DEMYSTIFYING RESEARCH EXCELLENCE FRAMEWORK (REF)

Jenny Dunn

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Team PIP

Policy, Impact and Performance Team. Aka 'the REF Team', aka 'the Impact Team'. Assembled 2016-19. Managed the university's successful REF 2021 submission.

Jenny Dunn, Impact Manager. Jenny is the co-founder of the Northern Impact Network, a professional association for impact managers across the north of England. She has previously worked supporting health research and as a journalist/producer for BBC radio and television.

Keith Fildes, Research Development Manager. Keith is the University's REF manager. He has worked with University of São Paulo to advise on the incorporation of elements of the REF into Brazil's research assessment exercise. He was originally a researcher in History.

Alison Honnor, Impact Manager. Alison was seconded to Research England for REF 2021 and served as Panel Adviser to Panel D and UOAs 27, 30 and 34. She has previously worked as an Impact Researcher in a Cultural, Communication and Computing Research Institute.

History of REF

Established in 1986.

To evaluate the quality of research undertaken by UK universities.

Submissions for each subject area (unit of assessment), with scores from a subject specialist peer review panel.

The rankings are used to inform the allocation of quality weighted research funding (QR) each universities receives.

Took place in 1986, 1989, 1992, 1996, 2001, 2008, 2014, 2021. The next one will be 2029.

Purpose of REF

For the government:

• Provide accountability for public investment in research and produce evidence of the benefits of this investment

• Provide benchmarking information for use within the HE sector and for public information

• Inform the selective allocation of funding for research

• Provide an evidence base to inform strategic decisions about national research priorities

• Create performance incentives for universities and individual researcher

Purpose for Universities

Income

REF-related income accounts for approximately a third of the University's annual research funding (**£16,000** per staff per year).

£16,000 is the annual QR income Sheffield Hallam gets for every FTE of staff who has SRR.

For 10% of time (160 hours)/salary investment for T&R staff, that's the baseline for how much each bring into the university (excluding any grants etc.).

Prestige (League Tables)

REF performance is also a strong determiner of rankings in university league tables (**19%** weighting).

19% weighting for REF in league tables is the same as NSS contributes.

Sheffield Hallam does much better in REF than we do in NSS, so REF performance significantly improves the university's overall standings/reputation/student recruitment.

COMPONENTS

Overall quality

Outputs	Impact	Environment
FTE x 2.5 = number of outputs required	Impact case studies	Environment data and template
60%	25%	15%

50% for 2029?

