

Report on the HUBS meeting of 10 November 2004 at the Royal Institution of Great Britain.

RAE2008

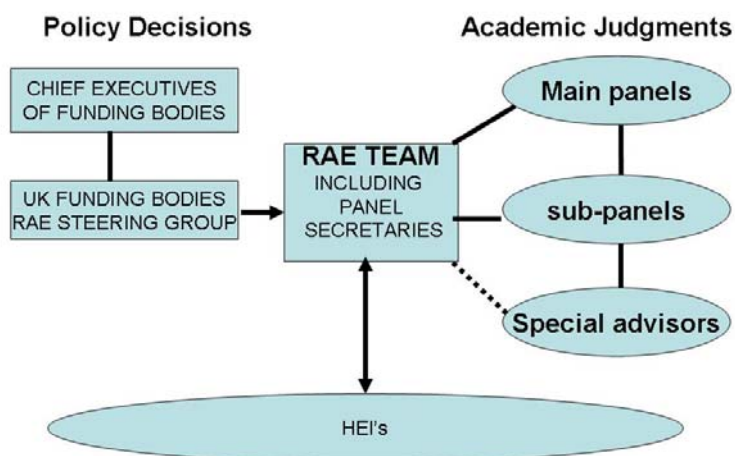
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LATEST DEVELOPMENTS IN RAE 2008

Ed Hughes, *RAE2008 Manager, HEFCE*

RAE Re-visited

- **Roberts Review**
 - Many changes introduced following extensive consultation
- **House of Commons Report**
 - “RAE 2008 should go ahead”
 - Funding Bodies already considering future
 - Key issues: metrics, applied research, workload of panels, institutional research strategies, funding formula



Flexibility

“Don’t distort the research you do just because you think Panel X or Panel Y will behave in a particular way. Please continue to do the research you want to do and we will make sure the RAE is sufficiently flexible to assess the quality of your work”

Rama Thirunamachandran, Director, Research & Knowledge Transfer, HEFCE
Times Higher Education Supplement 1st October 2004

Timetable

2004	Nov-Dec	Guidance for Panels published
		Panel Membership announced
2005	Feb-March	First round of Panel Meetings
	May-June	Second round of Panel Meetings
	June	Publish Guidance on Submissions
		<i>Develop Criteria and Working Methods</i>
	August	Publish Draft Criteria and Working Methods
	Sept-Oct	Consultation Period
	Nov/Dec	Publish final criteria and working methods
2006		Trial Submission Software
2007		31 July – End of Assessment Period
		31 Oct – Census Date
		30 Nov – Closing Date for Submission
2008		Assessment Period
		Results announced December 2008

Main Changes for RAE 2008

- **Two-Tier panel structure**
 - Main Panels with sub-panels in cognate areas
 - Ensure consistency of approach, more readily assess interdisciplinary research
 - Make better use of international advisors
- **Graded Quality Profile to replace Grades**
 - Reduce “cliff edge” effects of old grade system
 - Smoother profile for future funding formulae
 - Less “game playing”

Two-Tier Panel Structure

- **15 Main Panels**
 - each supported by between 3 and 9 subject-based Sub-Panels
- **67 sub-panels**
 - Map onto to the panel structure of 2001 RAE with some changes
 - Not proposed to have “sub-sub-panels” in 2008
- **Administrative Support increased:-**
 - 15 Panel Secretaries and 15 Assistant Secretaries seconded from HEIs: recently appointed

