

Annex G

Selectivity and the characteristics of excellence

Table G1 **Proposed characteristics of excellence**

Production of knowledge at the leading edge
Value to users
Commercial exploitation
Diversity of funding sources
Sustainability

The sub-group looking at selectivity recommended that the characteristics of excellence of different disciplines should be recognised to a greater extent. It provisionally identified the parameters above, which have in common the concept of impact, either on the discipline itself or on others. Recognition on the world stage might be an indicator of excellence in some disciplines, such as particle physics, but not necessarily or exclusively so in others, such as medicine where the concern might also be for excellent research to meet national needs. Concern was noted that in some disciplines (such as architecture) world-class practitioners may not currently be attracted into the academic profession because it was perceived that RAE panels used rather narrow and outdated definitions of excellence.

Table G2 **Interviewees' definitions of a centre of excellence**

Entities to which scholars and researchers would be attracted on an international basis
A critical mass of researchers and activity
A stimulating research culture, a 'buzz'
Client satisfaction; 'repeat business'; being seen by industry as the think tank
High esteem from peer group, seen as setting a benchmark
At the cutting edge in identifying and undertaking work which pushes back the disciplinary boundaries, rather than just filling in the gaps in knowledge

Excellence or a centre of excellence in UK terms could be defined as a unit graded at 5 or 5* in more than one RAE. However, this is a narrow definition. In interviews with HEPUs, researchers found excellence hard to define and often reinterpreted it in synonyms. Centres of excellence were considered to be more readily definable, but generally this was couched in terms of exemplars. The characteristics of specific institutions, departments, or research groups were usually cited (they tend to be seen in concrete terms rather than in a network or virtual sense).

Figure G1a - Scenario A:

All quality ratings 3b and above funded at the same rate

Funding scale (1,2,3b,3a,4,5,5*) = (0,0,1,1,1,1,1)

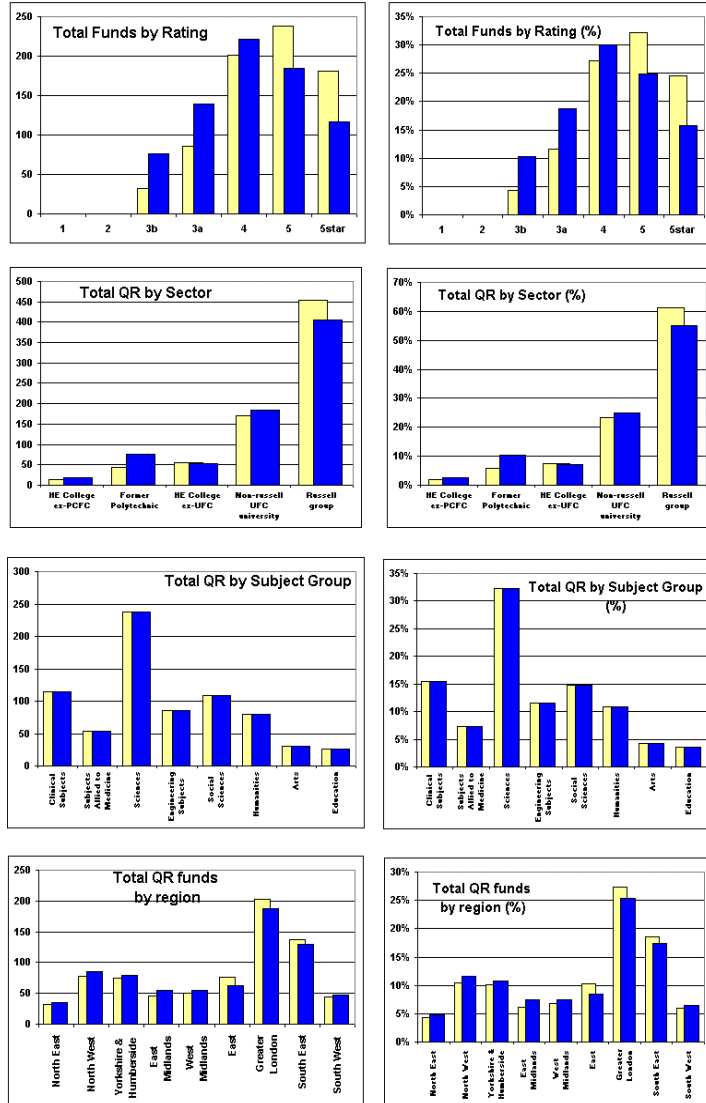
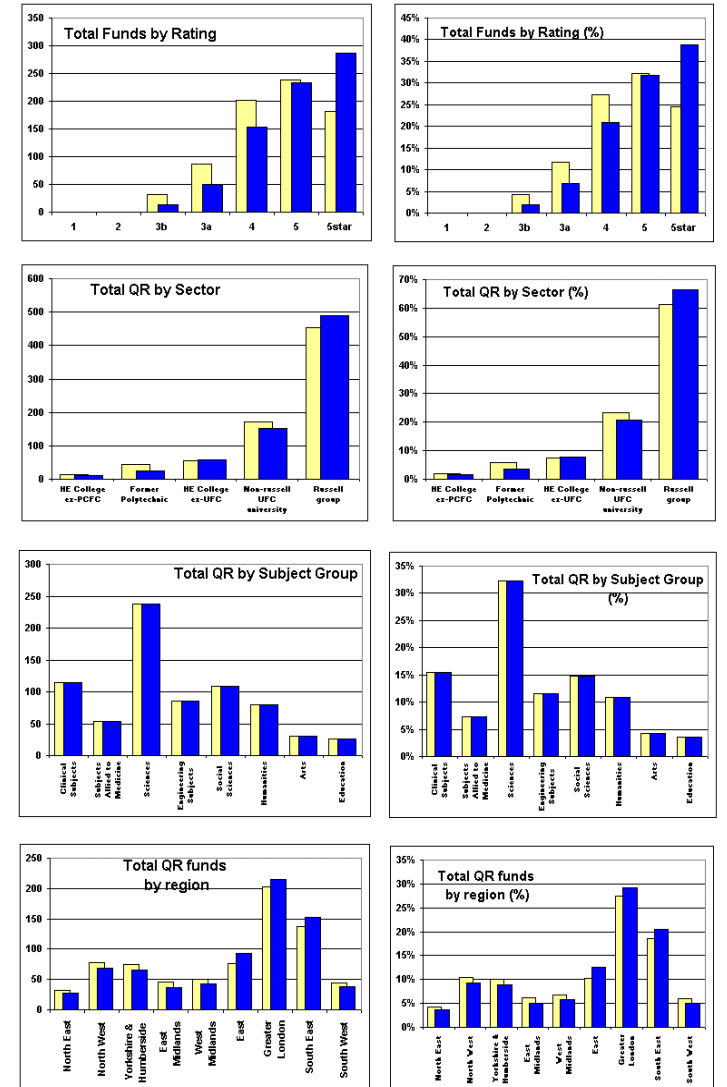


