Parallel Session (C.004)

National & Regional Evaluation Systems

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National and regional evaluation systems

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AESIS Impact of Science Conference
Leiden
23 June 2022

Session focus

- The systematic evaluation of societal impact is becoming a feature of many national and regional research assessment systems worldwide.
- What are the common features and distinctions in different assessment systems?
- What lessons can we learn from the differences in implementation?

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Speakers

Steven Hill	Chris Brink	Marta Natalia Wróblewska
Overview of international systems for impact assessment	Impact assessment in the Hong Kong Research Assessment Exercise 2020	Incentives from impact assessment – comparison of UK, Norway and Poland

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Four systems for impact assessment

UK – Research Excellence Framework 2014, 2021	Italy – VQR, 3rd Mission Element
Australia – Engagement and Impact Assessment	Netherlands – Strategy Evaluation Protocol (Societal relevance)

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Definitions of impact

UK	an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia	The definition of impact is totally open but the case studies should be related to 10 areas of impact (fields of action)	Italy
Australia	Research impact is the contribution that research makes to the economy, society, environment or culture, beyond the contribution to academic research.	the societal relevance of the unit's research in terms of impact, public engagement and uptake of the unit's research is assessed in economic, social, cultural, educational or any other terms that may be relevant.	Netherlands

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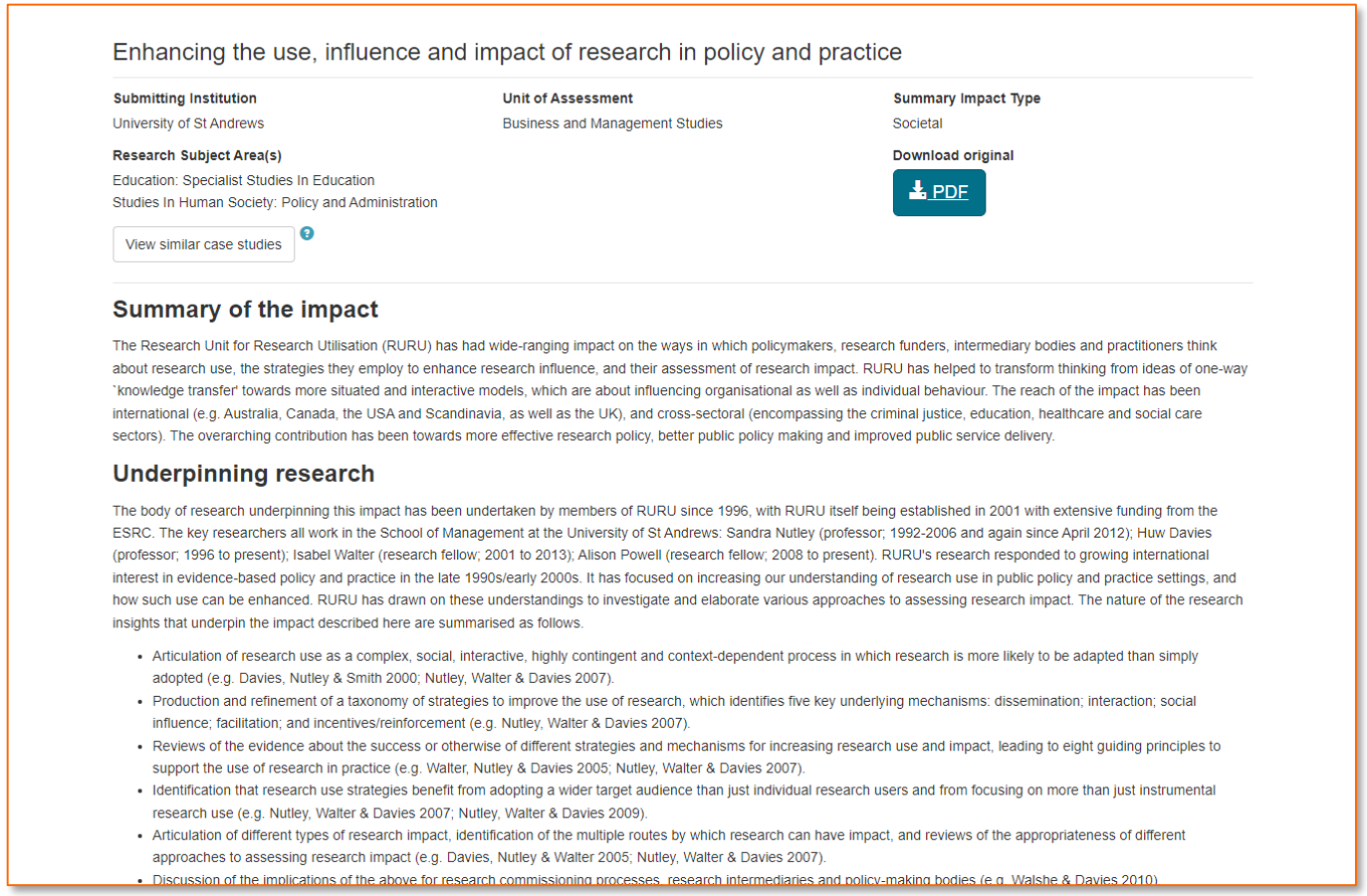
Case study format

- UK, Australia and Italy use a structured case study format for the assessment of impact



Enhancing the use, influence and impact of research in policy and practice

Submitting Institution
University of St Andrews

Unit of Assessment
Business and Management Studies

Summary Impact Type
Societal

Research Subject Area(s)
Education: Specialist Studies In Education
Studies In Human Society: Policy and Administration

Download original
PDF

View similar case studies

Summary of the impact

The Research Unit for Research Utilisation (RURU) has had wide-ranging impact on the ways in which policymakers, research funders, intermediary bodies and practitioners think about research use, the strategies they employ to enhance research influence, and their assessment of research impact. RURU has helped to transform thinking from ideas of one-way 'knowledge transfer' towards more situated and interactive models, which are about influencing organisational as well as individual behaviour. The reach of the impact has been international (e.g. Australia, Canada, the USA and Scandinavia, as well as the UK), and cross-sectoral (encompassing the criminal justice, education, healthcare and social care sectors). The overarching contribution has been towards more effective research policy, better public policy making and improved public service delivery.

Underpinning research

The body of research underpinning this impact has been undertaken by members of RURU since 1996, with RURU itself being established in 2001 with extensive funding from the ESRC. The key researchers all work in the School of Management at the University of St Andrews: Sandra Nutley (professor; 1992-2006 and again since April 2012); Huw Davies (professor; 1996 to present); Isabel Walter (research fellow; 2001 to 2013); Alison Powell (research fellow; 2008 to present). RURU's research responded to growing international interest in evidence-based policy and practice in the late 1990s/early 2000s. It has focused on increasing our understanding of research use in public policy and practice settings, and how such use can be enhanced. RURU has drawn on these understandings to investigate and elaborate various approaches to assessing research impact. The nature of the research insights that underpin the impact described here are summarised as follows.

- Articulation of research use as a complex, social, interactive, highly contingent and context-dependent process in which research is more likely to be adapted than simply adopted (e.g. Davies, Nutley & Smith 2000; Nutley, Walter & Davies 2007).
- Production and refinement of a taxonomy of strategies to improve the use of research, which identifies five key underlying mechanisms: dissemination; interaction; social influence; facilitation; and incentives/reinforcement (e.g. Nutley, Walter & Davies 2007).
- Reviews of the evidence about the success or otherwise of different strategies and mechanisms for increasing research use and impact, leading to eight guiding principles to support the use of research in practice (e.g. Walter, Nutley & Davies 2005; Nutley, Walter & Davies 2007).
- Identification that research use strategies benefit from adopting a wider target audience than just individual research users and from focusing on more than just instrumental research use (e.g. Nutley, Walter & Davies 2007; Nutley, Walter & Davies 2009).
- Articulation of different types of research impact, identification of the multiple routes by which research can have impact, and reviews of the appropriateness of different approaches to assessing research impact (e.g. Davies, Nutley & Walter 2005; Nutley, Walter & Davies 2007).
- Discussion of the implications of the above for research commissioning processes, research intermediaries and policy-making bodies (e.g. Walshe & Davies 2010).