Main Panel Chairs

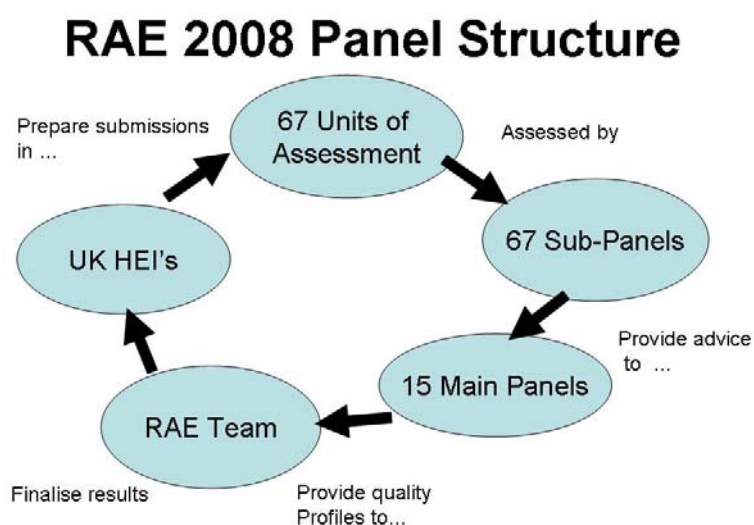
Main Panel	Chair	Subject Coverage
A	Professor Les Borysiewicz, Imperial	Clinical Medicine
B	Professor Robert Stout, Queen’s University Belfast	Pre-Clinical Medical Subjects
C	Professor Maggie Pearson, Keele	Allied Health Sciences

D	Professor Sir John Beringer, Bristol	Biological Sciences
E	Professor Dame Julia Higgins, Imperial	Natural Sciences
F	Professor Nigel Hitchin, Oxford	Mathematics and Computing
G	Professor Ann Dowling, Cambridge	Engineering
H	Professor Nigel Thrift, Oxford	Geography and Built Environment
I	Professor David Otley, Lancaster	Economics, Business
J	Professor Hazel Genn, UCL	Social Sciences and Law
K	Professor Vicki Bruce, Edinburgh	Psychology, Education, Sports
L	Professor Judie Newman, Nottingham	Area Studies
M	Professor Nigel Vincent, Manchester	Modern Languages
N	Professor Martin Daunton, Cambridge	Humanities
O	Professor Bruce Brown, Brighton	Performing and Creative Arts

Panel Appointments

- Several thousand nominations received – thank you
- Working with main panel chairs to identify sub-panel chairs and other main panel members
- Will work with sub-panel chairs to develop panels with appropriate subject coverage
- All panel members ratified by Funding Bodies' chief executives

RAE 2008 Panel Structure



Rating Scale 2001

Grade	International	National
5*	Over half	Remainder
5	Up to half	Remainder
4	Some	Virtually All
3a	Some (possible)	Over two thirds
3b	-	Over half
2	-	Up to half
1	-	None

Rating Profile 2008

		By percentage of research activity in the submission judged to reach quality standard				
Sub-Panel A	FTE Staff submitted for assessment	4*	3*	2*	1*	Unclassified
University X	50	15	25	40	15	5
University Y	20	0	5	40	45	10

Consultation

- Draft Panel Criteria and Working Methods will be published in the late summer 2005.
- Will be a formal consultation on this before adoption in late 2005
- Opportunity for subject communities to have input into the criteria and working methods for their disciplines
- RAE Team welcomes views of subject community throughout the process.
- Summary
- RAE 2008 going ahead on schedule
- Panels being put in place now
- Developing criteria & working methods in first half of 2005
- followed by period of consultation
- Aiming to develop flexible systems that allow for the fair assessment of the research undertaken

There was a brief debate after Profs Evans and Baumberg's session on (i) what proportion of HEFCE-funded staff will have to be returned, and (ii) whether the proportion of staff being returned will be declared as part of the result. It would seem that, for (i), the decision has already been made that not all staff need be returned, nor that there is a fixed percentage that should be. The issue of whether the proportion returned is declared is still under discussion, but the HEFCE view is that this is not a useful indicator, and is too easily made use of in inappropriate league tables. The likelihood is that this metric will be dropped.

THE TASK AHEAD: EARLY THOUGHTS ON RESEARCH ASSESSMENT OF THE BIOSCIENCES

Prof Sir John Beringer, *Panel D Chair, RAE2008, University of Bristol*

Want to learn two things: What concerns do you have, what would you like me to do?
I have a responsibility to ensure that the RAE is conducted fairly and is of value to the biological sciences community.

The sub-panel membership may cause problems if there are important areas of research that are not appropriately covered. Please feel free to contact me if you have concerns. Panels may seek extra advice, so suggestions where there are concerns would be helpful.

Do any of you know about possible multi-university submissions? If there are none, I need not worry myself about how best to handle them.