25% for 2029?
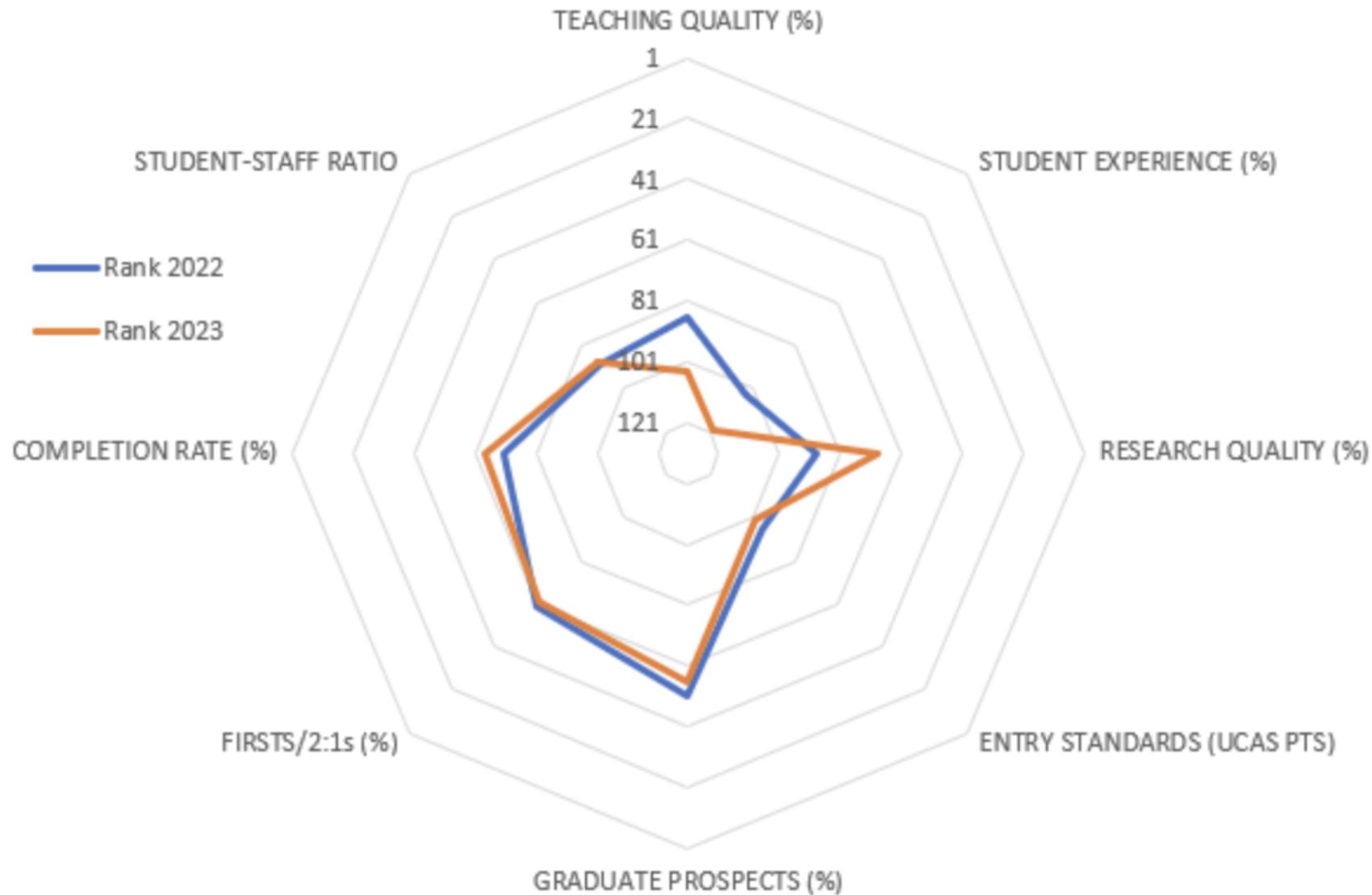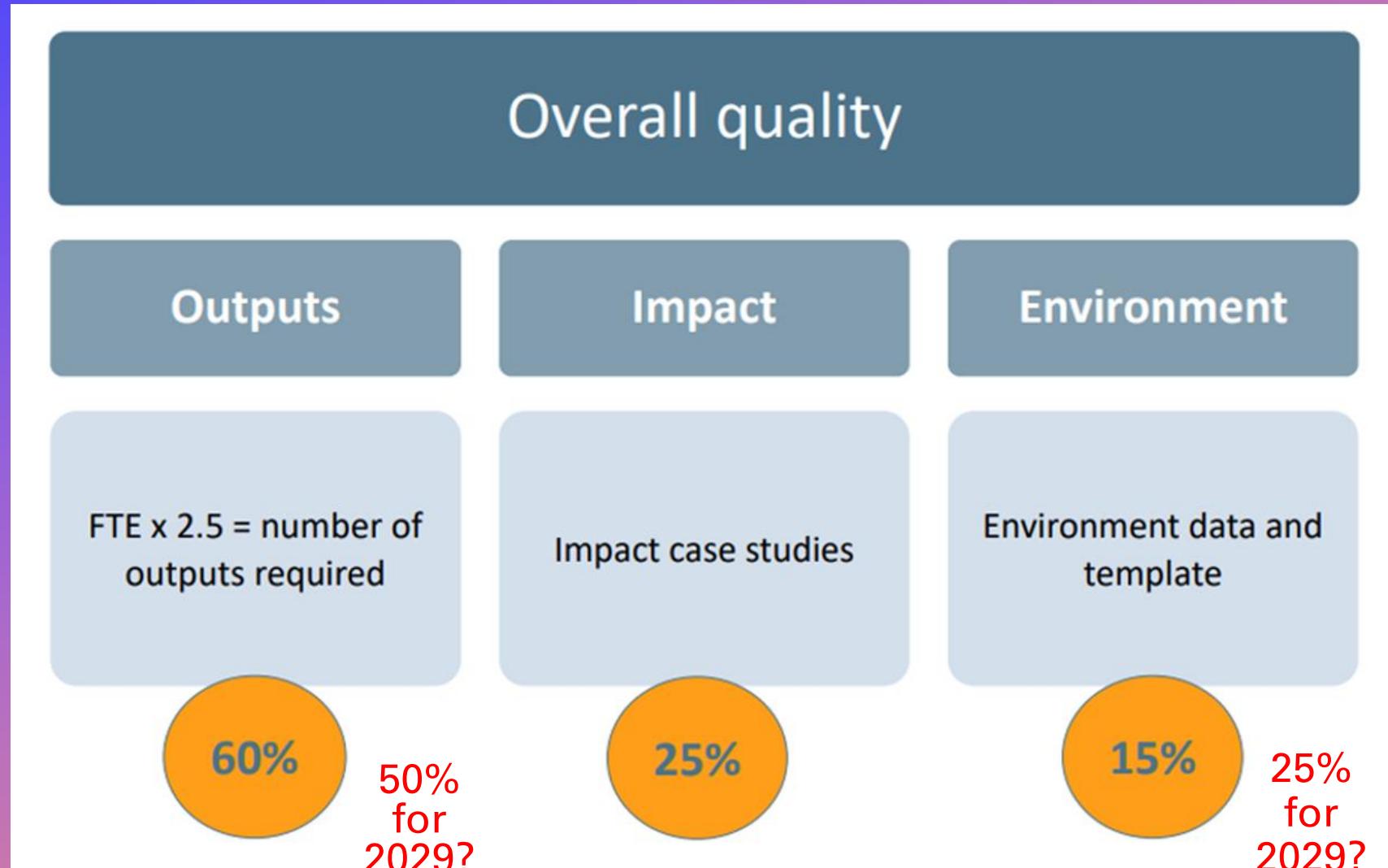
REF
2029

