Impact evaluation for strategy development

Steven Hill
Director of Research, Research England

AESIS, Assessing Impact of Science
04 November 2021

UK Research and Innovation

- Principal government agency for research and innovation
- UKRI funds research in universities and other research organisations and also performs research in its own institutes
- UKRI is made up of 9 Councils:
    - 7 Councils focussed on research in specific disciplines
    - Research England
    - Innovate UK

UKRI Research England

The Numbers

UKRI currently has a **combined budget of more than £9bn** and in 2019-20**:**

- Supported more than **24,000** researchers across more than 4,100 research organisations.
- Funded **1,500 research fellows** across 100 research organisations.
- Supported over **27,000 active students.**
- Allocated research funding to **151** universities.
- Supported **38** institutes, laboratories, units, campuses and innovation catapults.

UK Research and Innovation

Research England

- Our mission is to create and sustain the conditions for a healthy and dynamic research and knowledge exchange system in English Higher Education Providers

- Strategic investments underpinning research and knowledge exchange
- Bulk of funding provided as annual grants to universities, based on past performance in research and knowledge exchange

- Conduct the national research evaluation, the Research Excellence Framework (REF)

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Summary

- Developing strategy for impact

- The UK's Research Excellence Framework (REF) as a source of impact evidence

- Evidence to inform impact strategy
    - Building an impact culture
    - Delivering excellent impact
    - Research for excellent impact

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Simplified view of strategy development

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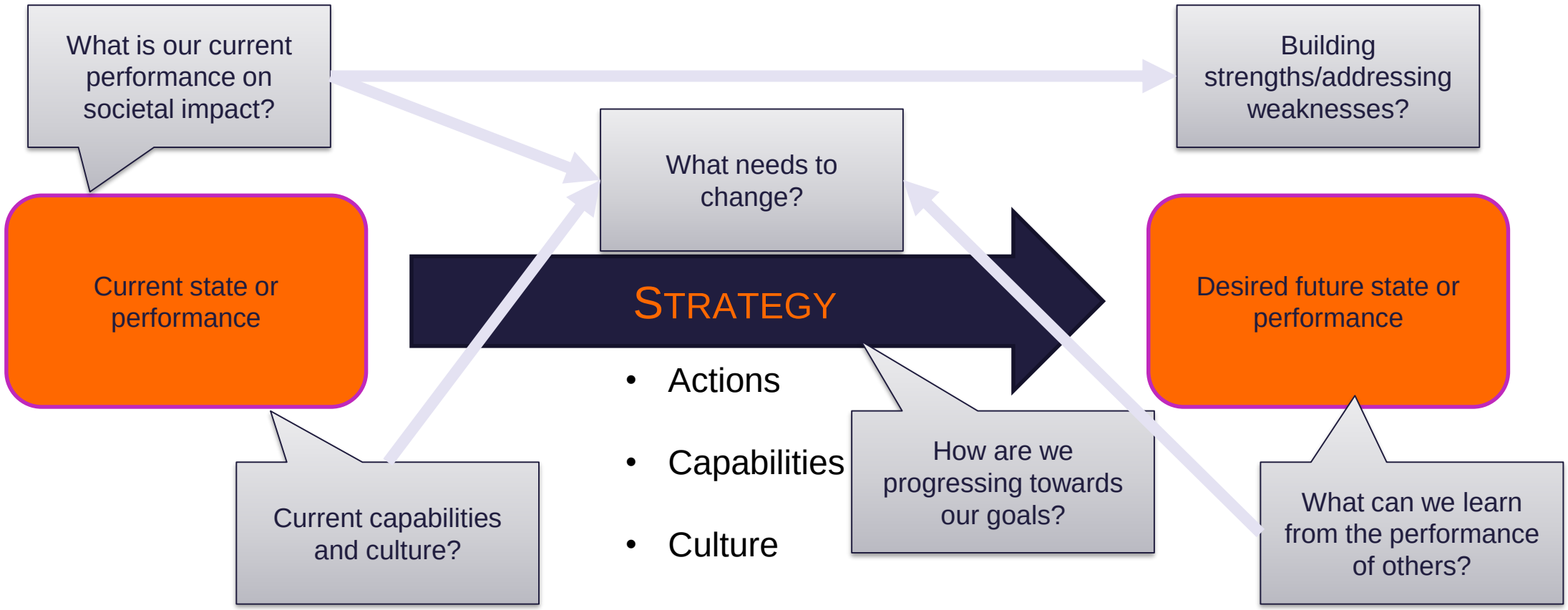
Evidence and strategy development



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Sources of evidence for impact strategy

- Engagement metrics
- Classical bibliometric analysis
- Alternative metrics (‘Altmetrics’)
- Narrative and case studies

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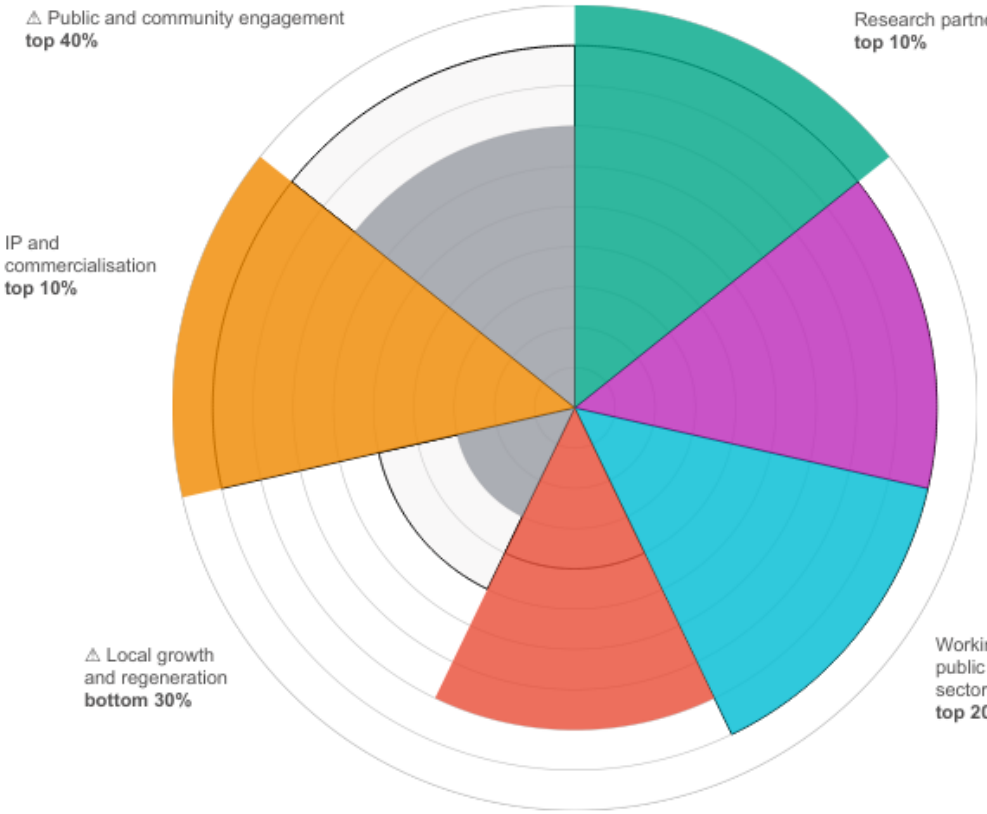
https://kef.ac.uk/dashboard

Research England
Knowledge exchange framework

KEF overview | Clusters | Find an institution | Compare

Institution: King's College London

Each segment below shows the relative strength of the selected institution for each KEF perspective, compared against the average for the cluster they are a member of (as denoted by black decile line). Tap or hover over a segment to show the links to the dashboard for each perspective. Segments are displayed using deciles; for example, a segment that reaches the outer edge of the chart shows that the selected institution is one of the top 10% of all institutions for that perspective.



⚠ Note that the metrics for public and community engagement and local growth and regeneration have associated narratives that give a more complete picture. Tap or hover over the chart segment to show a summary of the narrative, and a link to the full version.

Institution Context

Since our foundation in 1829, King's students and staff have dedicated themselves in the service of society.
As a civic university at the heart of London, King's is spread across five main campuses in London, three co-located with major NHS hospitals, along with sites in Oxfordshire and Cornwall.
King's is a diverse inclusive community with students, staff and alumni joining us from London, the UK and across the globe. A research-intensive multi-faculty university with a diverse range of subjects and disciplines, we employ 8,500 staff and have 33,000 students from over 150 countries; annual income is c.£971m. King's is ranked 7th in the UK by the Times Higher Education World University Rankings (2021).