Multidisciplinary research must be handled properly in this RAE, so again I would appreciate any comments on how we might address the issue. Main panel chairs will meet to compare what is being done and to ensure as far as they are able that joint research projects are assessed fairly.

I want to be made aware of unwanted consequences of the RAE that impede your long-term research strategies – if any.

I intend to write to Howard Newby to recommend that data collected for the RAE are handled in a way that will allow universities to obtain useful management information from the exercise, beyond that obtained from the simple grading for each of their units of assessment. Any ideas of what would be valuable would be appreciated.

One reason for the RAE is to satisfy the Treasury that the funds “pouring into research” are being spent effectively. I am interested in finding indicators of activity derived from research that would help me to address Gordon Brown’s agenda.

We are asked to ensure that applied research is treated fairly. I do not see a simple split between applied and pure research, or indeed some forms of contract work. As with so much else, the panels will have to work hard to tease-out research excellence from mere application of techniques – what’s new?

My email is j.beringer@bristol.ac.uk Please feel free to contact me with advice, but please not for special pleading.

REFLECTIONS ON RAE2001

Prof Hilary Evans, *Liverpool John Moores University*, Prof Simon Baumberg, *University of Leeds*,
Panel members RAE2001

How the Uo14 panel interpreted the published criteria

- Assessed OUTPUTS, not INPUTS
- Read 25 – 50% of papers
- Did not use journal impact factors (Readership needs to be right for the subject material)
- No policy to look at citations (Individual committee members might use it on occasion)
- Multiauthored papers – the same paper could not count for two researchers
- Individual researchers were classified as International (I), National (N) or sub national (SN)
 - using output
 - using indicators of esteem

“International” interpreted in terms of quality. The percentage of I, N and SN were calculated for each submission and a grade (1-5*) was assigned in conformity with the published criteria.

Debated Issues

Borderlines: for individuals: esteem measured by conference plenaries, research council committee membership, interaction/ collaboration both national and international, etc
for submission: primarily metrics, income, PDRA, students etc; management/future plans/research strategies expected to be convincing anyway.

Selective submission of staff Not within remit of panel to consider; yet because of nature of published criteria, could have significant effect at borderlines.

Applied Research

Inherent problems:

- Difficulty in obtaining data
- How to judge quality of patents?

Small submissions were difficult to judge because of intrinsic error on the I/N/SN ratios.

Interdisciplinary research

- Did judgement by two separate panels: score less because the criteria of the committees might not be identical?

International assessment

- A small sample was sent to international experts; one submission's grading was changed. Not clear about the overall value of this; external experts unsure of criteria

DISCUSSION:

Q: How did you select what to read?

A: As much as possible was read, 50% or more. There was a debate about paper availability and why they were not presented online,

Q: Why ask for 4 submissions when only 2 were read

A: It is still better to receive 4 submissions as all abstracts were read.

Q: As articles in high quality journals have already been peer reviewed, why is it necessary for them to be re-read and re-assessed?

A: Publication in a journal is not just about the best science, but can be affected by fashion, and by space available at any particular time.

Q: How should papers be selected for submission?

A: The best 4 papers for that area, not always the highest impact factors.

Q: To what extent was the indicated paper taken into account?

A: It was always read by someone on the panel.

Q: Were consultants and advisors used in 2001? How will they be identified?

A: Yes they were. Nominations for advisors were sought in the summer. There is a clear need for advisors that will cover all areas of diversity.

A CONSUMER PERSPECTIVE ON RAE

Dr John Lackie, *Consultant, Panel member RAE2001*

Industry perspective:

- My background:

1975–1990: Lecturer in Cell Biology, Glasgow University
 1990–2000: Director & Director of Research, Yamanouchi Research Institute, Oxford
 2000: Vice-President R&D Strategy, Yamanouchi UK Ltd.
 1992–2000: ABPI's R&D Committee

- Yamanouchi had several major (£M) collaborations with academic groups in the UK
- On Panel 14 in RAE 2001 as 'industrial representative'

Caveat: Pharmaceutical industry is not typical of all industries and discovery research is only one aspect!