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from the lists provided in SEER.

PART A—IMPACT

1. **Summary of the impact** (maximum 800 characters)
Briefly describe the specific impact in simple, clear English. This will enable the general community to understand the impact of the research.

2. **Beneficiaries**
List up to 10 beneficiaries related to the impact study.

3. **Countries in which the impact occurred**
Choose from the ABS list of countries as many as relate to the location of impact.

4. **Details of the impact** (maximum 6000 characters)
Provide a narrative that clearly outlines the research impact. The narrative should explain the relationship between the associated research and the impact. It should also identify the contribution the research has made beyond academia, including:

- who or what has benefitted from the results of the research (this should identify relevant research end-users, or beneficiaries from industry, the community, government, wider public etc.)
- the nature or type of impact and how the research made a social, economic, cultural, and/or environmental impact
- the extent of the impact (with specific references to appropriate evidence, such as cost-benefit-analysis, quantity of those affected, reported benefits etc.)
- the dates and time period in which the impact occurred.

NOTE—the narrative must describe only impact that has occurred within the reference period, and must not make aspirational claims.

5. **Associated research** (maximum 1500 characters)
Briefly describe the research that led to the impact presented for the UoA. The research must meet the definition of research (1.9). The description should include details of:

- what was researched
- when the research occurred
- who conducted the research and what is the association with the institution.

6. **FoR of associated research**
Up to three two-digit FoRs that best describe the associated research.

7. **References** (up to 10 references, 350 characters per reference)
This section should include a list of up to 10 of the most relevant research outputs associated with the impact.

TITLE: _____

FIELD OF ACTION: _____

A. INSTITUTIONS
B. DEPARTMENT(S):
C. DISCIPLINARY AREA(S) INVOLVED IN THE CASE STUDY:
D. NAME(S) OF THE ACADEMIC STAFF RESPONSIBLE FOR THE CASE STUDY:
E. KEYWORDS: In this section, 10 keywords will be indicated to qualify the case study and its impact.
F. DETAILED DESCRIPTION OF THE CASE STUDY In this section the case study will be illustrated with particular reference to the context in which it is located, the role played by the submitting institutions, the temporal development, the subjects involved and their role, the resources used and, generally, to all those elements that qualify the actions taken.
G. DETAILED DESCRIPTION OF THE IMPACT IN THE PERIOD 2015 – 2019 In this section the impact of the activities carried out shall be illustrated with reference to the local area, the reference period, and the added value for the beneficiaries, the economic, social and cultural dimension. In the description, the differences deriving from the actions taken with respect to the initial situation shall be highlighted.
H. INDICATORS TO CORROBORATE THE DESCRIBED IMPACT In this section it will be possible to provide a set of indicators, considered pertinent by the submitting institution and that allow to appreciate the impact of the activities carried out and to corroborate what is reported in section G. It is also possible to insert qualitative elements useful to demonstrate the impact of the intervention.
I. PUBLICATIONS RELATED TO THE CASE STUDY In this section the following elements will be provided, where relevant: a) main national / international scientific outputs that support the relevance of the case study; b) main scientific outputs by authors affiliated to the submitting institution or the involved department(s) that support the relevance of the case study.

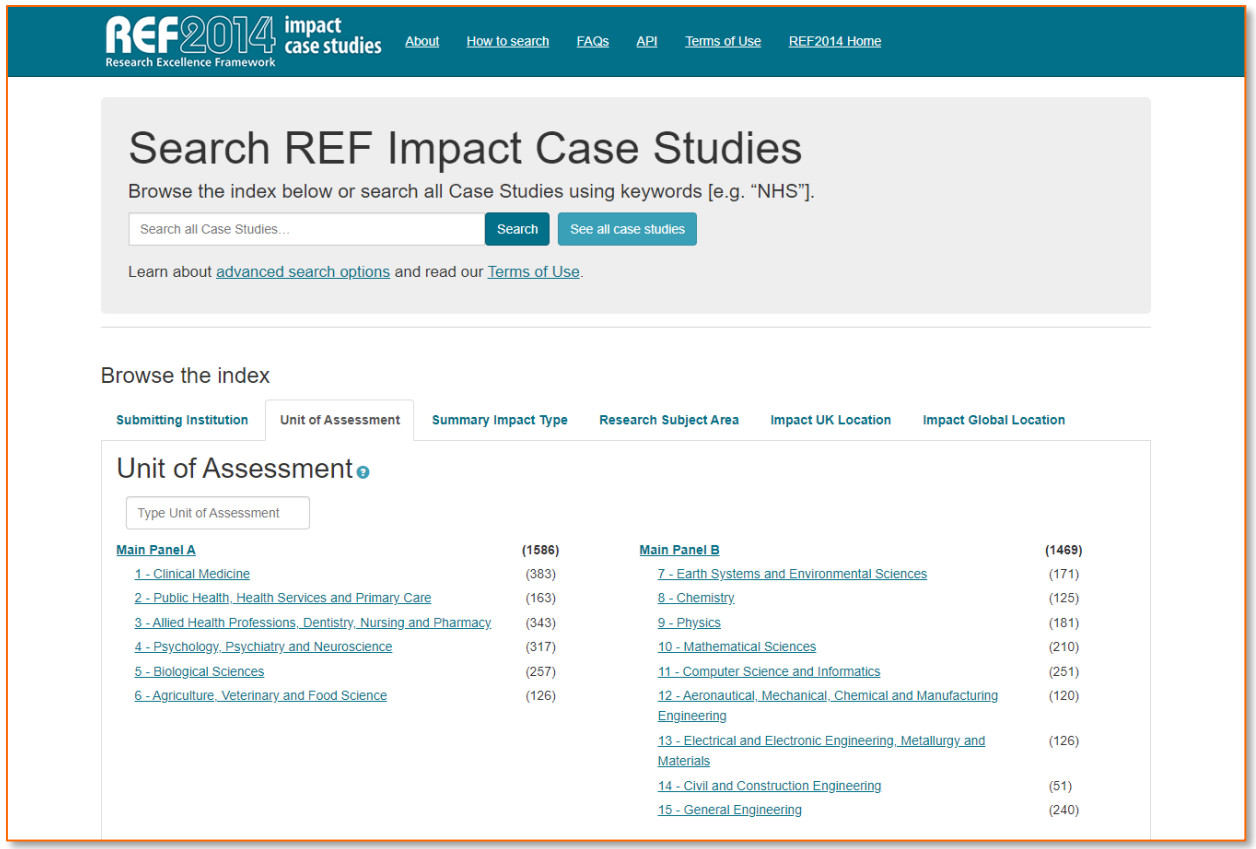
The sum of the characters used to fill in sections F and G shall be a maximum of 12,000.