Figure G1b - Scenario H:

100% increments from 3b to 5*

Funding scale with 100% jumps between successive ratings, from 3b to 5*



These graphs show the effect of the most selective and least selective funding scenarios that were explored - in terms of the movement from the current distribution (light grey bar) to the modelled distribution (dark grey bar) by region, by sub-sector ('Russell Group' institutions, other institutions formerly funded by the Universities Funding Council (UFC), formerly UFC-funded colleges, former polytechnics and other institutions formerly funded by the Polytechnics and Colleges Funding Council) and by RAE rating. Each chart is presented by absolute value and by percentage. The effect on quality-related (QR) funding allocations to individual institutions of these two scenarios is also shown, plotted against current QR, in the scatter-graphs following the histograms.

Figures G2a and G2b The effect on individual QR allocations to institutions of the least selective method (Scenario A) and most selective (Scenario H), plotted against current QR (£millions). Each point represents an HEI.

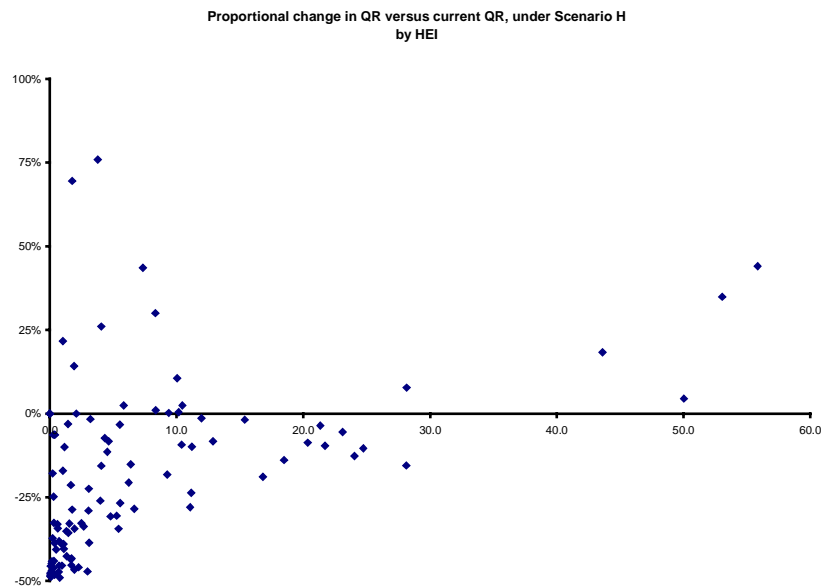
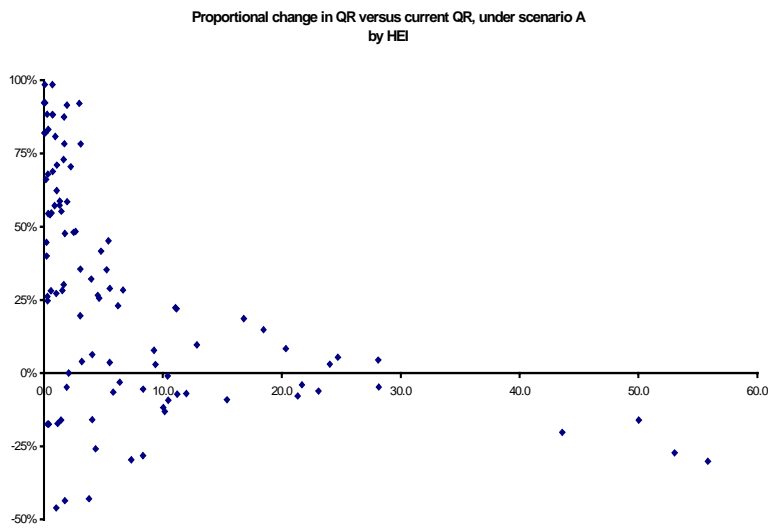