STAFF

Eligibility

All academic staff are eligible.

Specifically:
- T&R contract (L, SL, PL)
- R-only contract (RF, SRF, PRF)
- AP/R, P, other academic SSG
- Minimum 0.2 FTE

But not:
- T-only contract (ALs)
- Technicians
- Professional services
- Doctoral researchers
- Clinical and other collaborators

Eligible pool therefore is about 1600 staff.

SRR

Staff Group	Status
Professors	All have significant responsibility for research; other than exceptionally those whose focus is not research, e.g. teaching excellence, knowledge exchange and/or senior management
Readers	All have significant responsibility for research
Research Staff	
Principal Research Fellows (G9), Senior Research Fellows (G8), Research Fellows (G7), Researchers/Research Assistants (G6)	All have significant responsibility for research; other than exceptionally those with a specific consultancy/knowledge exchange focus *(Grade 6 staff will not be independent, while grade 7 staff will have their independence determined)*
Academic Staff	
Principal Lecturers (G9), Senior Lecturers (G8), Lecturers (G7)	Research and Scholarly Activity (RSA) time (10.8%) does not, on its own, constitute a significant responsibility for research Additional Research time (+ ≥10%), in combination with RSA, and allocated against agreed research plans, constitutes a significant responsibility for research
Atypical Staff	Do not have significant responsibility for research; except those with explicit research objectives in their role descriptor and/or PDR

https://www.shu.ac.uk/research/excellence/research-excellence-framework/code-of-practice

Universities cannot select which staff from their eligible pool to include. Instead, we must submit all those with 'significant responsibility for research'.

This means those given the time, resources and objectives to do research. Essentially - at least 20% of time. Inclusion has to be about inputs, not outputs.

Currently nearly a third of staff have SRR (500 of 1600). Our ambitions have been to push towards half. Varies by discipline.

R&I Planning

T&R staff are designated SRR if their forward-looking R&I Plan is approved.

R&I Plans set objective-driven and outcome-oriented objectives against time allocations.

R&I Plans are submitted each winter using the Elements system. SRR designations may be for up-to 3 years.