Scoring, weighting, link to funding

UK	4-point scoring scale Accounts for proportion of an overall assessment (20% in 2014, 25% in 2021) Linked to funding	5-point scoring scale Carried out alongside outputs assessment Limited link to funding	Italy
Australia	3-point scoring scale Stand-alone assessment (with engagement) Not linked to funding	Entirely qualitative (formative) assessment Assessed alongside ‘Research quality’ and ‘Vitality’ Not linked to funding	Netherlands

Research England

Impact case study databases



- 6637 case studies
- All disciplines, almost all universities
- Underpinning research (36,244 with DOIs)
- Search, download, api
- Impact 2008-2013; research 1993-2013
- Limitations:
  - Assessment
  - Rules

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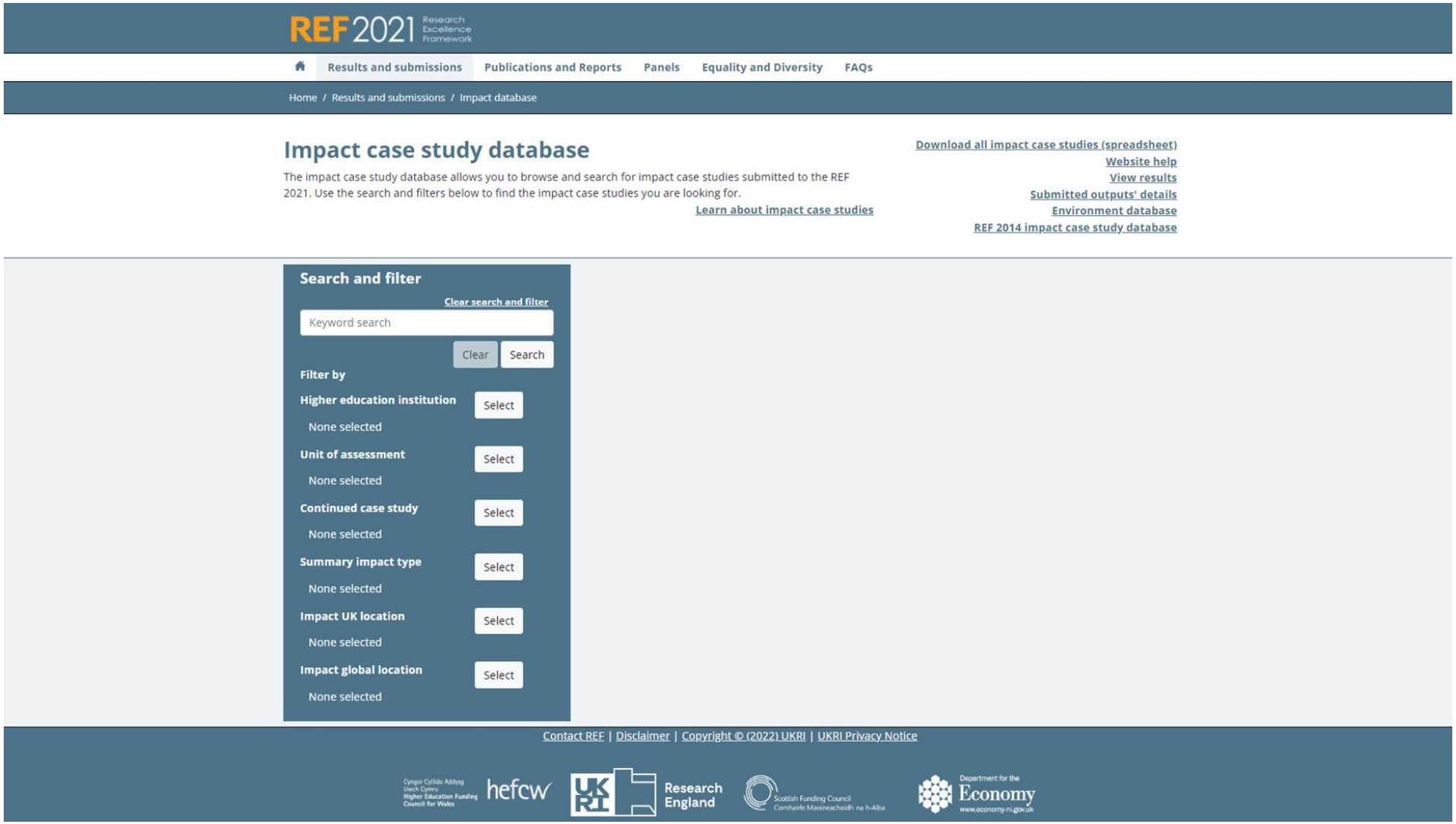
http://impact.ref.ac.uk

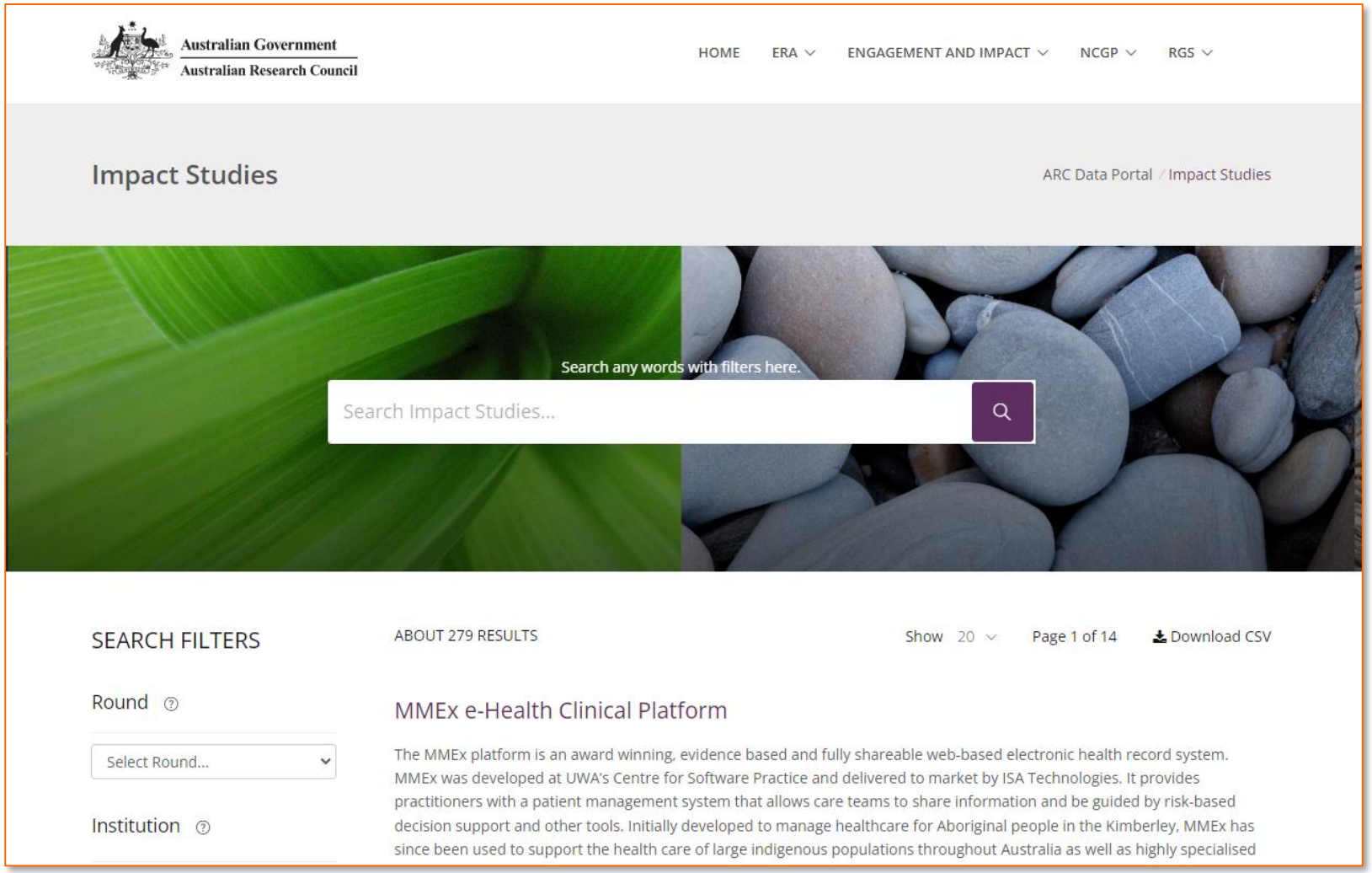
Impact case study databases



Research England

https://results2021.ref.ac.uk/impact

Impact case study databases



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https://dataportal.arc.gov.au/EI/Web/Impact/ImpactStudies

Some lessons learned (UK)

