

# Research Excellence Framework and University Rankings; Evidence from the UK

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# The University System in the UK

- The vast majority of UK universities are government financed (only two private universities).
- They have been instituted by Royal Charter, Papal Bull, Act of Parliament or an instrument of government under the Education Reform Act 1988; generally with the approval of the Privy Council
- Only such recognised bodies can award degrees of any kind.
- British undergraduate students and students from other European Union countries have to pay university tuition fees. A government-provided loan is available towards tuition fee costs.
- Scottish and European Union students studying in Scotland have their tuition fees paid by the Student Awards Agency for Scotland.
- In principle, all postgraduate students are liable for tuition fees, though a variety of scholarship schemes exist which provide support.

# Why is Research Assessment Important ?

- Concerns regarding the relative worldwide standing of UK research excellence

(British universities tend to have a strong reputation internationally for two reasons: history and research output. Britain's role in the industrial and scientific revolutions and the reputation of British institutions due to their continuous stream of world-class research output).

- Social returns to university innovative research
- Vehicle for efficient allocation of scarce resources (university funding).
- Incentives to promote research for the senior staff
- Research led teaching

# Research led Teaching?

*“I never teach my pupils. I only attempt to provide the conditions in which they can learn...”*

*Albert Einstein*

*“The university teacher is no longer the teacher, and student is no longer the learner, but himself does research, with the professor guiding his research and supporting him in it. University education situates the student to grasp the unity of science, to bring it forth, and therefore enlists his creative faculties. For, scientific insight is creative....”*

*Wilhelm von Humboldt*

- For university education, what matters is whether the students *learn to think independently*. If so, the student can find the material and the answers him/herself. University studying is more of a form of apprenticeship. It is not a passive accumulation of knowledge through lectures
- Being a good researcher is a prerequisite for a good *university* teacher

# Definition of Research in RAE/REF

- Includes:
  1. Original investigation undertaken in order to gain knowledge and understanding (the invention and generation of ideas, images, performances, artefacts; the use of existing knowledge in development to produce new or substantially improved materials, devices, products and processes, including design and construction; work of direct relevance to the needs of commerce, industry, public and voluntary sectors)
  2. The creation, development and maintenance of the intellectual infrastructure (dictionaries, scholarly editions, catalogues and contributions to major research databases (Scholarship)).
- It excludes:
  1. routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards
  2. the development of teaching materials that *do not* embody *original research*.

# REF Structure – Panels

- Expert sub-panels for each of *36 units of assessment (UoA)* under the guidance of *four Main Panels* (to ensure equity of standards across sub-panels)

## *Main panel A (Life Sciences)*

1 Clinical Medicine/ 2 Public Health, Health Services/ 3 Allied Health Professions, Dentistry/ 4 Psychology, Psychiatry and Neuroscience/ 5 Biological Sciences/ 6 Agriculture, Veterinary and Food Science

## *Main panel B (Sciences)*

8 Chemistry/ 9 Physics/ 10 Mathematical Sciences/ 11 Computer Science and Informatics/ 12 Aeronautical, Mechanical, Chemical and Manufacturing Engineering/ 13 Electrical and Electronic Engineering/ 14 Civil and Construction Engineering/ 5 General Engineering

# REF Structure – Panels

## *Main panel C (Socioeconomic)*

16 Architecture, Built Environment and Planning/ 17 Geography, Environmental Studies/ 18 Economics and Econometrics/ 19 Business and Management Studies/ 20 Law / 21 Politics and International Studies/ 22 Social Work and Social Policy/ 23 Sociology/ 24 Anthropology and Development Studies/ 25 Education/ 26 Sports-Related Studies

## *Main panel D (Literature-Art)*

27 Area Studies (American Studies; Middle Eastern and African Studies etc)/ 28 Modern Languages/ 29 English Language and Literature/ 30 History/ 31 Classics/ 32 Philosophy/ 33 Theology and Religious Studies/ 34 Art and Design: History, Practice and Theory/ 35 Music, Drama, Dance and Performing Arts/ 36 Communication, Cultural and Media Studies.

# REF Structure – Submission

- Each submission in each UoA contains a common set of data comprising:
  - a. Information on staff in post on the census date (31 October 2013) selected by the institution to be included in the submission.
  - b. Details of publications (4 publications per full time academic) and other forms of assessable output that selected staff have produced during the publication period (1 January 2008 to 31 December 2013).
  - c. A completed template describing the submitted unit's approach during the assessment period to enabling impact from its research.
  - d. Case studies describing specific examples of impacts achieved during the assessment period, underpinned by excellent research in the period 1 January 1993 to 31 December 2013.



## REF Structure – Elements for Assessment

- *Panels of experts* in individual academic subject areas carry out the assessment and assess research under three broad headings:
  1. **Outputs:** the main focus of the REF is to identify excellent research of all kinds (4 publications per full time academic). This is assessed through expert peer review. In subjects where robust data is available, peer review may be informed by additional citation information (65% weight)
  2. **Impact:** recognition is given where researchers build on excellent research to deliver demonstrable benefits to society, public policy, culture, quality of life and the economy (20% weight)
  3. **Environment:** the quality of the research environment in supporting a continuing flow of excellent research and its effective dissemination and application (15 % weight).