SRR allocations are ≥160 hours (pro-rata). Combined with RSA (170 hours, pro-rata), this provides staff with ≥20% research hours.

https://www.shu.ac.uk/-/media/home/research/ref/using-elements-for-narrative-cvs-ri-plans-and-pdr.pdf

Units of Assessment

Sub-panels are grouped into four Main Panels:

➤**Main Panel A:** Medicine/Life Sciences [UoA 1-6]

➤**Main Panel B:** Physicals Sciences, Engineering and Technology [UoA 7-13]

➤**Main Panel C:** Social Sciences [UoA 14 – 24]

➤**Main Panel D:** Humanities [UoA 25 – 34]

Units of Assessment are nationally-agreed disciplines.

These don't mirror internal structures, but all eligible staff have to be allocated to one (SRR and non-SRR).

Tend to map departments/subject groups, but also overwrite on an individual basis.

Work on the principle of 'best intellectual fit'.

Can only be aligned to a UoA the university submits to (need critical mass).

UoAs are a field on the annual staff HESA return.

UOA	UOA Coordinator	UOA Impact Lead	UOA Administrator	College / ADRI
03 - Allied Health Professions, Dentistry, Nursing and Pharmacy	Julie Nightingale	Andrea Wigfield	Sarah Redding	HWLS Neil Bricklebank
04 - Psychology, Psychiatry and Neuroscience	Antonia Ypsilanti	Jenny Porritt	Samm Wharam	SSA Keith Hurst Peter Wells (REF)
05 - Biological Sciences	Tom Smith	Simona Francese	Jane Wright / Clare Mills-Roberts	HWLS Neil Bricklebank
11 - Computer Science and Informatics	Chris Roast	Chris Roast	Jessica Barber	BTE Jen Smith Maguire
12 - Engineering	Chris Sammon / Doug Cleaver	Andy Alderson	Stephanie Portier	BTE Jen Smith Maguire
13 - Architecture, Built Environment and Planning	Will Eadson	Tina Beatty	Sarah Ward	SSA Keith Hurst Peter Wells (REF)
17 - Business and Management Studies	Tina Harness	David Harness	Lizzy Gifford	BTE Jen Smith Maguire
20 - Social Work and Social Policy	James Banks	Jamie Grace	Samm Wharam	SSA Keith Hurst Peter Wells (REF)
23 - Education	Gill Adams	Tig Slater and El Formby	Kate Wallace	SSA Keith Hurst Peter Wells (REF)
24 - Sport and Exercise Sciences, Leisure and Tourism	Markos Klonizakis	Themis Kokolakakis	Rebecca Jones	HWLS Neil Bricklebank
27 - English Language and Literature	Alice Bell	David Peplow	Kate Philp	SSA Keith Hurst Peter Wells (REF)
28 - History	Matt Stibbe	Robbie Aitken	Anna Ryan	SSA Keith Hurst Peter Wells (REF)
32 - Art and Design, History, Practice and Theory	Keith Wilson	Virginia Heath	Anna Ryan	SSA Keith Hurst Peter Wells (REF)
34 - Communication, Cultural and Media Studies, Library and Information Management	Anya Louis	Dave Clarke	Anna Ryan	SSA Keith Hurst Peter Wells (REF)

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REF 2029

OUTPUTS

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Outputs

Outputs are mostly publications, but can be creative portfolios, datasets, patents etc. (any 'process of investigation, leading to new insights, effectively shared').

UoAs need to submit 2.5 x the FTE of staff. Sheffield Hallam needed 1100 for the last REF.

Two selection criteria: 1) quality and 2) representativeness.

Much of the preparation for this element consists of internal review, to gauge quantity and identify the best quality outputs.

Reviewing guide: https://www.shu.ac.uk/-/media/home/research/ref/guidance-on-research-output-reviewing-and-assessment-v2.pdf

Criteria

Assessment of research is based on three criteria – originality, significance and rigour (OSR)

Originality	The extent to which the output makes an important and innovative contribution to understanding and knowledge in the field. Research outputs that demonstrate originality may do one or more of the following: produce and interpret new empirical findings or new material; engage with new and/or complex problems; develop innovative research methods, methodologies and analytical techniques; show imaginative and creative scope; provide new arguments and/or new forms of expression, formal innovations, interpretations and/or insights; collect and engage with novel types of data; and/or advance theory or the analysis of doctrine, policy or practice, and new forms of expression.
Significance	The extent to which the work has influenced, or has the capacity to influence, knowledge and scholarly thought, or the development and understanding of policy and/or practice.
Rigour	The extent to which the work demonstrates intellectual coherence and integrity, and adopts robust and appropriate concepts, analyses, sources, theories and/or methodologies.