- Incentive for universities
- Role of interdisciplinary research
- Evidence on impact process

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'REF3A is informing the [impact] strategies that are currently being written'

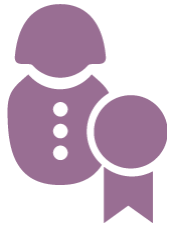
Setting out an impact strategy

Fixed-term posts becoming permanent

Implementing systems to store evidence of impact

Capturing evidence of impact on an ongoing basis

Building a plan for impact into projects



Inclusion of impact as a criterion for promotion

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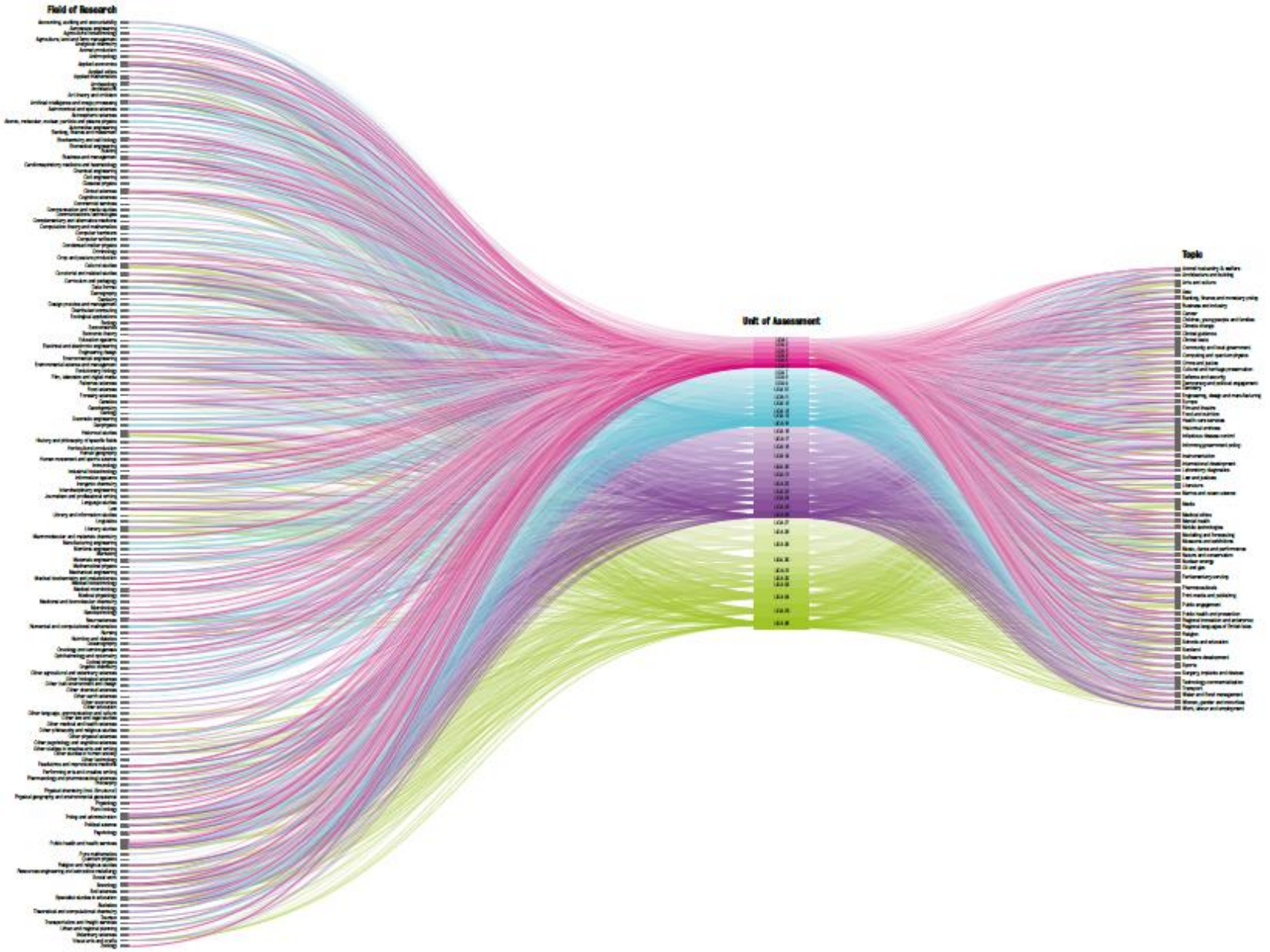
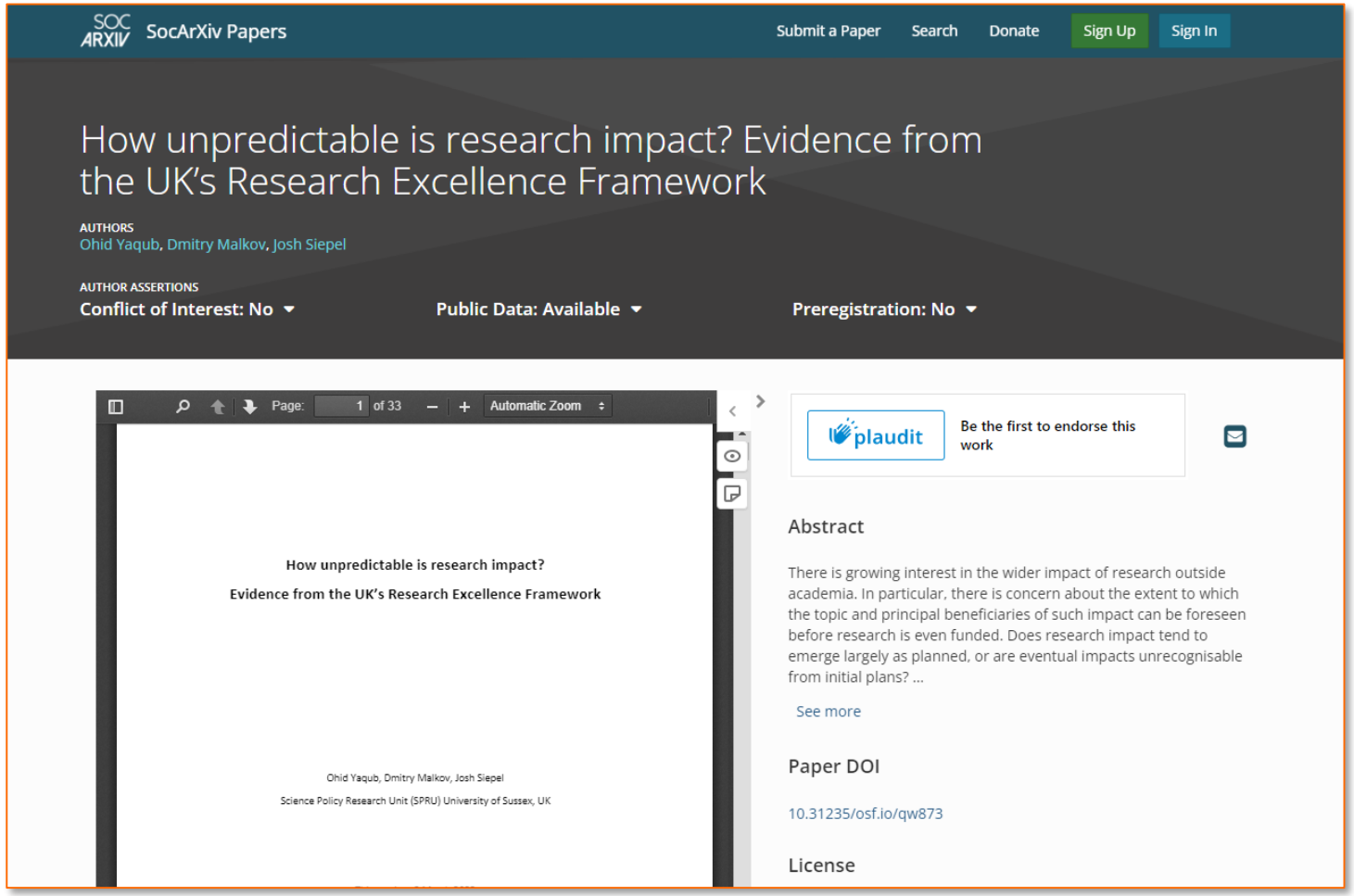
Source: RAND Europe (2015) Preparing impact submissions for REF 2014: An evaluation https://www.rand.org/randeurope/research/projects/hefce-ref2014-impact.html