# REF - Output Criteria

- 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.

*Similar criteria apply to Impact and Environment*

# REF Structure – Assessment and Funding

- The three elements of the assessment are scored and these scores are combined to give an overall 'excellence profile' of the research.
- The 'excellence profile' together with the number of submitted staff for the academic department(s) in the submission are used to generate an annual (until the next REF) research based funding stream from the funding councils (HEFC in England and Wales and SFC in Scotland) to the university.

# REF Structure – Staff Submission Rules

- Higher educational institutions (HEI's) are:
  - > Free to submit as many of their Departments are deemed appropriate
  - > Free to submit as many of their academic staff as deemed appropriate
  - > Free to place staff in the Unit of Assessment they believe will yield the highest return, e.g. An Economic Historian in a History Department (Main Panel D, sub-panel 60) could be placed in with the Economics Department (Main Panel C; sub-panel 18).
- HEIs are encouraged to submit as many of their staff as possible. (including a zero rated academic will have no financial impact on the university but will have an impact on the overall excellence profile). Most HEI's will nevertheless in such circumstances choose to exclude such an individual as it will improve academic reputation at no cost.

## REF Structure – Staff Submission Rules

- HEIs have some choice in the Panel they place their academic departments, e.g. A Department of Health Economics could be submitted either under Main Panel A; subpanel 2 (Public Health, Health Services) or Main panel C, sub-panel 18 (Economics and Econometrics).
- It should be noted that though exclusions of staff may be internally controversial, there are safeguards. Many local associations of the Trade Union (UCU) and single universities negotiated ‘no detriment’ agreements. A typical wording given below:

*‘Staff whose work is excluded from RAE in year xxxx are free to apply for research leave and funding support both from sources outwith the University and from University funds; and such applications will be judged on their merits, the applicant’s cv, etc. Exclusion from RAE in year xxxx will not, in itself, affect either time designated for research when it comes to the allocation of departmental duties, or promotion prospects.’*

# REF – Codes of Practice

- Principles
  1. Transparency (processes for selection of staff for inclusion)
  2. Consistency (staff selection is consistent across the institution)
  3. Accountability (responsibilities of individuals and bodies clearly defined)
  4. Inclusivity (all eligible staff who have produced excellent research )
- Individual staff circumstances
  1. Joint publications (within or out with the institutional unit)
  2. Interdisciplinary research (cross evaluated by relevant sub- panels)

# College and university rankings

- These rankings use arbitrary criteria and a variety of methodologies . There is lack of consensus about their usefulness and accuracy. Research performance plays relatively low role.
- The rankings exhibit a disparity with global rankings (a number of universities which regularly feature in the top ten of British university league tables, such as Durham, St Andrews and LSE, rank low in the worldwide tables, whilst other universities such as Manchester, Birmingham Aberdeen that do not do well in the domestic rankings but rank far better in international Tables) .
- Global university rankings (Academic Ranking of World Universities, QS World University Rankings and Times Higher Education World University Rankings) primarily use criteria such as academic and employer surveys, the number of citations per faculty, the proportion of international staff and students and faculty prize winners. The national rankings, give most weighting to the undergraduate student experience.

# College and university rankings

Examples of UK university rankings:

- The Complete University Guide: (Z-transformation) of *nine criteria* (student satisfaction, research assessment/quality, entry standards, student/staff ratio, the expenditure per student on staff and student facilities, proportion of firsts and upper seconds, employability of a university's graduates, completion rate .
- The Guardian's ranking: *six (arbitrarily) weighted criteria* (students' degree results compared to their entry qualifications (value-added), teaching quality – feedback- as rated by graduates of the course- spending per student, staff/student ratio, job prospects, entry score). It **DOES** not include a measure of research output.



# College and university rankings

- The Sunday Times university league: *nine (arbitrarily) weighted criteria* (student satisfaction, teaching excellence (Quality Assurance Agencies), Heads'/peer assessments (Heads are asked to identify the highest-quality undergraduate provision), research quality ranking, % of A-level/Higher, number of students assume to be unemployed six months after graduation, Firsts/2:1s awarded, Student/staff ratio, dropout rate).
- The Times university rankings : *eight (arbitrarily) weighted criteria* (student satisfaction, research, entry standards, the student-staff ratio library and computing spending, facilities spending, % good honours, graduate prospects, completion rates).

# Conclusions

- The rigour of the Research Assessment Exercise / Research Excellence Framework has served well the UK university system.
- It has provided a good guide for the allocation of university funding, offered tangible incentives to promote research (including research by the senior staff) and facilitated research led teaching.
- Research appears to be the most objective measure of the quality of university education and underpins and promotes good university teaching.
- University league Tables depend heavily on arbitrary criteria which may or may not be relevant for excellence in university education.