Assessment

Scoring of outputs is on a four-star scale, although half-point scoring between these is also common practice internally

4*	Quality that is **world-leading** in terms of originality, significance and rigour
3*	Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence
2*	Quality that is **recognised internationally** in terms of originality, significance and rigour
1*	Quality that is **recognised nationally** in terms of originality, significance and rigour
U	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

'World-leading', 'internationally' and 'nationally' in this context refer to quality standards. They do not refer to the nature or geographical scope of particular subjects, nor to the location of research, nor its place of dissemination.

Detailed Criteria

4*	• Outstandingly novel in developing concepts, paradigms, techniques or outcomes • A primary or essential point of reference • A formative influence on the intellectual agenda • Application of exceptionally rigorous research design and techniques of investigation and analysis • Generation of an exceptionally significant data set or research resource
3*	• Novel in developing concepts, paradigms, techniques or outcomes • An important point of reference • Contributing very important knowledge, ideas and techniques which are likely to have a lasting influence on the intellectual agenda • Application of robust and appropriate research design and techniques of investigation and analysis • Generation of a substantial data set or research resource
2*	• Providing important knowledge and the application of such knowledge • Contributing to incremental and cumulative advances in knowledge • Thorough and professional application of appropriate research design and techniques of investigation and analysis
1*	• Providing useful knowledge, but unlikely to have more than a minor influence • An identifiable contribution to understanding, but largely framed by existing paradigms or traditions of enquiry • Competent application of appropriate research design and techniques of investigation and analysis

Panel C (Social Sciences)
version for illustration

REF 2029

IMPACT

Environment

Environment has traditionally been assessed via a narrative statement that details the UoA's research strategy, impact strategy, staffing strategy, researcher development, infrastructure and facilities.

Grant income and doctoral completions are key quantitative metrics in this element.

Currently the biggest unknown for 2029. Sector-wide consultations and pilots running/imminent.

Expecting diversification of measures and expansion into softer areas (people and culture, as well as income and infrastructure).

View our 2021 narratives here:
https://sheffieldhallam.sharepoint.com/sites/3085/SitePages/Submitted-Environment-Statements.aspx

Maximising REF Performance

Growth ambitions for staff numbers – supporting earlier-career staff (including co-authorship).

Pre-submission peer review of publication.

Involving earlier-career staff in peer reviewing.

Continuous review to keep up-to-date with scoring data.

Impact training and 1:1 surgeries.

Progressive initiatives around culture (RIDA, open research, EDI, recruitment and promotion).

Case Study REF2021 - Strategy

Ambitions

- Ambition to grow research significantly, while maintaining quality. Also to increase representation of emerging areas, both subject-wise and of individual emerging researchers

Targets/KPIs

- Double the size from 16% of academic staff included to 30%

- At least maintain output profile GPA (was 2.71), but aim for $\geq$ 3.00

- Increase research power ranking (determiner of QR income)

- Improve inclusivity and representation in the submission

Case Study REF2021 - Submission

UoA No.	UoA	SRfR Headcount	ECR Headcount	SRfR FTE	Intensity % eligible FTE	Outputs Required	Impact Case Studies Required
3	Health	35	4	31.6	14%	76	3
4	Psychology	18	4	17.6	35%	40	2
5	Bioscience	36	5	33.5	65%	84	3
11	Computing	27	6	25.6	31%	61	3
12	Engineering	49	9	48.6	41%	116	4
13	Planning	43	10	38.7	37%	92	4
17	Business	29	3	24.9	15%	62	3
20	Social Policy	22	4	20.6	19%	46	3
23	Education	45	7	41.6	27%	104	4
24	Sport	67	11	64.15	42%	149	5
27	English	35	4	31.51	91%	79	3
28	History	16	0	15.41	100%	39	2
32	Art and Design	39	3	31.25	32%	78	3
34	Communications	39	4	33.2	50%	80	3
	SHU	500	74	458.22	32%	1106	45

Case Study REF2021 - Results

Targets

- Double the size from 16% of academic staff included to 30%

- At least maintain output profile GPA (was 2.71), but aim for ≥ 3.00

- Increase research power ranking (determiner of QR income)