Two-thirds of the research related to impact case studies involved two or more disciplines



Source: Kings College London and Digital Science (2015) The nature, scale and beneficiaries of research impact https://www.kcl.ac.uk/policy-institute/research-analysis/nature-scale-beneficiaries-research-impact



- Used journal articles to link impact case studies to research grant proposals
- Dataset of 2,194 grant-case studies pairs, 209 pairs allow comparison of impact plans and outcomes
- In the majority of cases (76%) the impact plans aligned with the actual outcomes

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Source: https://osf.io/preprints/socarxiv/qw873/

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Former Vice-Chancellor, Newcastle University (UK)
& Chair of the 2020 Research Assessment Exercise
Group, University Grants Committee, Hong Kong

Lessons Learnt

from the Impact component of the Hong Kong Research Assessment Exercise 2020

Chris Brink

Presentation for AESIS

2022-06-23

UNIVERSITY OF JOHANNESBURG

Background

- **Every 6 years Hong Kong conducts a sector-wide Research Assessment Exercise (RAE) of its 8 public universities**
- **Conducted by the University Grants Committee (UGC)**
- **Major part of funding allocation**

For RAE 2020:

- Every single academic at each university had to submit their 4 best **research outputs** over the past 6 years
- Each academic Unit/Department/Centre had to submit a number of **impact case studies** [Roughly one case study per 15 academics]
- Each academic unit had to submit a **Research Environment Summary**

Evaluation

- **A peer evaluation exercise**
- **13 evaluation Panels, each dealing with a few Units of Assessment (UoAs, 41 in total)**
- **Every Output, every Impact Case Study, and every Environment Statement was graded as:**
  - **4*** = world-leading, or
  - **3*** = internationally excellent, or
  - **2*** = international standing, or
  - **1*** = limited standing, or
  - Unclassified
- **Weightings:**
  - Outputs:Impact:Environment = 70:15:15

Panels:

1. Biology
2. Health Sciences
3. Physical Sciences
4. Electrical & Electronic Engineering.
5. Computer Science & IT
6. General Engineering
7. Built Environment
8. Law
9. Business & Economics
10. Social Sciences
11. Humanities
12. Creative & Performing Arts, & Design
13. Education

About Research Impact

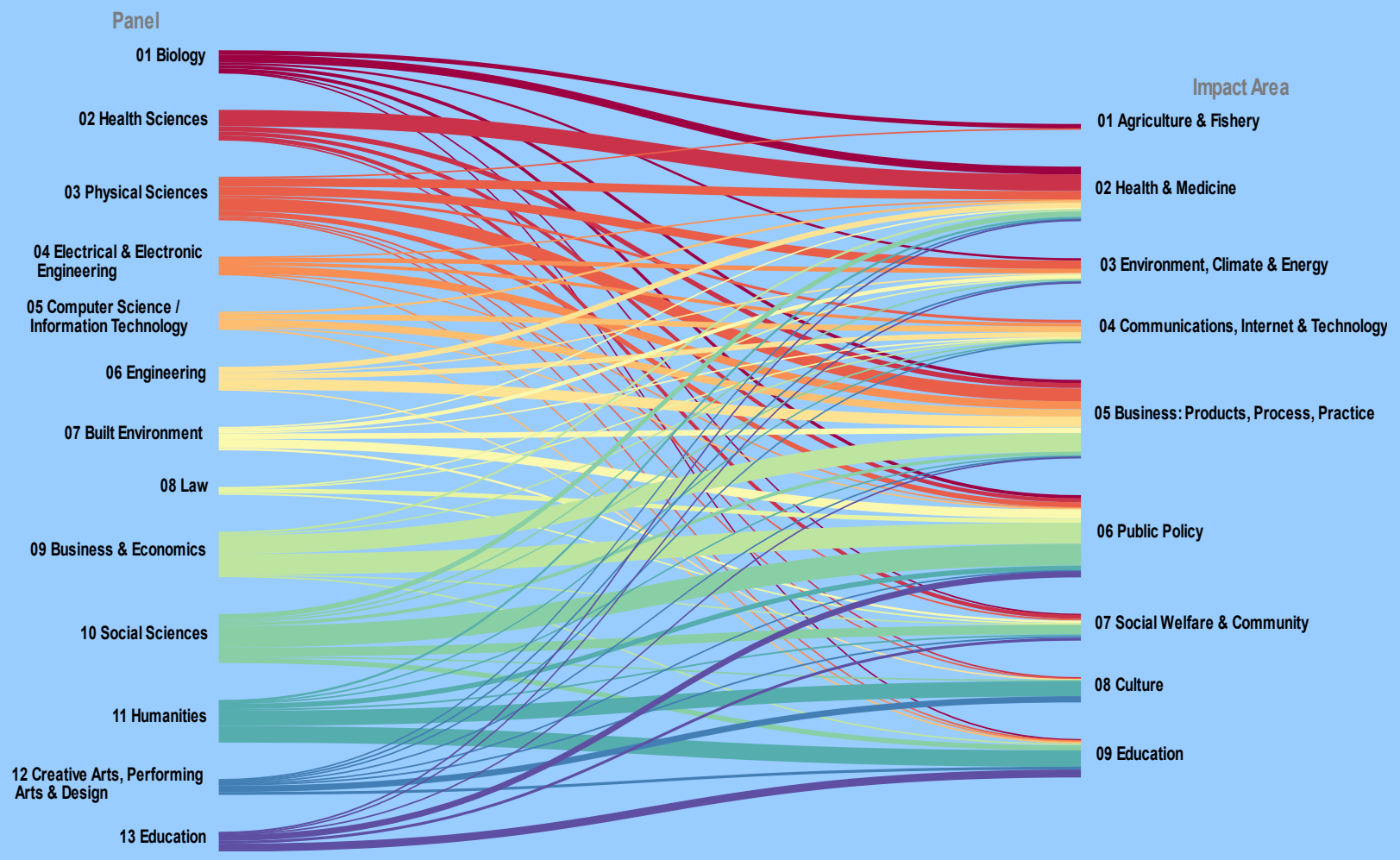
- **A new and additional evaluation category in 2020 (and therefore a fair amount of initial apprehension amongst academics)**
- **The basic question:**
  - What beneficial change has the research of your unit brought about in society at large?
  - And what evidence can you provide of such change?
- **Impact Case Studies had to be:**
  - Research-based
  - Evidence-based
  - Retrospective
- **Impact = <u>Societal</u> impact (not academic impact)**
- **Impact ≠ Outreach/Engagement/Community Work**
- **Impact is not geographically bound**

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."

[Acknowledgment: UGC]

What lessons have we learnt about Impact from the RAE 2020?