Table G3 Mapping of units of assessment (UoAs) to Super UoAs

Proposed macro grouping	SUOA	HEPU grouping based on bibliometric similarity	Unit of Assessment	HESA subjects
Medical and health	S1	Clinical	Clinical Laboratory Sciences	1 <i>Medicine and dentistry</i>
	S1	Clinical	Community Based Clinical Subjects	2 <i>Subjects allied to medicine</i>
	S1	Clinical	Hospital-Based Clinical Subjects	1 <i>Medicine and dentistry</i>
	S1	Clinical	Clinical Dentistry	1 <i>Medicine and dentistry</i>
Biomedical sciences	S2	pre-clinical	Psychology	3 <i>Biological sciences</i>
	S2	pre-clinical	Pre-Clinical Studies	2 <i>Subjects allied to medicine</i>
	S2	pre-clinical	Anatomy	2 <i>Subjects allied to medicine</i>
	S2	pre-clinical	Physiology	2 <i>Subjects allied to medicine</i>
	S2	pre-clinical	Pharmacology	2 <i>Subjects allied to medicine</i>
	S2	pre-clinical	Pharmacy	2 <i>Subjects allied to medicine</i>
	S2	pre-clinical	Other Studies and Professions Allied to Medicine	2 <i>Subjects allied to medicine</i>
	S3	Biological sciences	Biochemistry	3 <i>Biological sciences</i>
	S3	Biological sciences	Biological Sciences	3 <i>Biological sciences</i>
	S3	Biological sciences	Agriculture	5 <i>Agriculture and related</i>
Science	S3	Biological sciences	Food Science and Technology	5 <i>Agriculture and related</i>
	S4	Environment	Veterinary Science	4 <i>Veterinary sciences</i>
	S4	Environment	Earth Sciences	6 <i>Physical sciences</i>
	S4	Environment	Environmental Sciences	6 <i>Physical sciences</i>
	S4	Environment	Geography	6 <i>Physical sciences</i>
	S5	Mathematics	Pure Mathematics	7 <i>Mathematics</i>
	S5	Mathematics	Applied Mathematics	7 <i>Mathematics</i>
	S5	Mathematics	Statistics and Operational Research	7 <i>Mathematics</i>
	S6	Physical sciences	Chemistry	6 <i>Physical sciences</i>
	S6	Physical sciences	Physics	6 <i>Physical sciences</i>
Engineering	S6	Physical sciences	Metallurgy and Materials	6 <i>Physical sciences</i>
	S7	Engineering	Computer Science	8 <i>Computer science</i>
	S7	Engineering	General Engineering	9 <i>Engineering and technology</i>
	S7	Engineering	Chemical Engineering	9 <i>Engineering and technology</i>
	S7	Engineering	Civil Engineering	9 <i>Engineering and technology</i>
	S7	Engineering	Electrical and Electronic Engineering	9 <i>Engineering and technology</i>
	S7	Engineering	Mechanical, Aeronautical and Manufacturing Engineering	9 <i>Engineering and technology</i>
	S7	Engineering	Mineral and Mining Engineering	9 <i>Engineering and technology</i>
	S7	Engineering	Built Environment	10 <i>Architecture, building and planning</i>
	S7	Engineering	Town and Country Planning	10 <i>Architecture, building and planning</i>
Social and economic sciences	S8	Social science	Law	12 <i>Law</i>
	S8	Social science	Politics and International Studies	11 <i>Social, economic and political studies</i>
	S8	Social science	Social Policy and Administration	11 <i>Social, economic and political studies</i>
	S8	Social science	Social Work	11 <i>Social, economic and political studies</i>
	S8	Social science	Sociology	11 <i>Social, economic and political studies</i>
	S8	Social science	Nursing	2 <i>Subjects allied to medicine</i>
	S8	Social science	Education	18 <i>Education</i>
	S8	Social science	Sports Related Subjects	18 <i>Education</i>
	S9	Business	Economics and Econometrics	13 <i>Business and administrative studies</i>
	S9	Business	Business and Management Studies	13 <i>Business and administrative studies</i>
Arts and humanities	S9	Business	Accountancy	13 <i>Business and administrative studies</i>
	S10	Language and culture	Library and Information Management	14 <i>Librarianship</i>
