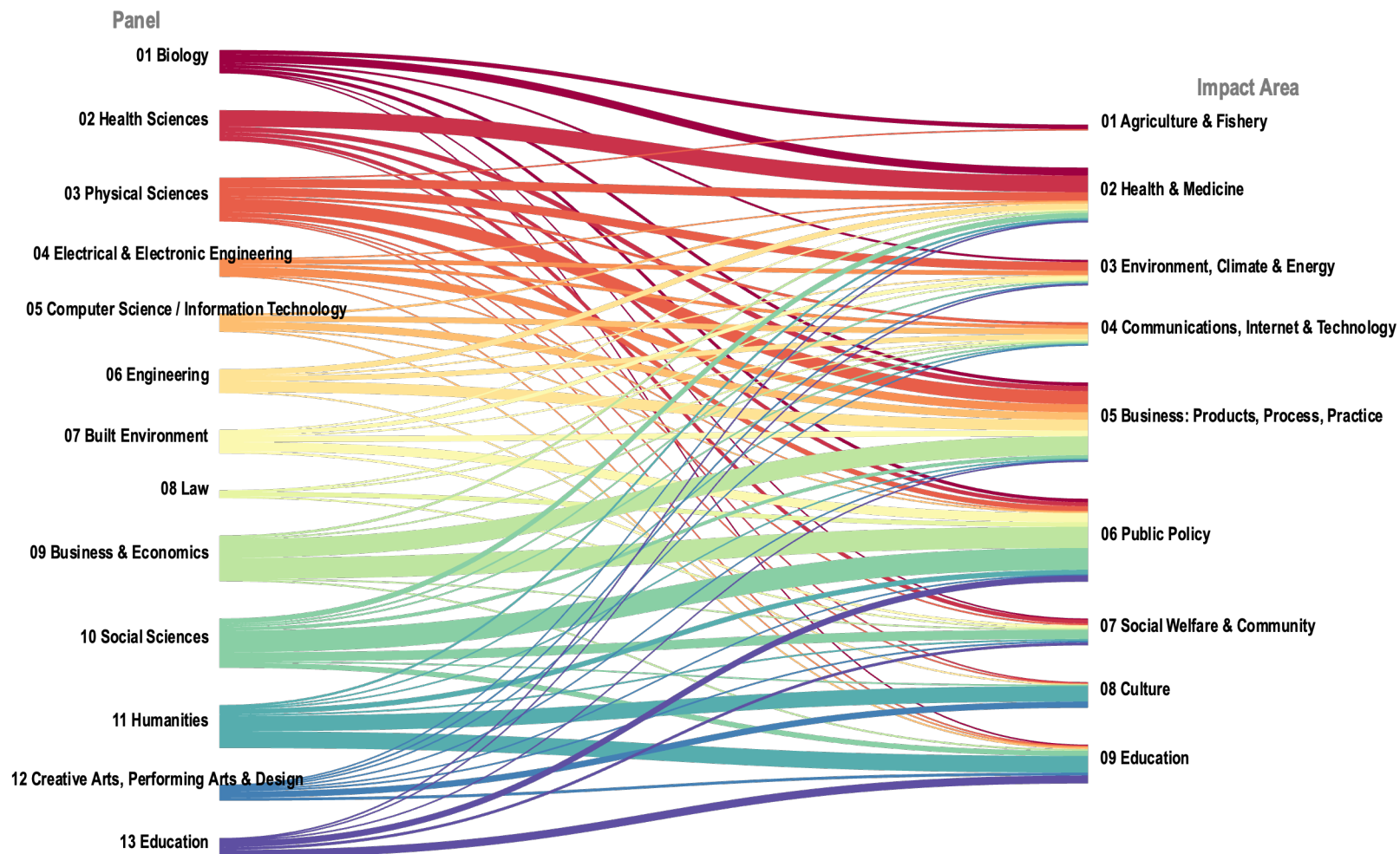
- **Impact Case Studies must be:**
  - Research-based (There needs to be a causal chain leading back to original research conducted at that particular university)
  - Substantiated by verifiable evidence (which can be of various kinds)
  - Retrospective (The impact must already have happened)
- **Evaluation by peer-review panels, with additional lay members from civil society**
- **Qualitative more than quantitative**
  - Metrics may be used at most to inform the judgment of a panel, but not to determine its judgment
- **Evaluation criteria:**
  - Reach (How far/wide has the impact spread?)
  - Significance (How much of a difference has it made?)
- **Evaluation on the same scale as research outputs**