Read the full institutional context
(opens in new window)

Cluster V summary

Very large, very high research intensive and broad-discipline universities undertaking significant amounts of excellent research. Research funded by range of sources including UKRI, other government bodies and charities; 10.2% from industry. Significant activity in clinical medicine and STEM. Student body includes significant numbers of taught and research postgraduates.

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- Engagement metrics
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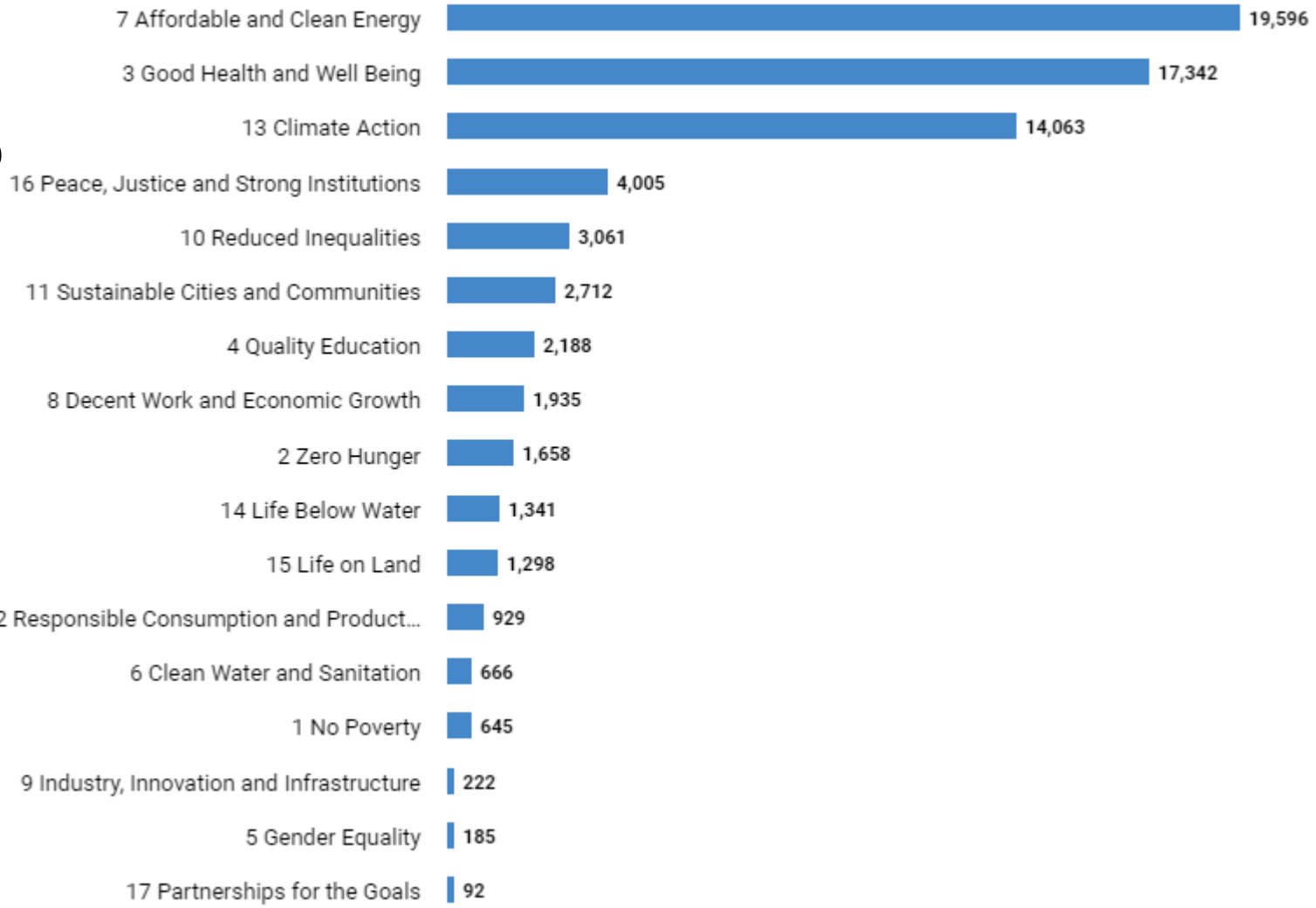
Publications funded by UK Research Councils allocated to Sustainable Development Goals. Source: Dimensions https://app.dimensions.ai/



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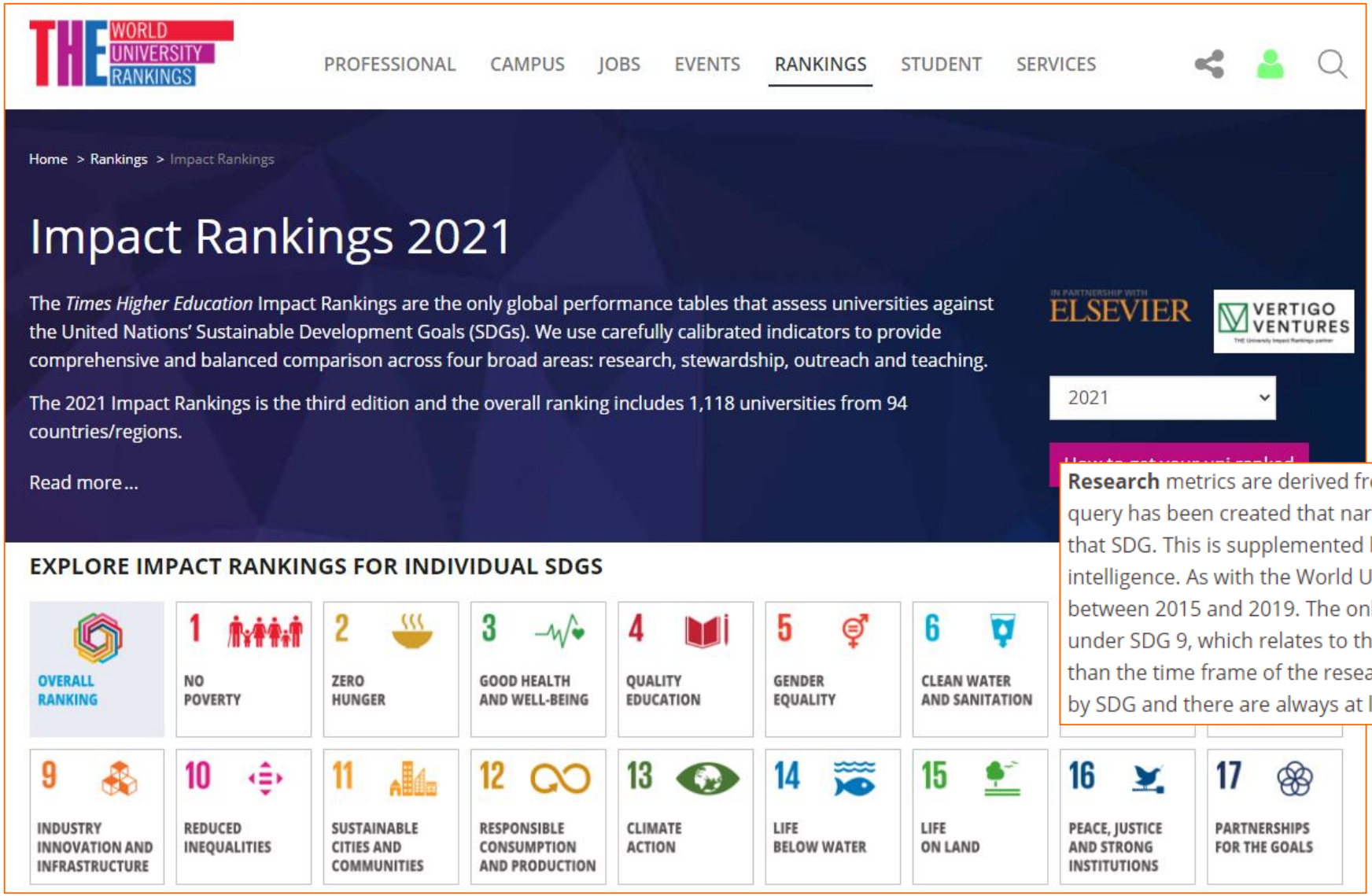

Research metrics are derived from data supplied by Elsevier. For each SDG, a specific query has been created that narrows the scope of the metric to publications relevant to that SDG. This is supplemented by additional publications identified by artificial intelligence. As with the World University Rankings, we are using a five-year window between 2015 and 2019. The only exception is the metric on patents that cite research under SDG 9, which relates to the time frame in which the patents were published rather than the time frame of the research itself. The metrics chosen for the bibliometrics differ by SDG and there are always at least two bibliometric measures used.