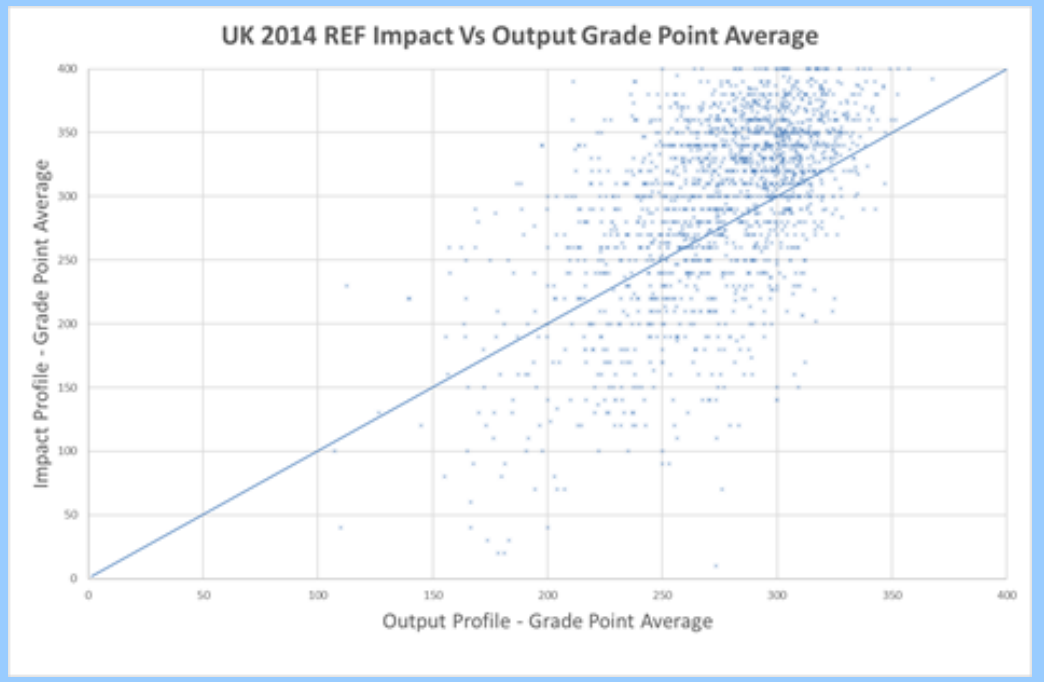
Lesson 1: Impact can arise from any disciplinary area, and take effect in any sector of society

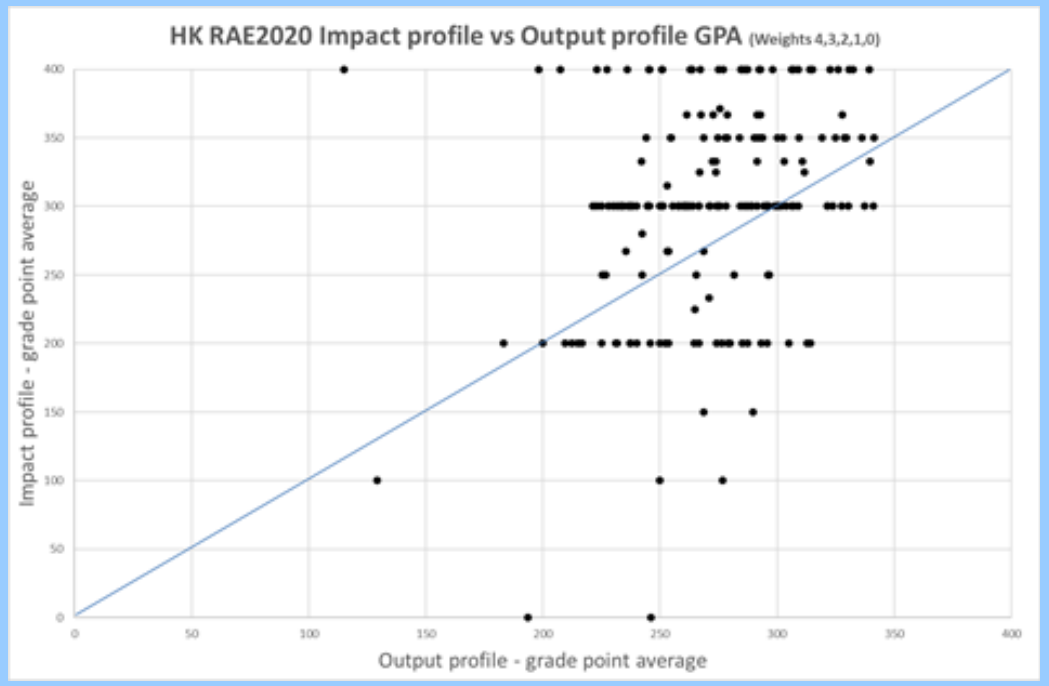


Acknowledgement: Prof Phil Gummett and UGC staff; originally Prof Jonathan Grant

Lesson 2:
Both UK REF 2014 and Hong Kong RAE 2020 indicate that, by and large, excellence in Outputs correlates with excellence in Impact …

Lesson 3:
… But there are some significant exceptions.





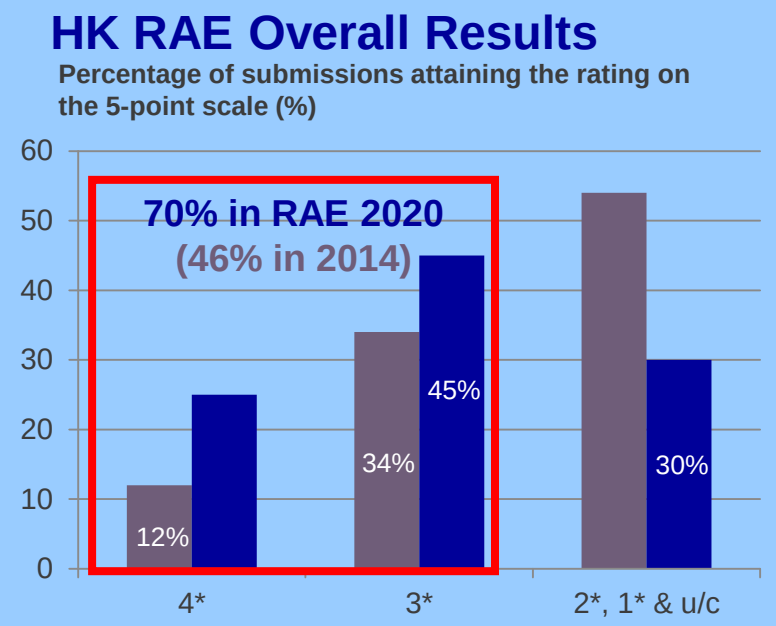
Acknowledgement: Mario Ferelli

Lesson 4: 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



Lesson 5: 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)

More general lessons:

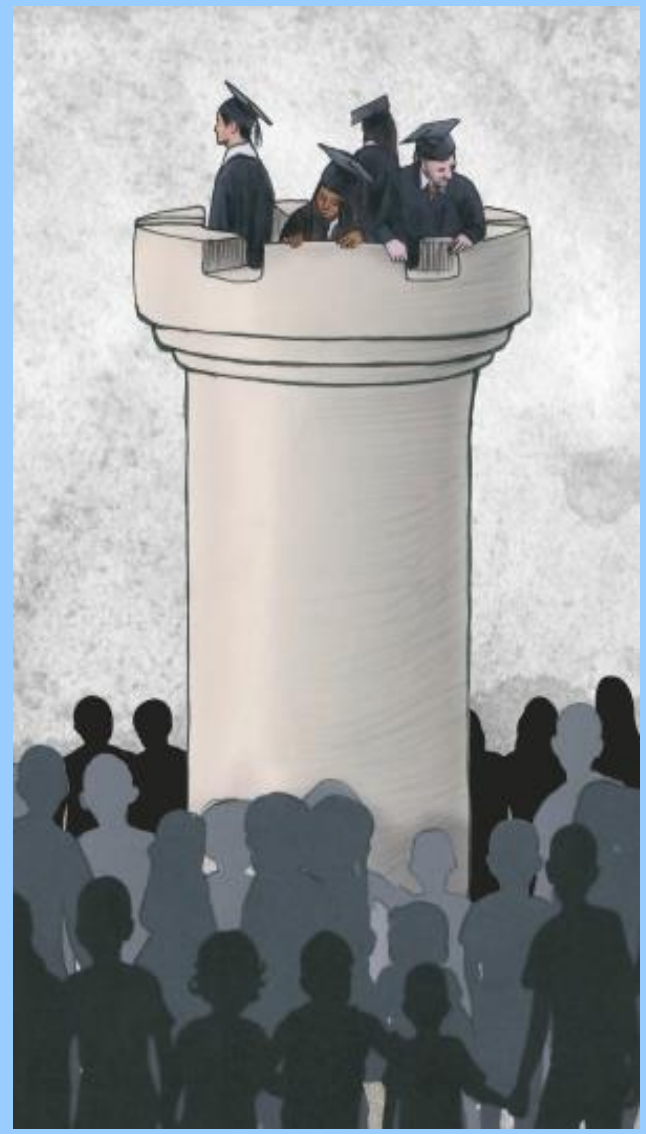
Explain, explain and explain again

Beware false narratives. (For example: “Excellence vs. Impact”)