- Improve inclusivity and representation in the submission

Performance

- 32% of staff were included. Submitted to three new subject areas

- Output profile of 2.86 (overall profile 2.93)

- Moved up 10 places in the national research power league table (to 55/157, up from 65th)

- 47% female staff and 15% staff from an ethnic minority background

REF2021 - Results

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Overall Quality Profile					
	4*	3*	2*	1*	U
2021	24	48	26	2	0
2014	18	47	29	5	0

All %

Outputs (60%)				
4*	3*	2*	1*	U
18	53	25	3	0
16	46	31	6	1

Impact (25%)				
4*	3*	2*	1*	U
43	35	21	1	0
22	50	24	4	0

Environment (15%)				
4*	3*	2*	1*	U
16	47	35	2	0
18	47	31	4	0

Implications

QR income from 22-23 is set by a funding formula determined by the REF 2021 quality profile. These will then though remain fairly stable for the next 6-7 years - QR is recurrent block research funding. QR income for Sheffield Hallam increased by £2.2m per year for this next cycle (c.2022-29). This increase has been used to fund SHRIF, RIDA and TLFs.

University league tables are affected by these results – knock-on on student/staff recruitment and potentially eligibility to apply for external funding.

Changes REF 2021 to 2029

The REF constantly evolves, with major changes to its design taking place between each exercise.

The key proposed changes from 2021 to 2029 are:

- Impetus – to further change the emphasis from the performance of individuals to the 'contribution institutions and disciplines make to healthy, dynamic and inclusive research environments'

- The weighting for environment is likely increasing from 15% to 25%, at the expense of outputs

- Full decoupling of staff and outputs

- No minimum or maximum requirements per person (just a statement on representativeness)

- New discipline-level structured statements on outputs and impact (more on process, not just outcomes)

Our REF 2029 Preparations

- Big overhaul of research and innovation planning. Annual plans submitted and reviewed online. This clearer overview is helping identify those with REF aspirations who are not currently designated as having 'significant responsibility for research'.

- Output reviews happening continuously. Reinforcing expectation that all 2021 to 2024 ones will be up-to-date by later in 2025.

- Ongoing impact support, including plans to run UoA-level sessions with all potential/long-list authors.

- More detailed operational plans in preparation, to cover 2025-28.

- Code of Practice and environment are more bound by and awaiting external developments.

Our Ambitions

- The University's REF staffing strategy (UEB/2023-07-04/P6) is that the optimum target for SRR is c.650-700 FTE, where return on investment would be 3 to 4-fold, and could earn the University a net £3.5-5m per year income increase.

- The increase from the baseline of c.450 FTE is to be made through the following 5 initiatives:
    - Recruitment of Transforming Lives Fellows (TLFs)
    - Reclassification of all grade 7 research-only staff to SRR (with a few 'KE exemptions')
    - Regrading of some grade 6 research-only staff to grade 7
    - A more 'risk-positive approach' to decision making for staff on the boundary of being given SRR
    - Mentoring and staff development to support staff moving over the threshold and to deliver outputs

SRR Trends

UoA		18/19	19/20 (REF21)	20/21	21/22	22/23	23/24	Change 19/20 to 23/24
Health	3	29.32	31.6	32.5	31.1	26.5	40.32	8.72
Psychology	4	16.6	17.6	14.6	21.56	19.56	22.48	4.88
Bioscience	5	30.7	33.5	34.6	34.6	30.9	33	-0.5
Computing	11	23.6	25.6	22	21.5	14.5	21	-4.6
Engineering	12	48.7	48.6	42.4	43.4	43.9	33.4	-15.2
Planning	13	42.3	38.7	51.9	52	53.1	47.6	8.9
Business	17	27.3	24.9	34.1	35	35.6	29	4.1
Social Policy	20	24.5	20.6	17	20.8	20.8	19.9	-0.7
Education	23	43.5	41.6	39.9	36.2	38.6	42.4	0.8
Sport	24	67.8	64.15	65.58	62.69	65.61	68.31	4.16
English	27	32.41	31.51	29.31	28.75	23.35	20.5	-11.01
History	28	15.82	15.41	13.6	12.81	11.21	10.4	-5.01
Art & Design	32	25.85	31.25	30.95	33.37	30.67	28.91	-2.34
Communications	34	29.3	33.2	31.1	31.35	35.2	32.6	-0.6
SHU		457.7	458.22	459.54	465.13	449.5	449.82	-8.4

Reflections

- Despite efforts and ambitions to grow SRR, numbers have so far remained relatively flat. Had to absorb 8% of staff with SRR leaving the University through the VSS scheme.