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Mapping scholarly publications related to the Sustainable Development Goals: Do independent bibliometric approaches get the same results?

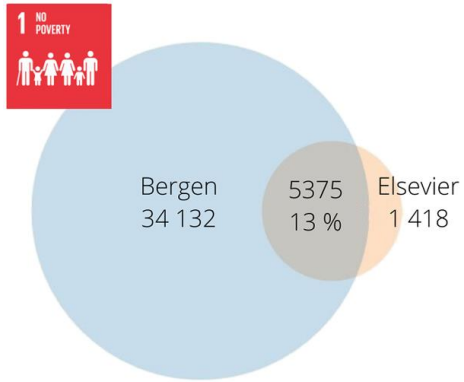
Caroline S. Armitage , Marta Lorenz , Susanne Mikki

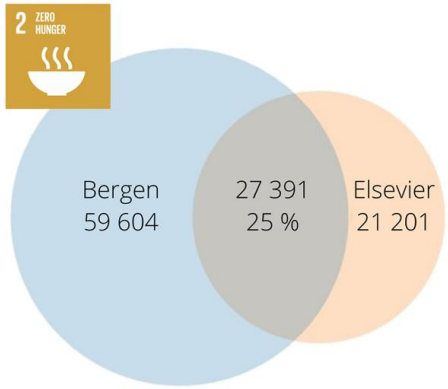
> Author and Article Information

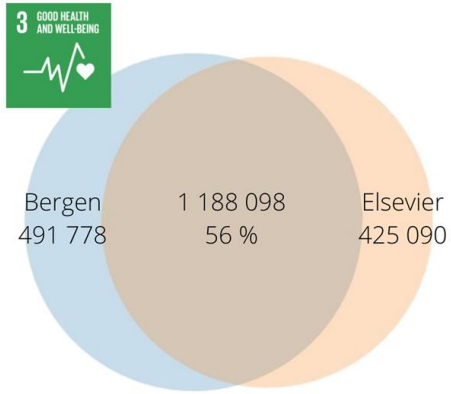
Quantitative Science Studies (2020) 1 (3): 1092–1108.

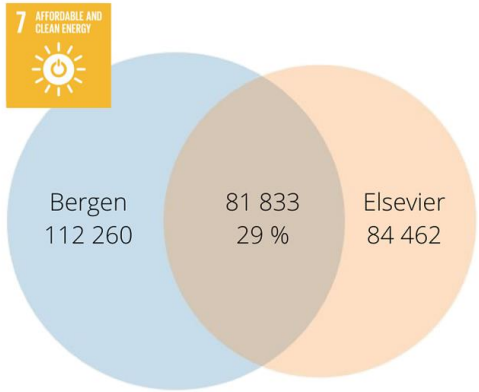
https://doi.org/10.1162/qss_a_00071 **Article history**

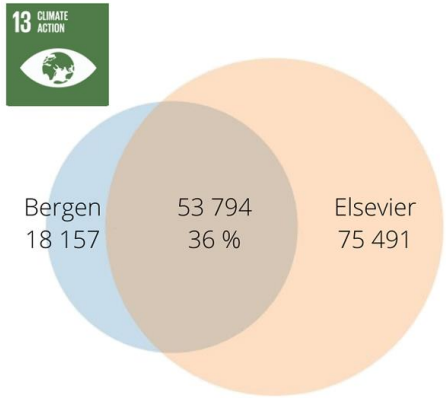
Interpretation of the themes of the SDGs, making decisions about what counts as a "contribution," and translating this into functioning search queries are not simple tasks. This study has shown that two independent approaches can deliver two widely different sets of results. Differences in the terms included and how they are combined makes large differences to the final result. The results suggest that it would be premature to trust commercial SDG analyses for anything other than exploratory purposes at this stage in their development.

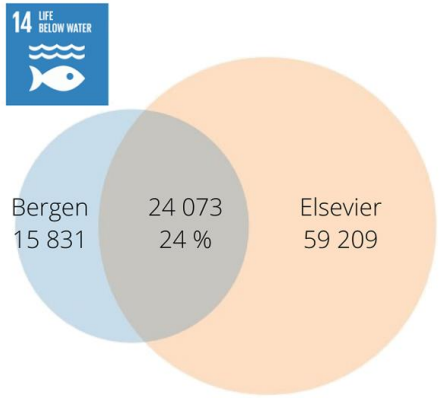












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Source: https://doi.org/10.1162/qss_a_00071

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Case studies as impact evidence

- Challenges with
  - Representativeness
  - Standardisation

- Case studies are being developed at scale through national research assessment exercises
  - Australia – Engagement and Impact assessment: https://dataportal.arc.gov.au/EI/Web/impact/ImpactStudies
  - Norway – Evaluation of the Humanities: https://www.forskningsradet.no/en/about-the-research-council/publications/2017/evaluation-of-the-humanities-in-norway---impact-cases/
  - UK – Research Excellence Framework (REF)

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Discussion questions

- How could you improve evidence of societal impact performance for your organisation? What additional or new sources of evidence could be used?

- What types of evidence of societal impact could be useful for monitoring progress of your impact strategy?

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The Research Excellence Framework (REF)

- National evaluation of university research
- Conducted every 7 years
- A process of expert review carried out by disciplinary panels (36 Units of Assessment in REF2014)

- Universities make submissions concerning:
    - Research outputs (academic impacts)
    - Impact of research on society
    - Research environment

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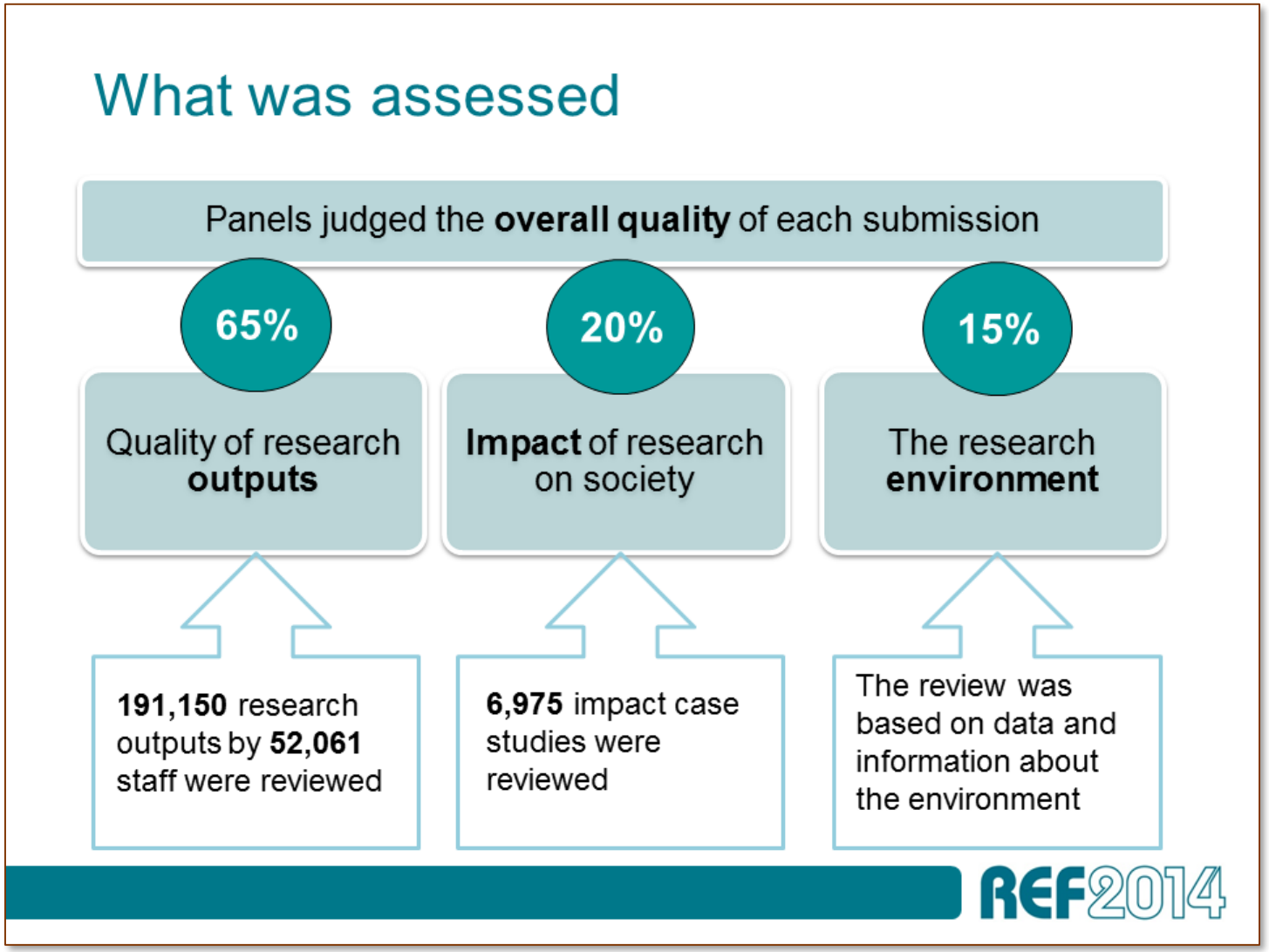
REF 2014