The expectation of impact falls primarily on the university collectively, not on the individual researcher

Once they get the idea, and see the advantages, many sceptics become converts

“Impact” as one example of a gradual change in our understanding of the mission of Higher Education



Thank you
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OF
JOHANNESBURG

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Incentives offered by impact evaluation – a cross-national comparison UK – Norway – Poland

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Incentives offered by impact evaluation - a cross-national comparison UK– Norway–Poland

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Impact evaluation: UK, Norway, Poland

Systems compared:

- UK: Research Excellence Framework (REF) – since 2014
- Norway: Humeval 2015-2017
- Poland: Ewaluacji Jakości Działalności Naukowej (Evaluation of Quality of Scientific Activity) – 2017-2021 (ran for first time in 2021/22 – currently waiting for results)

Science systems & evaluation strategies

UK

- Investment in R&D: 1.7% GDP, €43.2 bn (2018) to increase to 2.4% in 2027, longer term 3%
- Number of researchers per m inhabitants: 4,3
- Considered ‘central’ science system
- Single, expert-review driven evaluation system (REF) which is basis for funding distribution

NO

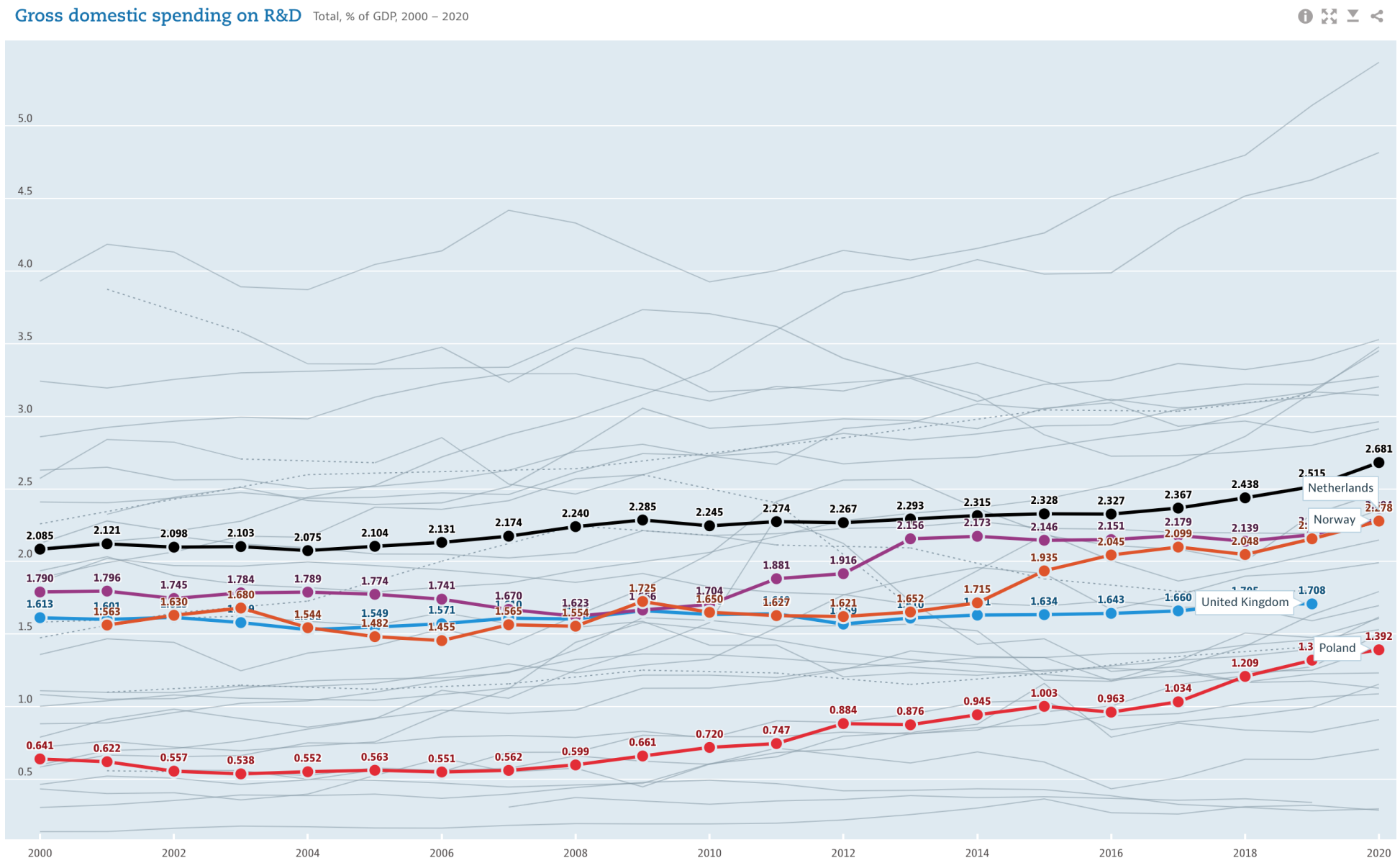
- Investment in R&D : 2.07% GDP (2018), €7.7 bn (20% increase from 2011)
- Number of researchers per m inhabitants: 5,7
- Complex system of evaluation, using different methodologies, mainly formative

PL

- Investment in R&D : 1,21% GDP, € 5.5 bn (2018); 1,39 % in 2022 (85% increase from 2011)
- Number of researchers per m inhabitants: 2,1
- Mixed “paramatric” approach to science evaluation