- Just as growth in SRR increases QR income, a drop in SRR would lead to major future financial black holes for the University.

- Organic growth so far has had a damage limitation effect regarding VSS. Future SRR increases are anticipated for 24/25 (based on decisions taken last winter). 25/26 and 26/27 however are the two years that count for REF, so need very careful and strategic consideration.

REF 2029

MISCELLANY

REF and Researchers

Being returned to REF is important currency for researchers in terms of recruitment and progression.

However, REF is a collective assessment, not an individual one. No one knows what their actual specific contribution was. Particularly in the case of internal co-authorship, the attribution is arbitrary, so is never shared. No one ever knows what their outputs scored.

Publication metrics and place of publication are never used as proxies for assessing research quality. All outputs are always freshly peer reviewed. This is both in internal processes and by the REF review panels themselves.

Internal REF processes are principally used for developmental purposes – staff receive constructive feedback on how to score higher in their future work. They are also used to optimise submissions. But they are not used systematically in other areas of university business, e.g. they will not be provided to promotion panels (although individuals may present their own scores).

REF and Doctoral

REF is often criticised for not including doctoral work satisfactorily, despite this work being the 'lifeblood' of our system.

REF measures doctoral contribution in Environment - through completion numbers (3.75% weighting) and a portion of the People section narrative (part of 1.875% weighting)

Doctoral publications can be submitted to REF, but only if there is a staff co-author.

Doctoral quality is measured in other ways instead – processes (QAA) and experience (PRES)

REF and Bibliometrics

REF generally doesn't use bibliometrics.

The Library use bibliometrics (journal impact factor, Scimago, h-index citations etc.) to advise researchers where to publish.

But all REF assessment is fresh expert/peer review.

Some subject areas use REF language to rank journals e.g. "a 4* journal". But it is the quality of the journal review that creates any correlation, and we must avoid ever using these as proxies for research quality (we are signatories of DORA - https://sfdora.org/)
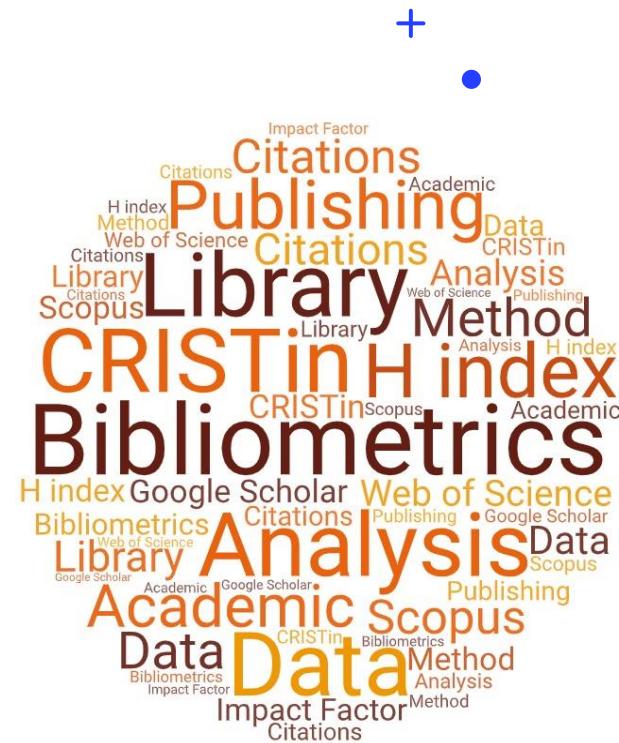
THANK YOU

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https://sheffieldhallam.sharepoint.com/:u:/r/sites/3085/SitePages/Impact-team-home.aspx

https://www.shu.ac.uk/research/excellence/research-excellence-framework

https://www.shu.ac.uk/research/excellence/research-excellence-framework/impact-case-studies

https://www.ref.ac.uk/

https://2021.ref.ac.uk/

QUESTIONS

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