Formal definitions of 'Reach' and 'Significance' are available

## Lessons learnt

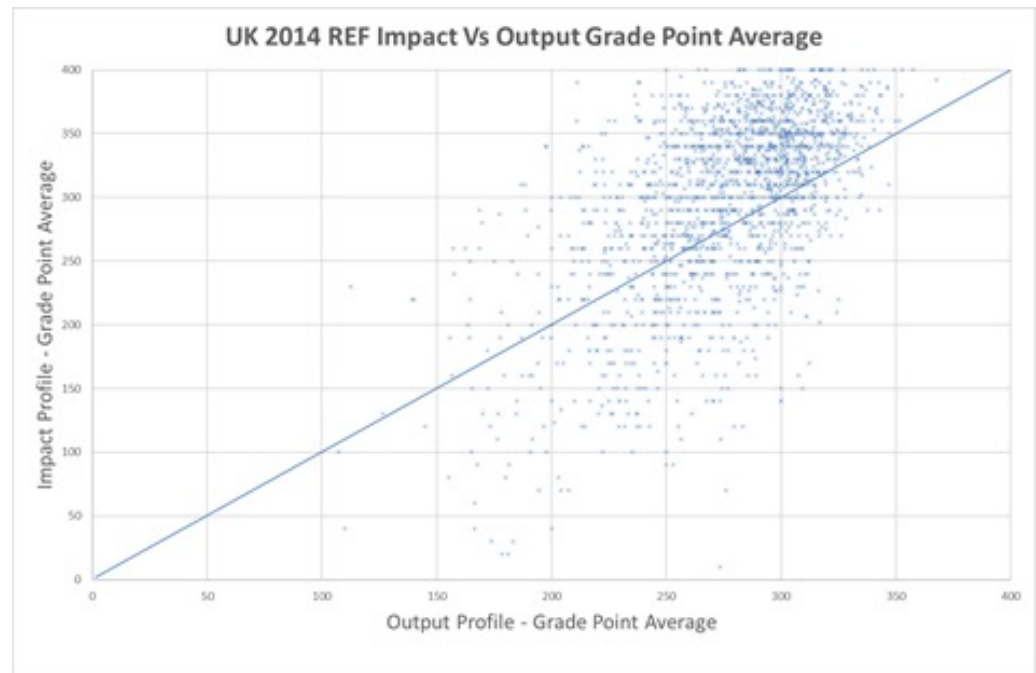
- **Initial apprehension and scepticism amongst academics:**
  - Explain, explain and explain again
- **Experience shows that evidence of societal impact is an excellent argument for increased research funding**
- **Once they get the idea, and experience the benefits, many sceptics become converts**
- **Beware false narratives**
  - For example: 'Excellence *versus* impact'
- **The expectation of impact falls primarily on the university or research unit collectively, not on the individual researcher**
  - This counters the fear about disadvantaging theoretical subjects such as pure mathematics
- **An activity is not by itself an impact**
  - Therefore, 'Engagement'  $\neq$  Impact
- **Promises are cheap**