RAE 2001: Panel 14 Overview

- Little work submitted that could be regarded as fully interdisciplinary, for example, on interfaces with physics or engineering.
- Did not receive a substantial amount of work of immediate application to industry
- Although biotechnology was identified as an area covered by the Panel, there were rather few submissions.

Why was so little submitted?

- Maybe there isn't much?
- Confidentiality – industrial partners don't want it publicised?
- Difficult to quantify – few publications, only confidential reports?
- Time lag in patenting – even if filed, isn't accessible?
- Self-censorship – not seen as 'RAE-worthy'?
- Not done by 'Research active staff'?

Applied research is non-randomly distributed?

- One Science Park manager said, in public, (*edited version*)
 "More things spin out of 2-, 3- or 4-rated departments – the 5's and 5*'s are too busy doing their own thing – and are not so desperate for money"
- May disadvantage post-1992 HEI's to greater extent
 - Their linkages with local industry often better
 - They put more effort into finding alternative sources
- What does this imply about the RAE process?

Red herring?

- Pure contract work for customers attracts full overhead (~120%) so is its own reward – doesn't need (or deserve) HEFCE money as well and so isn't entered or doesn't score highly
 - But genuine collaborations get partial (60%) overhead – and rely upon Departmental infrastructure
 - *Reductio ad absurdam*: if all the work is for paying customers then the department would not be considered as research active

RAE 2008

- Pressure to be seen to be doing work ‘relevant to the economy’
- A significant and growing part of the income stream
 - As hard, or harder, to get than a Research Council Grant
 - Industry will review collaborative projects very rigorously
- You need to find a way to present this activity
 - In such a way that it can be assessed
- Needs to be included in the ‘metrics’
 - Still an opportunity to do something?

Possibilities?

- How much are the contracts worth – and what % overhead do they have?
- How much leverage?
 - Is the industrial partner making a manpower/expertise contribution as well as a financial one?
- How many spin-out companies?
 - But new tax rules are making these unattractive
- How much royalty income is coming in?

Unlikely possibilities?

- Numbers of patents
 - Patenting often postponed as late as possible – preference is often for confidentiality
 - Filing is not equivalent to having patent granted
 - Some patents are filed as spoiling tactics
- Geographical spread of collaborations
 - Are you being sought out by international companies?
 - What is the value to UKplc?

Maybe it needs to be said:

- Academic snobbery is rife
- Applied work is often not ‘cutting edge’ and completely novel - nor should it be
- The RAE puts a premium on blue-skies, innovative, ‘basic’, research
- Assessing the value of applied research is the job of industry

Finally

- If you want applied research to be given the credit it deserves ...
- You need to suggest ways in which:
 - It can be accurately presented
 - It can be rigorously assessed
- Panels can’t assess things that they don’t see – and for which there is no good evidence

- The rules of engagement have not yet been defined.

DISCUSSION:

At least a third of BBSRC panel members are from industrial backgrounds. Should we have a sub group for industry (applied research)? It would have a broader remit than panel 14. There is applied research such as that in the public sector and environmental issues that would have to be included in the group.

A suggestion from the floor that a sub-group be set up to look at the metrics and criteria for the judgement of applied research was carried. Prof Wendy Purcell (UWE) agreed to convene a meeting in December. **Anyone with views is encouraged to email Wendy, wendy.purcell@uwe.ac.uk**

PREPARING FOR RAE2008

Prof David Shepherd, *University of Southampton*

The University of Southampton has a primary commitment to research and sees itself as a research led organization. Its major power base and strength is in engineering and the physical sciences. The key to this commitment is the recruitment high quality, research focused academic staff. The University is also a managed environment in which research performance is managed both at group and individual levels.

The University of Southampton did very well in RAE 2001, and achieved one of the best improvements over the previous assessment and secured itself a position in the research elite. The School of Biological Sciences performed well receiving a rating of 5.

The University is now seeking to capitalise on its strong position and plans to become a world leading research centre. The key to this is to improve its external profile and to create an internationally recognised identity for research.

In the context of this ambition the university has undergone a major restructuring and is seeking to develop a small number of major research foci that will define the University's international identity. This ambition was laid out into a Corporate Strategy that defined a 10 year plan for the development and growth of the University. The biosciences are an important part of the corporate plan which recognises the development of new interfaces and disciplines between Biosciences and engineering and physical sciences as a the major area for development and expansion.