UKRI Research England

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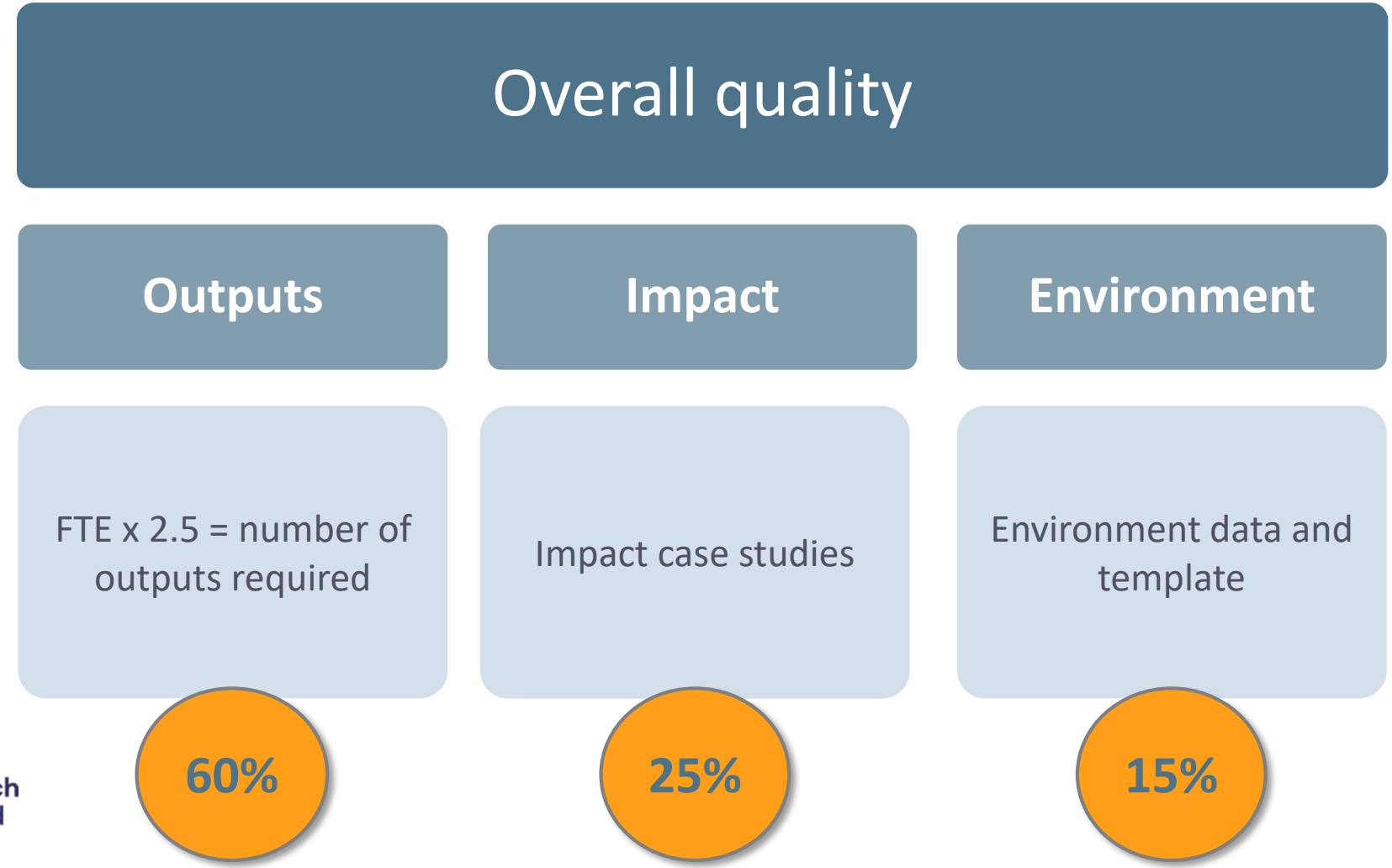

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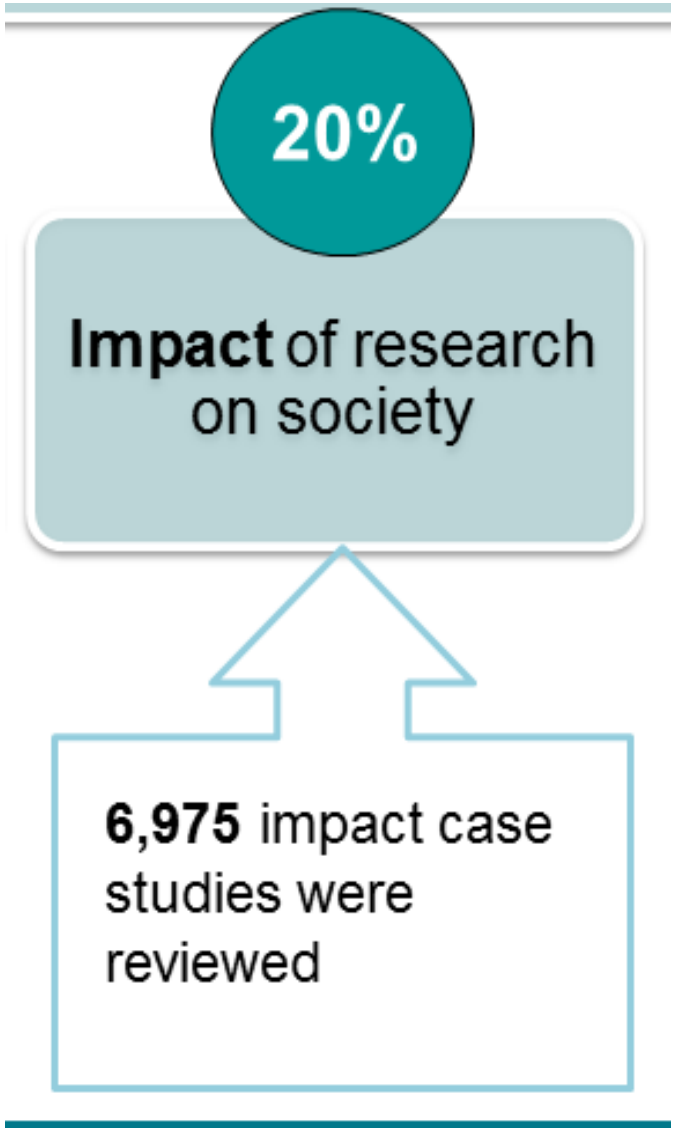
The impact element of REF



"an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia"

- 4-page narrative
- 'underpinning research'
- evidence and corroboration
- assessment by academics and research users

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Redesigning tourism policy and practices in Africa

Submitting Institution

University of Brighton

Unit of Assessment

Sport and Exercise Sciences, Leisure and Tourism

Summary Impact Type

Societal

Research Subject Area(s)

Medical and Health Sciences: Public Health and Health Services

Commerce, Management, Tourism and Services: Tourism

Studies In Human Society: Policy and Administration

Download original

PDF

Institution: University of Brighton	
Unit of Assessment: C26 Sport and Exercise Sciences, Leisure and Tourism	
Title of case study: Redesigning tourism policy and practices in Africa	ICS [3]

1. Summary of the impact

Researchers at the University of Brighton have changed national tourism policy and workforce training practices in African countries. Working with international organisations, including the World Bank and UN agencies, the underpinning research has identified approaches for developing capacity and skills in the tourism workforce. As a consequence, the Nigerian Board of Technical Education redesigned the national curriculum for leisure, tourism and hospitality; the Namibia Tourism Board introduced customer service skills training; government guidelines for ecotourism development were produced in West Africa. In the Gambia the research led to the Ministry of Tourism and Culture developing service standards and establishing the €2.7m Gambia Tourism and Hospitability Institute.