# Impact can arise from any disciplinary area, and take effect in any sector of society

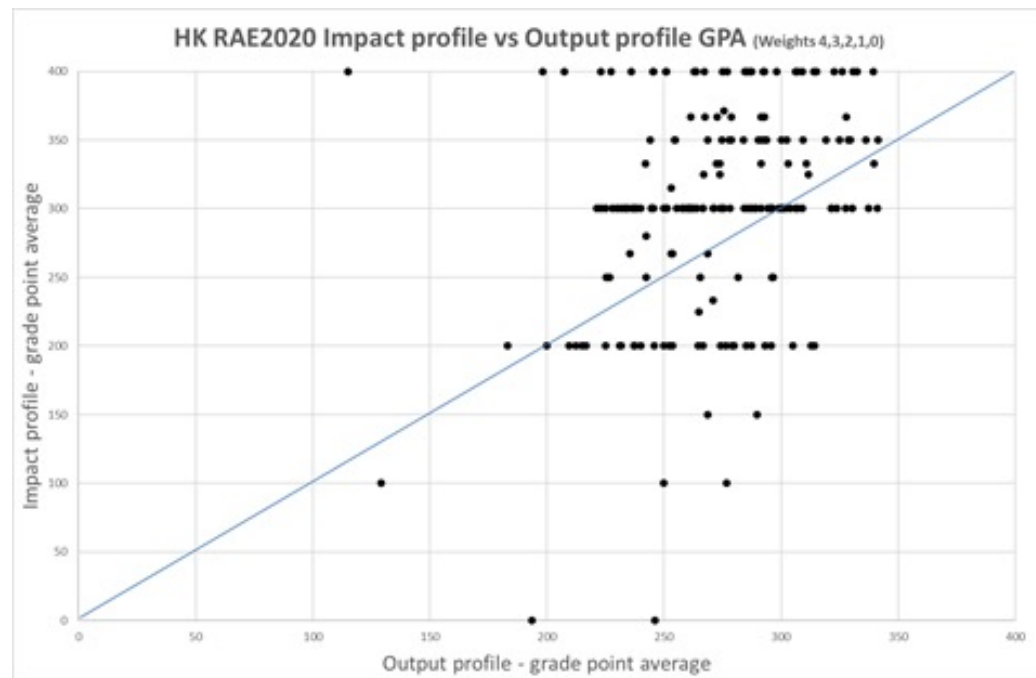


Acknowledgement: Prof Phil Gummert and UGC staff; originally Prof Jonathan Grant

**Both UK REF and Hong Kong RAE 2020 indicate that, by and large, excellence in Outputs correlates with excellence in Impact**



**... But there are some significant exceptions.**



**Impact results were generally better than Output results**  
(69% of Impact scores in RAE 2020 were better than the corresponding Output scores)  
(Similar results in UK REF 2014 (71%) and REF 2021 (62%))

Acknowledgement: Mario Ferelli and UGC staff

**Impact is not just a matter of better technology or making more money**  
**- As indicated by the main areas of impact in RAE 2020**

**Public Policy**  
(governmental & related bodies at all levels & in any region/place)

**Education**  
(all levels and modes)

**Health Services & the practice of Medicine**

**Business**  
(covering new products, processes & practices)



# What you can do to promote impact\*

- **General recommendations:**
  - Don't try to reinvent the wheel
  - Don't try a one-size-fits-all approach
  - Approach the matter as a culture-change project
  - Find the impact champions and support them
  - Keep it simple!
- **If you are a university leader:**
  - Stop talking about it and do something
  - Ask each Department and/or Research Unit to provide you with 3 examples of how its research has made a difference in society over the past 10 years
  - Put this information on your website
  - Use your impact case studies for PR purposes
- **If you are a research funder:**
  - When evaluating funding applications, don't be satisfied only with promises about future impact. Insist on evidence of impact already achieved.
  - In the annual reports you receive, ask for evidence of impact in addition to evidence of outputs.

[\*Acknowledgment: Impact Assessment of a Carnegie Corporation Grant to the University of Cape Town, 2023]

# Some Organisations with an Impact Agenda

- **Research England** (Research Excellence Framework, REF)
  - <https://www.ukri.org/councils/research-england/>
- **University Grants Committee, Hong Kong** (Research Assessment Exercise, RAE)
  - <https://www.ugc.edu.hk/eng/ugc/activity/research/rae.html>
- **Australian Research Council** (Excellence in Research for Australia, ERA)
  - <https://www.arc.gov.au/evaluating-research/ei-assessment/past-ei-evaluations-0>
- **South African National Research Foundation**
  - [NRF-Framework-to-Advance-the-Societal-and-Knowledge-Impact-of-Research.pdf](#)
- **NSF Centre for Advancing Research Impact in Society (USA)**
  - <https://researchinsociety.org/about/>
- **Research Impact Canada**
  - <https://researchimpact.ca/>
- **Network for Advancing and Evaluating Societal Impact of Science (AESIS)**
  - <https://aesisnet.com/>

**Thank you**