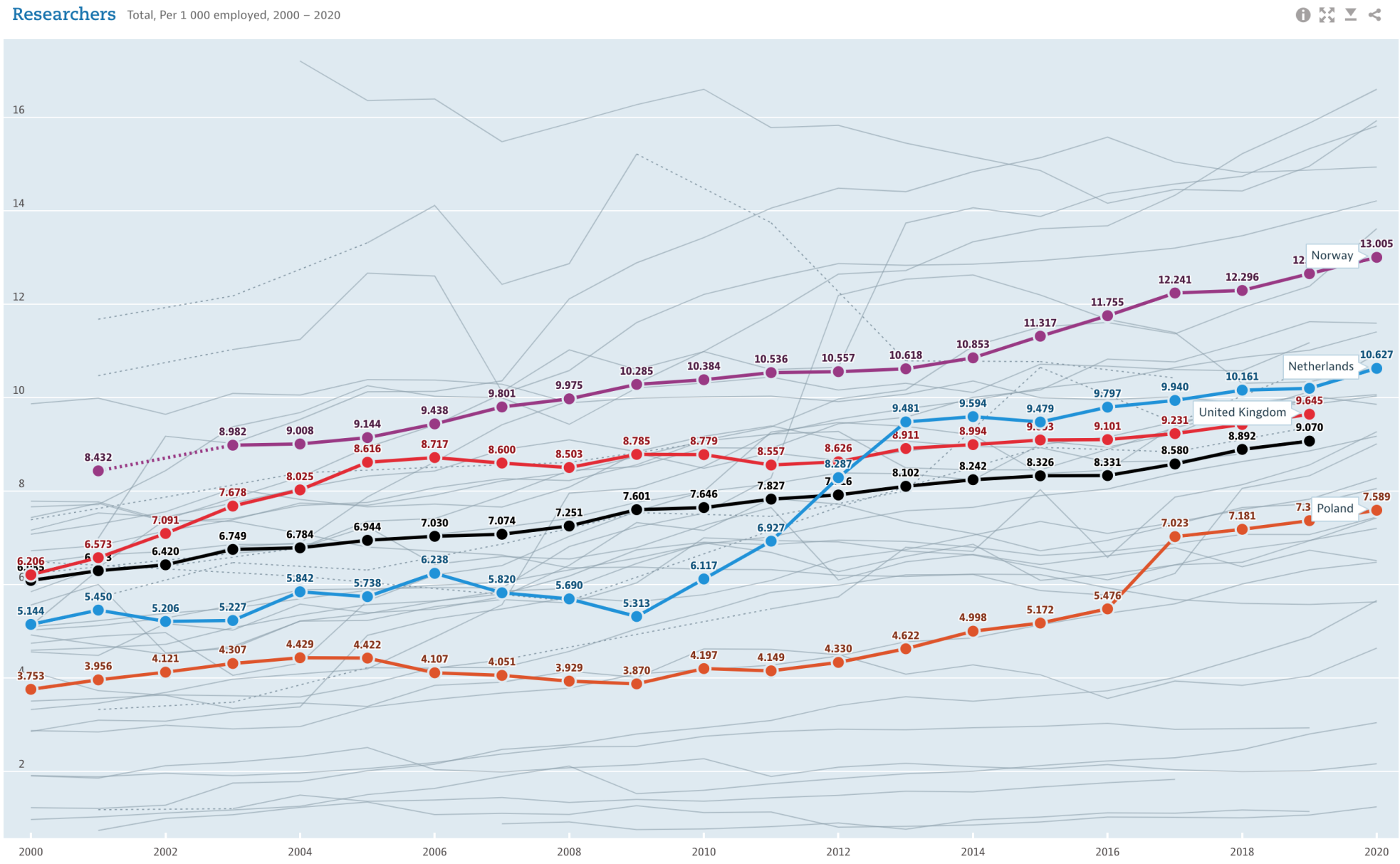
Investment in R&D EU-28 for 2018 ~ 2.12 GDP; 3,5 GBP Belgium & Sweden ; Romania, Malta, Latvia 0,7

R&D spending as % of GDP



Source: OECD

Researchers per total 1 000 employed



Source: OECD

Evaluation of impact – similarities

UK	Norway	Poland
Definition of impact*		
Criteria: 'reach and significance'**		
Basis for assessment: impact case studies (CSs)		
CSs submitted by Unit of Assessment (~discipline within university)		
Assessment conducted by disciplinary panels (expert review)		
Impact on academic teaching excluded		
Similar case study template		
Case study written in English		

Differences: evaluation system

	Evaluation system		
	UK (REF)	**Norway**	**Poland**
Assessment tied to core funding or formative	Tied to funding	Formative	Tied to funding
Process of change of science evaluation	Shift from one system to another	Developmental	Shift
Time from announcement of impact policy to evaluation	Over 2 years (2011–2013)	8 months (08.2015–04.2016)	3 years (2019-2022) (originally 2021)
Impact to account for what % of final score	Ref 2014: 20% REF 2021: 25%	–	20%
Disciplines assessed separately or together (in a single evaluation)?	Together All disciplines (STEM and SSH) assessed at the same time every ~6 years)	Separately (disciplines assessed separately every ~10 years)	Together (every ~6 years)

Differences: case studies

	Case studies		
	REF	**Norway**	**Poland**
Case study template	Yes	Yes (same as UK)	Yes (similar to UK*)
Number of CSs required	~1 per 10 researchers	At least 1 CS per evaluation panel, up to 1 CS per 10 researchers (in practice 1/14 academics submitted)	1 per 50-60 researchers (+2-3 per department in some cases)***
Evidence for impact	Broad range: including qualitative and quantitative data (sales / attendance data, user testimonials, surveys etc.)	Broad range (like in UK)	"reports, scientific publications, citations in other documents and publications"
Quality of research required	Impact based on high-quality research (at least 2-star, on the REF's 1-4 star scale)	Impact based on published research results (no explicit requirement as to quality)	Impact must be based on published research results
Timeframe	REF 2021: underpinning research from 2002-2022; impact 2015-2020	Both the research and the impact should have been produced in the last 10–15 years, counting from 2015 (2000-2015)	Impact to occur in the census period (2017-2021) based on research carried out from 1997

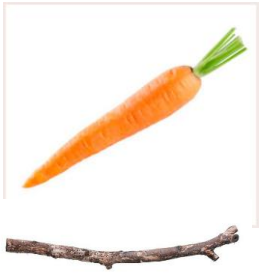
Evaluation of impact – differences

	Evaluation		
	REF	**Norway**	**Poland**
Practitioners (non-academics) included in panels	yes	no	no
International experts	yes	yes	yes
Type of feedback	Only aggregated score (on scale from 1–4) for unit of assessment (no scores given to individual CSs)	Descriptive feedback given on quality of impact case studies (sometimes per submission, sometimes for each CS)	Descriptive feedback on individual CSs, 800 characters
Results made public	Yes on searchable website	Yes in report (pdf)	Yes (?)

Impact CSs online:
UK: https://results2021.ref.ac.uk/,
PL: https://radon.nauka.gov.pl/dane/opisy-wplywu-dzialalnosci-naukowej-na-funkcjonowanie-spoleczenstwa-i-gospodarki

Incentives + / detractors -

UK



- Institutions:
  + funding
  + recognition
  - effort
  - costs
- Academics:

+ access to „impact infrastructure” (“the third space”)
+ chance to have involvement in impact recognised
  - additional burden (time, effort)
  - challenges for ECRs – „the conflict of the Impact Agenda”, international mobility

NO

- Institutions & academics:
  + qualitative feedback

PL

- Institutions
  + Funding
  - Risk of losing privileges
  - Chaotic proces, unclear guidelines, last minute changes
- Academics
  - additional burden (time, effort)
  - lack of institutional support

Polish Impact Agenda & why it went wrong

- Impact element received little attention in the academic debate that preceded the evaluation
- No support / guidance offered on impact by Ministry
- Lack of clear definition of “impact” in documentation
- Odd last-moment additions to the impact case study template
- Reach and significance understood literally
- Results of pilot never made public
- No infrastructure at universities
- “Parametrisation” of impact?

From an almost verbatim copy of the British version, the Polish concept of research impact has morphed into a whole other beast

Bibliography

- Wróblewska, M. N. (2019). Impact evaluation in Norway and in the UK – a comparative study based on REF 2014 and Humeval 2015-2017. ENRESSH Working Paper Series, https://research.utwente.nl/en/publications/impact-evaluation-in-norway-and-in-the-uk-a-comparative-study-bas
- Wróblewska, M. N. (2021), "Research impact evaluation and academic discourse". *Humanities and Social Sciences Communications,* 2021, 8 **(**58). 2021, doi: 10.1057/s41599-021-00727-8
- Wróblewska, M. N (2021), Jak napisać opis wpływu? Poradnik [How to write an impact case study? A guide] (e-book: https://martawroblewska.pl/jak-napisac-opis-wplywu-poradnik-moj-darmowy-e-book/)
- Wróblewska, M. N. (2022), Poland's impact evaluation gets lost in translation https://researchprofessionalnews.com/rr-news-political-science-blog-2022-4-poland-s-impact-evaluation-gets-lost-in-translation/
- Wróblewska, M. N., Balaban, Derrick (*in review*), The conflict of the impact agenda: Early Career Researches and planning for a future in academy

Recommendation

National & Regional Evaluation Systems

"Lets compare international practice in impact assessment across different cultures to learn about how impact arises and how best it can be evaluated"