2. Underpinning research

Over the last 13 years, a research programme integrating academic, policy and community-based participatory research has generated new knowledge and methodological developments related to tourism policy and planning in Africa. These are issues of continental importance, as Africa has been one of the fastest-growing tourism regions in the world, but policy and planning has been slow to respond to some of the human resource and development challenges.

Origins: Tourism policy and planning research originates from journal papers by BURNS [reference 3.1], NOVELLI [3.2] and BENSON [3.3] based on findings from applied empirical work funded by the United Nations World Tourism Organisation (UNWTO) and the South East England Development Agency (SEEDA). The findings demonstrated the inadequacy of traditional approaches in tourism policy and strategic planning for human and physical resource used both in developing and developed economies. BURNS' research focused on post-conflict, fragile and emerging economies. This theme was further researched in Africa by NOVELLI [3.4, 3.5] and by BENSON [3.3], who demonstrated the opportunities and challenges for linking the rapidly growing phenomenon of ecotourism and volunteer tourism to development. Further empirical research by NOVELLI and BURNS [3.5] revealed the importance of tourism network development and peer-to-peer capacity building aimed at workforce development and poverty alleviation in Africa.

Critical intervention: The researchers devised new methodological approaches that have also impacted upon tourism policy in Africa. A novel participatory research method, the Rapid Situation Analysis (RSA), was developed with funding from the ESRC (PTA-026-27-1451), and used to produce new knowledge on innovative ways in which tourism can contribute to local development [3.4]. Based on phenomenological principles, the RSA approach included workshops, in-depth interviews, collaborative community mapping and a range of public consultations aimed at investigating stakeholder perceptions and practice in local tourism systems. RSA demonstrated the importance of moving beyond largely Western conceived ideas for establishing who benefits from existing tourism activities, in order to give voice to those who experience tourism in some of the most remote rural and poverty stricken areas of the world. In this way indigenous voices can be embedded into both the micro- and the macro policymaking processes.

Impact expansion: RSA has been used subsequently in research funded by international organisations, including the World Bank, the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the United Nations Industrial Development Organisation (UNIDO) and the Commonwealth Secretariat. The research has led to knowledge transfer, human capacity building and improvement of training and service standards in Africa. The significance of the research findings and methodological developments in the African context has been emphasised by the decision of the Aga Khan University to work with University of Brighton researchers in developing their executive tourism programme to be delivered at their new campus in East Africa.

Key researchers:

Angela Benson: Senior Lecturer (Jan 2004–Jul 2006), Principal Lecturer (Aug 2006–to date)
Peter Burns: Professor of Tourism and Development (Sept 2000–Sept 2013)
Christina Koutra: Research Officer (Sept 2007–Aug 2008)
Marina Novelli: Senior Lecturer (Sept 2002–Jul 2006), Principal Lecturer (Aug 2006–Jan 2013), Reader (Feb 2013–to date)

3. References to the research

[3.1] BURNS, P. (1999) Paradoxes in planning: tourism elitism or brutalism? *Annals of Tourism Research,* 26(2), pp.329–349. [Quality validation: output in leading peer-reviewed journal].

[3.2] NOVELLI, M., SCHMITZ, B and SPENCER, T. (2006) Networks, clusters and innovation in tourism: a UK experience. *Tourism Management,* 27 (6), pp.1141–1152. [Quality validation: output in leading peer-reviewed journal].

[3.3] CLIFTON, J. and BENSON, A.M. (2006) Planning for sustainable ecotourism: the case for research ecotourism in developing country destinations. *Journal of Sustainable Tourism,* 14(3), pp.238–254. [Quality validation: output that has been through a rigorous peer-review process].

[3.4] NOVELLI, M., MORGAN, N. and NIBIGIRA, C., (2012) Tourism in a post-conflict situation of fragility. *Annals of Tourism Research*. 39(3), pp.1446–1469. [Quality validation: output in leading peer-reviewed journal].

[3.5] NOVELLI, M. and BURNS, P. (2010) Peer-to-Peer (P2P) capacity-building in tourism: values and experiences of field-based education. *Development Southern Africa.* 27(5), pp.741–756. [Quality validation: output that has been through a rigorous peer-review process].

Key research grant:

KOUTRA, 'More Than Simply Corporate Social Responsibility: Implications of CSR for Tourism Development and Poverty Alleviation in Less Developed Countries' ESRC award, (PTA-026-27-1451), 2007-2008, total funding: £69,840.

4. Details of the impact

The underpinning research and participatory methods have impacted on policies that aim to address the lack of tourism and hospitality human resources capacity, which is key to any nation's successful tourism development.

The World Bank commissioned research into education, capacity building and training in Gambia, which led to a re-designed education and training policy. The research influenced the decision of the Spanish government to fund The Gambia Tourism and Hospitality Institute (GTHI), a national centre of excellence for tourism and hospitality education. The research provided: a feasibility assessment (2009) and business plan (2011) to direct policy, later implemented through 'The Gambia Tourism and Hospitality Institute Bill', which sought to create an enabling environment for Gambians to study up to the level of a Higher National Diploma in travel, tourism and hospitality. This bill was approved by the National Assembly in 2011 (source 5.8). Drawing upon the University of Brighton's recommendations, the GTHI was inaugurated in 2013 after an investment of €2.7m. The GTHI aims to train an average of 200 school leavers per year and upgrade the level of professional training amongst the 30,000 workers in tourism and hospitality, a sector that contributes 16% to the national GDP (5.1, 5.2).

UNESCO-funded research in Nigeria led to a new national curriculum for leisure, tourism and hospitality workforce training. As part of a larger project aimed at revitalising Nigeria's Technical and Vocational Education and Training (TVET), in collaboration with the Nigeria Board of Technical Education (NBTE), NOVELLI produced a 'Leisure, Tourism and Hospitality Curriculum Review' (2004), followed by a 'Capacity Building/Train-the-Trainers Programme' (NOVELLI and BURNS 2009). This led to the adoption of new industry and employment-centred leisure, tourism and hospitality teaching materials and a new national curriculum replacing the previous redundant one, which dated back to colonial times. An evaluation of the material and curriculum undertaken by the NBTE concluded that the impacts had spread beyond Nigeria and that: 'The

tangible outcomes of the initiative have been accepted for adoption in the ECOWAS countries… Other counties outside the region, e.g. Libya, Bahrain, Ethiopia, etc. have also benefitted from its achievement and have used the curricula developed as part of their own national curricula.' (5.6).

Sub-Saharan Africa (SSA) contains 32 coastal states, where unsustainable tourism practices have already led to irreparable damage to fragile ecosystems and significant economic losses. The United Nations Environmental Programme (UNEP), Global Environmental Facility (GEF), UNIDO and UNWTO have worked together to develop the Collaborative Actions for Sustainable Tourism (COAST) initiative targeting the sub-Saharan coastline. University of Brighton researchers were part of a consortium of five experts undertaking research in three of the nine COAST Demonstrator Projects. Research into 'Best Available Practices/Technologies' in Nigeria, Gambia (NOVELLI) and Ghana (BENSON) led to the identification of training needs and government guidelines for ecotourism development. On this basis, COAST identified demonstrator sites and delivered, for example, targeted training and local initiatives in the village of Kartong (5.7). This research enabled local stakeholders to articulate a vision for tourism development in their village and contributed to the community's growing confidence in the future of that village. The process was transformative on both sides leading to direct and indirect support for local businesses, having far-reaching social and economic benefits within the wider community (5.3).

The Gambia Ministry of Tourism and Culture commissioned the research project *GambiaHost* that was aimed at the design of national tourism and hospitality service standards to improve destination competitiveness. NOVELLI facilitated participatory research with 67 industry stakeholders that identified the pitfalls of service standards and the mitigating actions required to address them. Drawing upon the recommendations from *GambiaHost* the Gambia Ministry of Tourism and Culture funded a follow-up 12-day 'Train the Trainers Programme' with 40 staff from hotels and tourism-related institutions on Customer Service Skills and F&B Cost Control. The beneficiaries of this training will in turn train the rest of the employees on best practices on customer excellence in their respective hotels (5.2, 5.9).

The Commonwealth Secretariat funded a project into customer service capacity building in order to support the Namibia Tourism Board (NTB) in implementing the 2011 'Tourism Human Resources Strategy for Namibia'. NOVELLI and Taylor led three 'train-the-trainers' pilot programmes with 60 Namibians working in tourism, who then became NTB-certified trainers in January 2013 (5.5). Following the success of these programmes the NTB has commissioned a further project into customer services and the delivery of a Capacity Building Customer Service Training Programme that will train 25 tourism and shuttle operators and immigration officials in Swakopmund and Windhoek.