	S10	Language and culture	Anthropology	15 <i>Languages</i>
	S10	Language and culture	American Studies (Canada, the Caribbean, Latin America and the USA)	15 <i>Languages</i>
	S10	Language and culture	Middle Eastern and African Studies	15 <i>Languages</i>
	S10	Language and culture	Asian Studies	15 <i>Languages</i>
	S10	Language and culture	European Studies	15 <i>Languages</i>
	S10	Language and culture	Celtic Studies	15 <i>Languages</i>
	S10	Language and culture	English Language and Literature	15 <i>Languages</i>
	S10	Language and culture	French	15 <i>Languages</i>
	S10	Language and culture	German, Dutch and Scandinavian Languages	15 <i>Languages</i>
	S10	Language and culture	Italian	15 <i>Languages</i>
	S10	Language and culture	Russian, Slavonic and East European Languages	15 <i>Languages</i>
	S10	Language and culture	Iberian and Latin American Languages	15 <i>Languages</i>
	S10	Language and culture	Linguistics	15 <i>Languages</i>
	S11	Humanities	Classics, Ancient History, Byzantine and Modern Greek Studies	15 <i>Languages</i>
	S11	Humanities	Archaeology	16 <i>Humanities</i>
	S11	Humanities	History	16 <i>Humanities</i>
	S11	Humanities	History of Art, Architecture and Design	16 <i>Humanities</i>
	S11	Humanities	Philosophy	16 <i>Humanities</i>
S11	Humanities	Theology, Divinity and Religious Studies	16 <i>Humanities</i>	
S12	Visual & performing art	Art and Design	17 <i>Creative arts and design</i>	
S12	Visual & performing art	Communication, Cultural and Media Studies	17 <i>Creative arts and design</i>	
S12	Visual & performing art	Drama, Dance and Performing Arts	17 <i>Creative arts and design</i>	
S12	Visual & performing art	Music	17 <i>Creative arts and design</i>	

These 'super units of assessment' were developed by the Higher Education Policy Unit, University of Leeds, in their study 'Benchmarking the International Standard of Research in England'. These are groups of UoAs based on bibliometric similarity.

Table G4 Key conclusions of the HEPU study on the effect of selectivity

The explicit policy of selectivity, underpinned by the RAE, has produced major changes in attitude and strategy, and has increased the active management of the research environment. Direct management of detailed research strategy is still rare and is considered by interviewees generally to be unproductive in the context of higher education research.
The RAE and the consequential selectivity of funding have operated as major stimuli to more conscious research management, and proved an effective lever to institutional change, although some change would have occurred anyway.
Selectivity and the RAE have also acted as incentives to improve research training since HEIs have recognised the need to develop their research potential. Research training has improved as a result of increases in the financial and management resources devoted to it and through the adoption of more systematic approaches.
Selective approaches to funding and research management are as widely accepted in the social sciences and humanities as among the natural sciences.
Institutions have established structures that ensure better financial and management accountability, and which permit the development of more strategic approaches to research policy (for example, research committees at both institution and department level).

Table G5 Comparison of the level of selectivity in the UK compared with the US: total public funding and proportion of funding to top decile

	UK		USA	
1980-81	£205m	46.5%	\$4.2Bn	47%
1997-98	£1.75Bn	56.9%	\$12.75	43%