In order to meet this corporate plan the School of Biological Sciences has undergone a major restructuring. Prior to restructuring the School was the merger of 2 departments (Biology and Biochemistry & Physiology) with staff organised into 3 large divisions: Biochemistry, Cell Sciences, Biodiversity and Ecology.

One of the key aims of the restructuring in Biological Sciences was identify our strengths and invest selectively in those to create a small number of internationally recognised activities. The School is now organised around 6 Research Groups. These groups are small in size (<10) and each group is headed by a single Group Leader and briefed to become small collaborative teams that are equipped to meet the changing challenges of modern biological research. Furthermore the plan is for each research group to be a nurturing environment in which the skills of all members are developed and utilised to ensure

that all members are able to produce quality research outputs. Thus the teams will work more like the research groups in engineering which are able to make bids for large multidisciplinary research grants and contracts.

The plan was also to encourage the establishment of interdisciplinary groups and developing cross cutting research incorporating work from disciplines throughout the University. A good example of this is the Southampton Neuroscience Group which focuses on a single problem (neuro-degenerative and inflammatory brain disease) but spans 5 schools from basic science (*Drosophila* models of disease) to clinical research (School of Medicine) and into rehabilitation (School of Physiotherapy). This group is multidisciplinary and focuses on a single problem from basic sciences to the clinic and the carer and is unique to the UK.

Other cross cutting areas being developed include:

The Environment spanning the Schools of Biological Sciences, Geography, Oceanography and Civil Engineering.

The Life Sciences Interface linking Biosciences with Engineering and the physical sciences.

These new developments are backed by investment in facilities and new appointments. Sample Investment in Biosciences

14 posts in Neuroscience

- Biological Sciences
- Medicine
- Psychology
- Physiotherapy

10 posts in Environment

- Biological Sciences
- Oceanography
- Civil engineering
- Geography
- Law

Current preparations for RAE 2008:

Our preparations for the next RAE are fully integrated into annually updated, 5 year strategic plans. These plans are designed to define our future directions and to identify strengths and weaknesses in Schools. As part of the planning process we are required to identify solutions to problems and the means to strengthen our position. As part of this process we review individual staff performance as well as the research groups. We do try, however, to fully recognize the differentiated nature of staff contributions to success and value all contribution to the School and not just the research outputs. As we get nearer to RAE2008 the University has suggested that Schools also employ external review is necessary and valuable for non-biased assessment and performance management.

In assessing RAE profile we use the following parameters:

The publications of each individual done largely on journal quality but we do read publications and try to form an opinion of its quality.

Indicators of esteem

Research income
PGR numbers

If the next RAE does prove to be the last the University of Southampton is committed to continuing the use of an internal RAE-type process.

DISCUSSION:

Q: Issue of publications. How do staff choose the papers to be considered for the review? (Staff can be their own worst enemy)

A: All papers are assessed and we do not ask staff to select at this stage. Final selection will be advised at the time of submission.

Q: Do you use any form of metric?

A: Look at impact factors, must judge quality of work not the journal it is published in.

Q: Investment in neuroscience and environment has the challenge of panel choice in RAE; if more neuroscientists are employed they may go to the medical panel.

A: It is of no great importance as long as the School of Biological Sciences receives the QR associated with its staff.

GROUP SESSION: ISSUES OF CONCERN

Prof Ian Montgomery, *Queen's University Belfast*

Points for discussion in Break-out session:

At this stage of RAE2008 there are many uncertainties and the response to the questions below might well be 'wait and see'. However, HUBS can flag up the biological communities' major concerns and, perhaps, suggest how these issues might be addressed.

Break out groups have two tasks on which to report back in Discussion 2:

1. List their five major questions/concerns from the list provided feeling free to bring in other issues if they so wish.
2. Discuss and report on the questions/issues allocated to each group.