NOVELLI and BURNS were further commissioned to produce two research studies by the Aga Khan University (AKU) that produced recommendations on ways to bridge the gap in postgraduate and executive education in Africa. These led to AKU's strategic decision to invest in the establishment of a new tourism-focused graduate and research school in East Africa (5.4).

5. Sources to corroborate the impact

5.1 Testimonial available from Private Sector Development, The World Bank. This confirms the impact of the World Bank Project and the establishment of the Gambia Tourism and Hospitality Institute.

5.2 Testimonial available from The Permanent Secretary of the Ministry of Tourism and Culture (MOTC) of The Gambia. This confirms the development of the World Bank funded study for the Gambia Tourism and Hospitality Institute and the MOTC funded GambiaHost Service Standards' Study.

5.3 Testimonial available from former Chair of Kartong Association for Responsible Tourism and proprietor of Sandele Eco-retreat and Learning Centre, The Gambia. This confirms the impact of the UNIDO COAST Project on local businesses and the local community.

5.4 Testimonial available from Senior Advisor, Aga Khan Development Network, Project Director Graduate School of Leisure and Tourism. This confirms the establishment of a new tourism-focused graduate and research school.

5.5 Testimonial available from Industry Human Resources Development Coordinator, Namibia Tourism Board. This confirms the impact of the customer service training and support with the implementation of the Tourism Human Resources Strategy for Namibia.

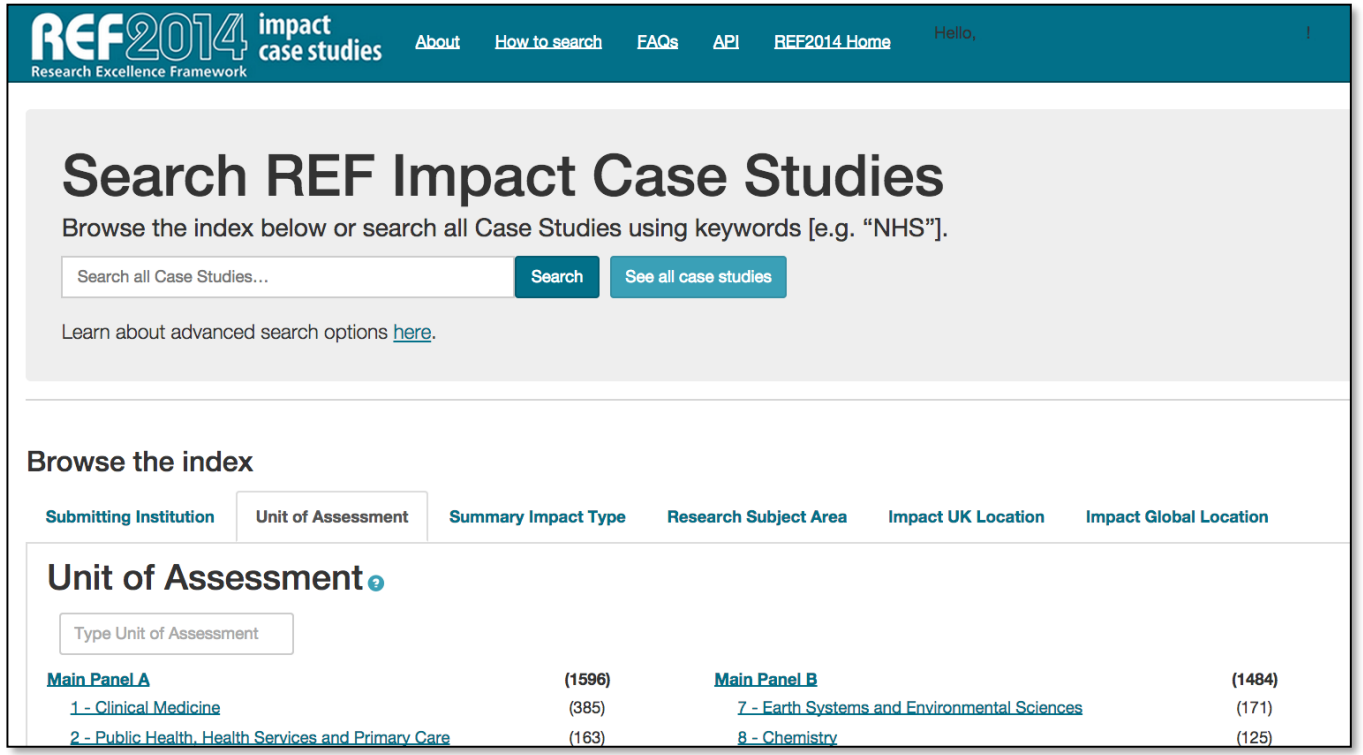
5.6 KAZAURE (2012) *Impact Evaluation Study of the UNESCO-Nigeria TVE Revitalisation Project.* Available at: http://www.adeanet.org/triennale/Triennalestudies/subtheme2/2_1_07_Kazaure_en.pdf [Accessed: 8 November 2013]. This evaluation confirms that the impacts had travelled further than Nigeria. The evidence of expansion is quoted on page 7.

5.7 COAST (2012) *Quarterly newsletter,* Edition 1, October 2012. Available at: http://coast.iwlearn.org/en/en/TheCOASTProjectNewsletter2012.pdf [Accessed: 8 November 2013].
COAST (2013) *Third Quarterly newsletter,* June 2013. Available at: http://coast.iwlearn.org/en/en/News%20and%20Events/3rdCOASTProjectNewsletterEditionJune20133.pdf. [Accessed: 8 November 2013]. This confirms that COAST identified demonstrator sites and delivered targeted training and local initiatives in the village of Kartong.

5.8 Gambia Hotel school Bill press release. Dibba, A.G. (2011) *Gambia: Tourism and Hospitality Institute Bill Passed.* Foroyaa Newspaper, [online] 16 Dec 2012. Available at: http://allafrica.com/stories/201112160951.html. [Accessed: 8 November 2013] This provides confirmation that the Bill was passed.

5.9 Service Standards Development in The Gambia press release. Sallu, Y.S. (2012) *Tourism Minister: Gambians are 'Jewels'.* Daily Observer [online] Available at: http://observer.gm/africa/gambia/article/tourism-minister-gambians-are-jewels. [Accessed: 8 November 2013]. This confirms the impact of continued training and enhancement of quality service standards.

Impact case studies as a research resource



- 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

Summary

- Developing strategy for impact

- The UK's Research Excellence Framework (REF) as a source of impact evidence

- Evidence to inform impact strategy
    - Building an impact culture
    - Delivering excellent impact
    - Research for excellent impact

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UKRI Research England

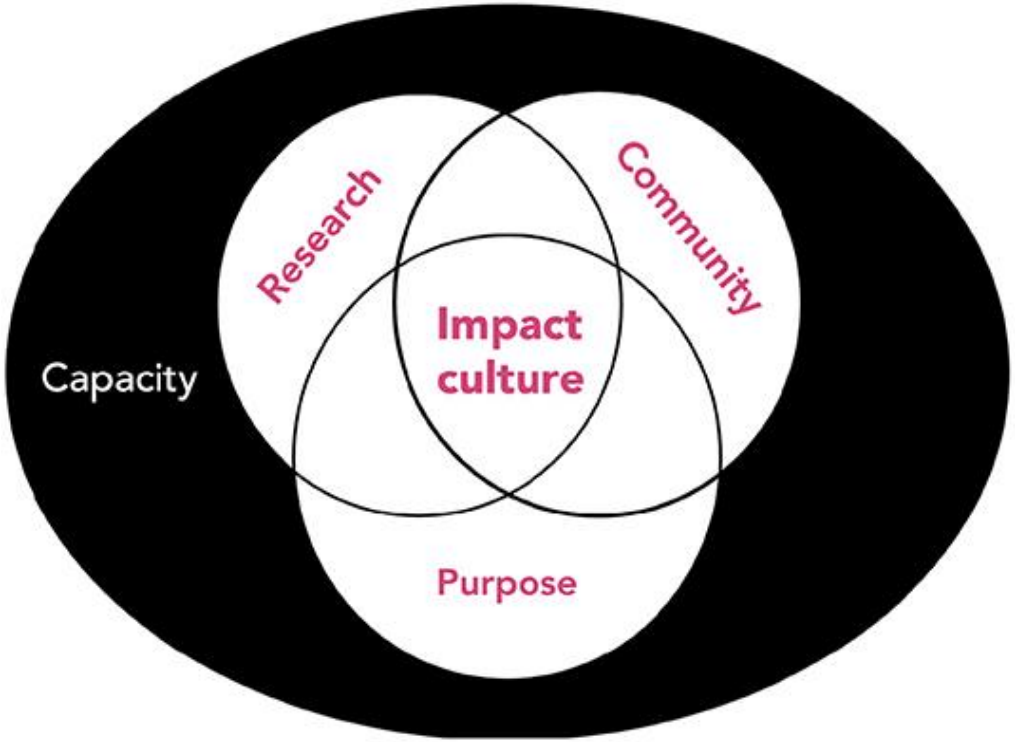
- Focussed on top 1.5% of submissions to REF2014 in terms of research quality (including societal impact)

- Key characteristics included:
  - Recruit and retain talented individuals
  - Training, mentorship and reward for high performance
  - Distinct ethos of social and ethical values
  - Real, living and owned strategy
  - Enable and encourage collaboration

Source: https://www.rand.org/pubs/external_publications/EP67130.html

Impact Culture: Transforming How Universities Tackle Twenty First Century Challenges

Mark S. Reed[1] and Ioan Fazey[2]*



- Clarity of purpose for the researcher and the research organisation
- Rigorous, ethical and action oriented research
- Social capital between academic and non-academic communities
- Developed capacity (skills, funding, leadership)

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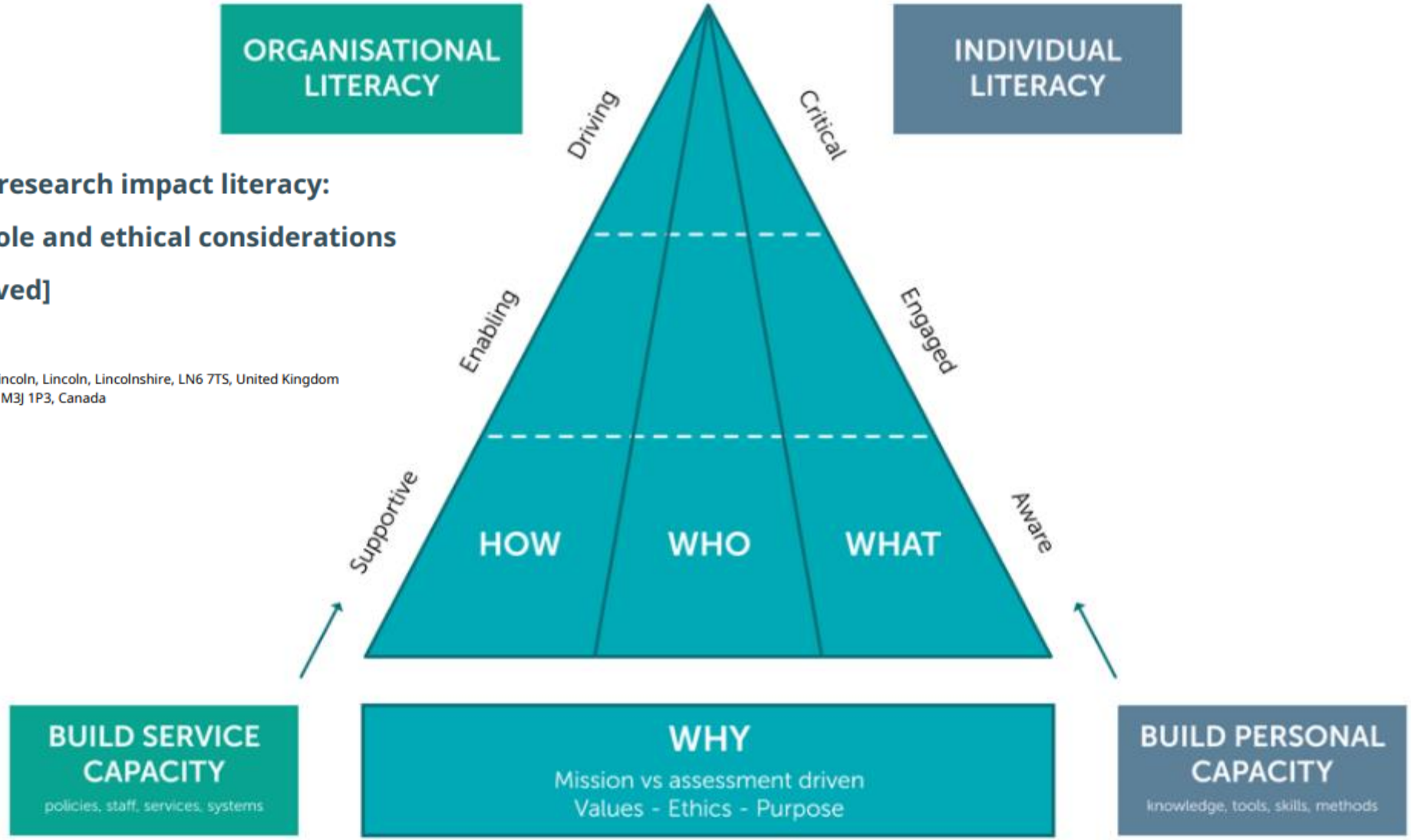
Source: https://www.frontiersin.org/articles/10.3389/frsus.2021.662296/full

REVISED

Extending the concept of research impact literacy: levels of literacy, institutional role and ethical considerations [version 2; peer review: 2 approved]

Julie Bayley[1], David Phipps[2]

[1]Research and Enterprise / College of Social Science, University of Lincoln, Lincoln, Lincolnshire, LN6 7TS, United Kingdom
[2]Research & Innovation Services, York University, Toronto, Ontario, M3J 1P3, Canada



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Source: https://emeraldopenresearch.com/articles/1-14

Summary

- Developing strategy for impact

- The UK's Research Excellence Framework (REF) as a source of impact evidence

- Evidence to inform impact strategy
    - Building an impact culture
    - Delivering excellent impact
    - Research for excellent impact

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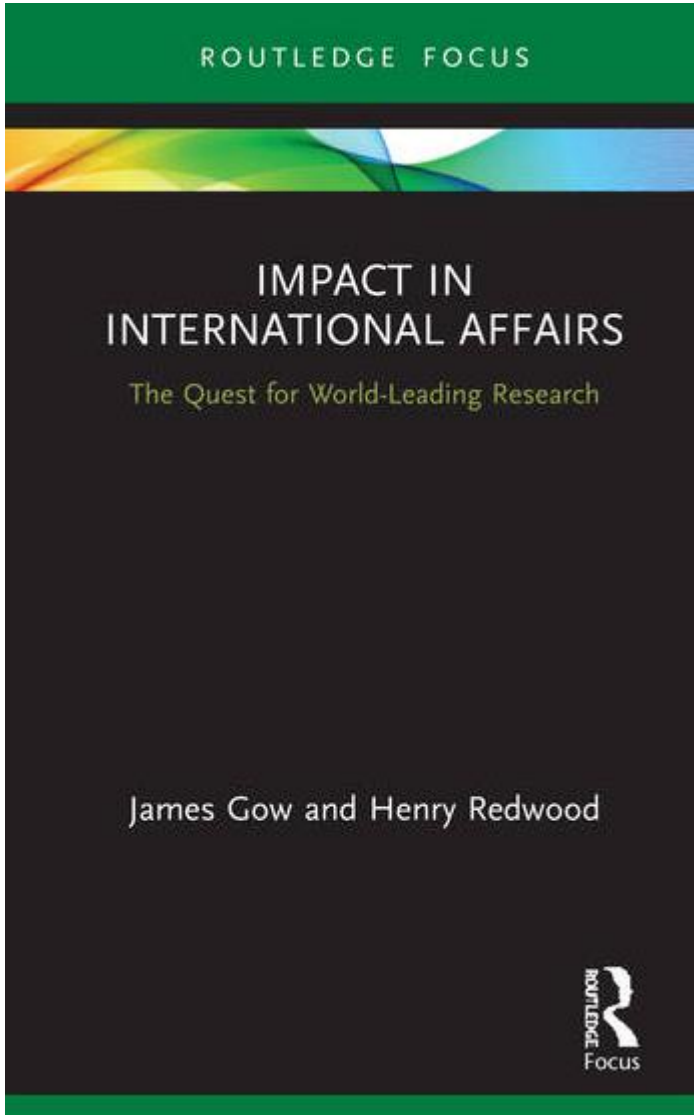

Characteristics of world-leading impact

- Long-term research
- Significant research funding
- Clear engagement with implementation and practitioners
- Resource commitment to impact
- Breadth and cumulative impact
- Transformative or innovative for beneficiaries
- Media and public engagement