TOP FIVE ISSUES BY GROUP

GROUP A	GROUP B	GROUP C	GROUP D
Relationships among publications, metrics and measurements of esteem	Relationships among publications, metrics and measurements of esteem	Relationships among publications, metrics and measurements of esteem	Relationships among publications, metrics and measurements of esteem
Panel breadth/composition/	Panel breadth/composition/	Use of metrics	Panel breadth/composition/

access to submitted work	access to submitted work		access to submitted work
Interdisciplinary work	Applied research	Indicators of esteem	Getting to the right panel/sub-panel
Feedback	Comparability within/between panels	Comparability within/between panels	Quality/size of unit relationships
	Peer review of papers/place of publication	Taking into account career stage; individual circumstances	Peer review of papers/place of publication

1. How large does a Panel and its Sub panels have to be to cover biosciences adequately?

Panel size should not be an issue; in 2001 there were 14 panel members, in 2008 there will be 15. There will be lots of work, as thousands of papers have to be read. Cross referral was suggested to spread the workload.

2. How might industry, commerce and the public sector play a role in Sub-panels?

People from this background should be involved from the outset; they should be fully engaged. These individuals would have a useful role in defining excellence.

3. How should the panel cope with new areas of research and interdisciplinary work?

Relates to Q1, there should be efficient material exchange, could set up and use a secure Internet site.

4. How should applied work be valued?

There is a huge variation on how this should be assessed. Recording the amount of industry funding may only be appropriate in some areas?

5. What emphasis should be placed on publications, metrics and esteem?

Publications are of primary importance. There was divided opinion on the amount of emphasis to be placed on metrics and esteem. Unclear on how they are going to be assessed, led onto the issue of unclear discrimination of individual versus unit assessment.

6. If the research profile is based on four assessed works, how might metrics etc play a role?

There was no agreement on this issue within group. Some felt metrics should play a primary role while others found no place for them. However, all agreed that peer review was of primary importance. A short commentary should be included with each publication.

7. Is it necessary/desirable for the same criteria and processes to apply across all Sub-panels?

No, but would like comparability; even sub-panels will need some discretion. Metrics based on income is distorting; weighting this factor will distort further. The number of post docs should be considered or unit's dynamics as indicators of research growth.

8. How does a panel ensure comparability across sub-panels and main panels?

It was felt that comparability between sub-panels was not achieved in 2001. There was uncertainty with respect to measures in place to ensure comparability. There are two issues; comparability across sub-panels within panels and across main panels. It maybe useful to have cross panel representatives; this could be part of the role of panel secretaries.

9. How will consultation between Main Panels (A, B, C, D etc) be managed to ensure the most appropriate life scientists deal with material submitted through a particular panel?

Transparency is the most critical thing; units should be allowed to request a 2nd panel. Critical to get criteria clear; this was poor in previous RAEs. It is important to have the confidence in the system based on transparency. Panels/sub-panels should be able to exchange materials.

10. Is research quality indicated by the journal or the paper and how should quality be assessed?

Must base research quality on papers and ALL papers must be read. It was thought inevitable that impact factors would be paid attention to by some panel members. This is a real worry and it is important to look at criteria. Direct comparison of impact factors is not valid. More subject specific citation indices are needed.

11. What are the major indicators of esteem?

Ranking of indicators of esteem: Nobel prize, invitations to international conferences, national conferences etc. Young people who show great potential could be 'tagged'.

12. How can the RAE be fair to researchers early in their careers?

Again the use of commentaries on publications. RAE provided this solution in 2001 but data not used by panel. Using the guidelines already in place should enable recognition of quality among younger researchers.

13. Should the proportion of 3 and 4 star research output vary across sub-panels and panels and if so should it simply be left to the discipline to establish these levels?

Variation of this nature is expected

14. What role should future plans/research strategies play in RAE2008?

Should not be part of quality profile judgment but is there to put a unit's submission into context.

15. What level of feedback would universities/UoAs find valuable over and above the published research profile?

Feedback should be as full as possible and should be transmitted back to those that made submissions.

16. Do units have to be big to be successful in RAE?

There was a concerned consensus about this issue. A small submission (< 10) should not be disadvantaged but there is no clear solution.

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Many thanks to all contributors for their slides/synopses

Copies of the powerpoint files and reports, as well as the programme, can be found on the HUBS website, at: <http://www.biohubs.org.uk>