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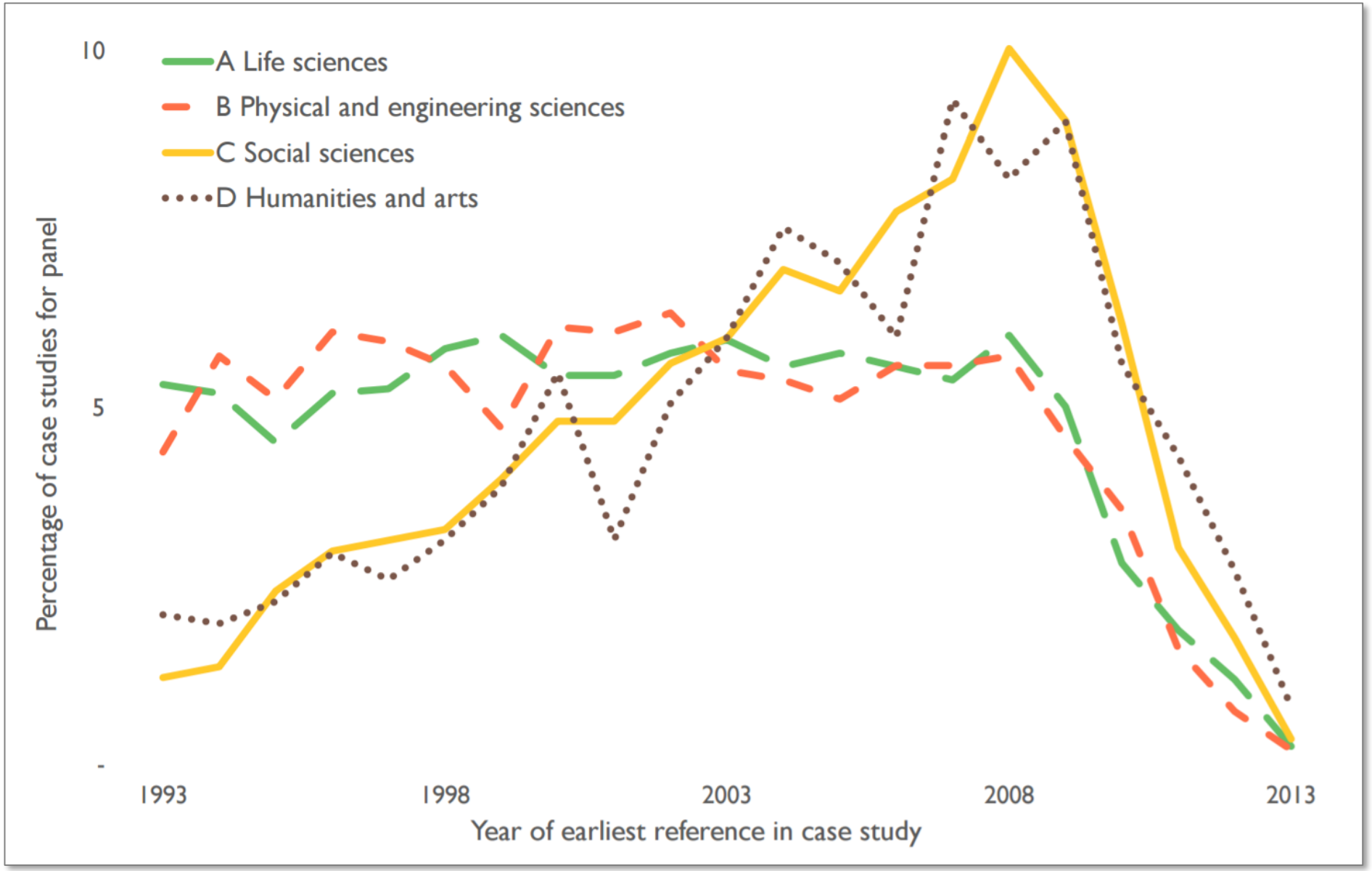
Source: https://www.routledge.com/Impact-in-International-Affairs-The-Quest-for-World-Leading-Research/Gow-Redwood/p/book/9780367902032
Open access version available from 14 Feb 2022: https://openresearch.lsbu.ac.uk/item/8v5v1



Research England

Source: Digital Science (2016): Publication patterns in research underpinning impact in REF2014 https://dera.ioe.ac.uk/26933/1/2016_refimpact.pdf

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Research for impact

- High academic quality

- Multi- and interdisciplinary

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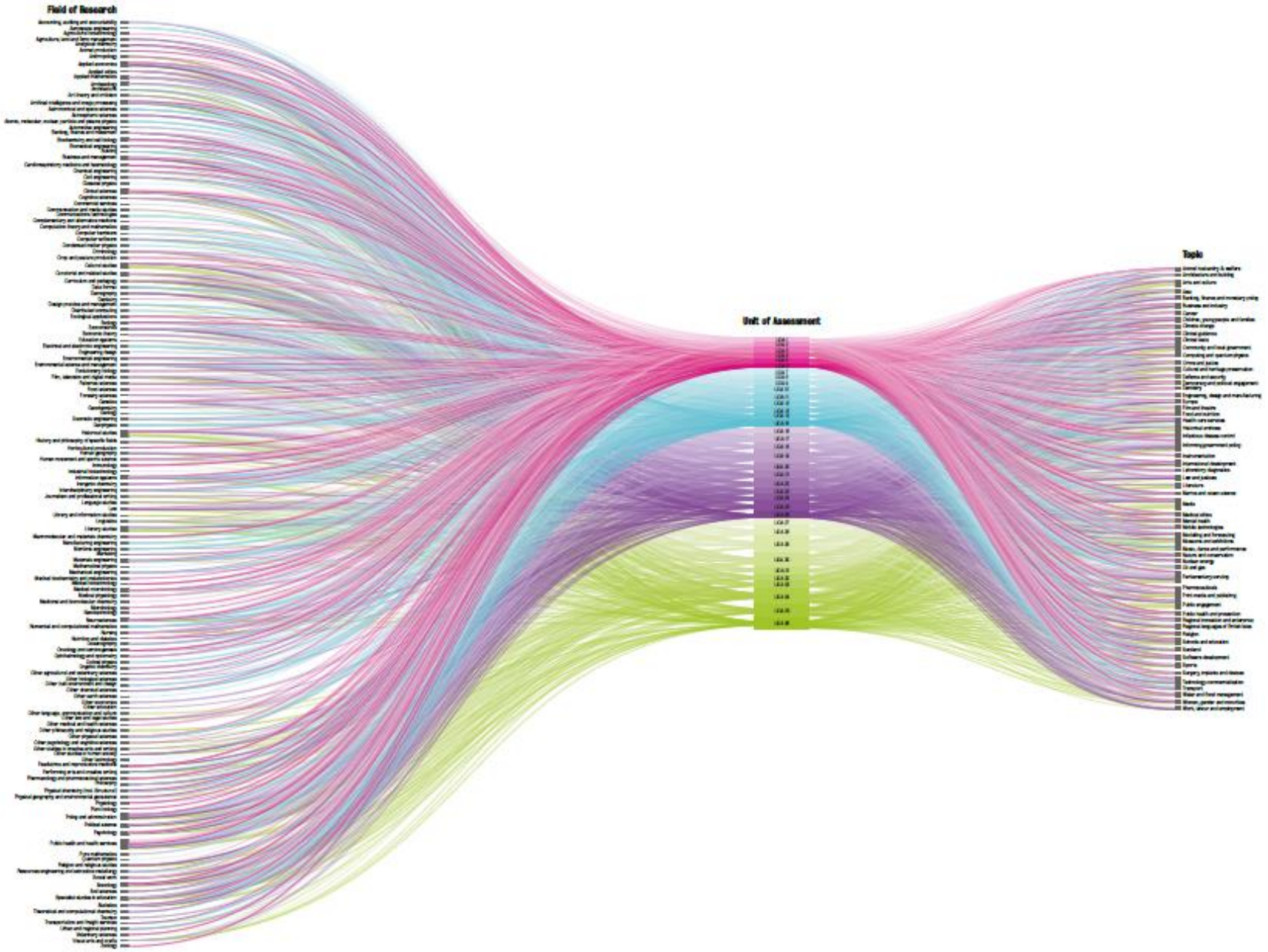
Research England

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

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Conclusions

- Evidence has a crucial role to play in developing impact strategy
- A diverse range of evidence sources are available, and there is value in combining different sources
- There are emerging themes that underpin the delivery of impact:
    - high quality and long-term research
    - deep engagement with stakeholders
    - diversity of research

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