



Reflections on research intensity

Presentation for the Foundation for Science and Technology discussion on the Review of Research Assessment

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The best lack all conviction, while the worst Are full of passionate intensity

W. B Yeats, The Second Coming



Dearing Recommendation 34

- To the Government that, with immediate effect, projects and programmes funded by the Research Councils meet their full indirect costs and the costs of premises and central computing, preferably through the provision of additional resources;
- To the Funding Bodies that the next Research Assessment Exercise is amended to encourage institutions to make strategic decisions about whether to enter departments for the Exercise or whether to seek a lower level of non-competitive funding to support research and scholarship which underpins teaching;
- To the Government that an Industrial Partnership Development Fund is established immediately to attract matching funds from industry, and to contribute to regional and economic development;
- To the Government that it promotes and enables, as soon as possible, the establishment of a revolving loan fund of £400 to £500 million, financed jointly by public and private research sponsors, to support infrastructure in a limited number of top quality research departments which can demonstrate a real need.

(The Dearing Report, Higher Education in the Learning Society, 1997)

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Comparison of RAE Results, 1996 and 2001

RAE Submissions by Grade

Grade	RAE 1996		RAE 2001	
	Number	%	Number	%
1	236	8%	18	1%
2	464	16%	140	5%
3b	422	15%	278	11%
3a	528	18%	499	19%
4	671	23%	664	26%
5	403	14%	715	28%
5*	170	6%	284	11%
Total	2,894	100%	2,598	100%

Source:

RAE 4/01



RAE Grade 4:

"quality that equates to attainable levels of national excellence in virtually all of the research activity submitted, showing evidence of international excellence". Competitiveness and the UK Business Environment: Summary of the Evidence

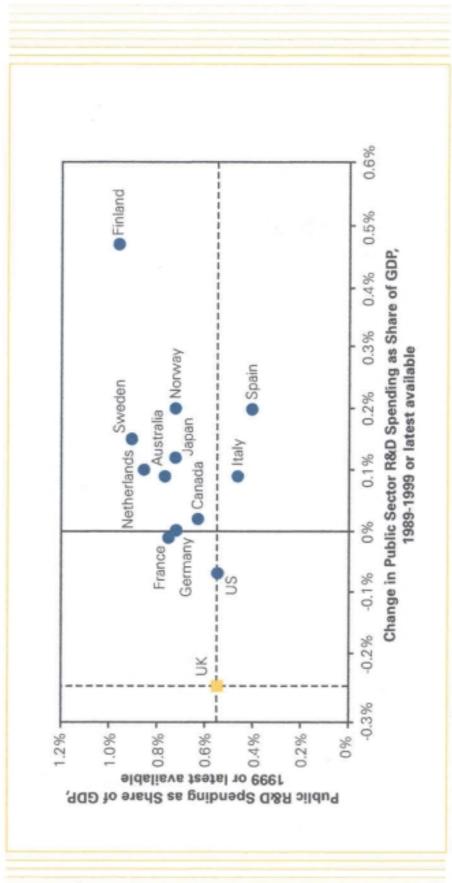


Figure 12: Public Sector Spending on R&D

Note: Includes spending by government and institutions of higher education. Source: OECD (2002)



Research funding: the challenge of diversity (November 1997)

- 1 supporting "new entrants"
- 2 "developing capacity"
- 3 ensuring industrial and commercial impact, including "gearing"
- 4 motivating collaboration
- 5 confirming the distinctiveness of higher education



	Ratio		
Total UK	2.06		
Total England	2.06		
Total Scotland	2.34		
Total Wales	1.70		
Total Northern Ireland	1.49		



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	Ratio
University College Northampton	13.17
Anglia Polytechnic University	9.07
University of Wolverhampton	6.55
University of Paisley	6.52
University College Worcester	6.39
Cranfield University	4.53
St George's Hospital Medical School	4.25
London School of Hygiene & Tropical	4.00
Medicine	
Glasgow Caledonian University	3.76
Staffordshire University	3.72

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Ratio of total research funding : QR (top 10 over £3m R)

	Ratio
Cranfield University	4.53
St George's Hospital Medical School	4.25
London School of Hygiene & Tropical	4.00
Medicine	
University of Aberdeen	3.63
University of Dundee	3.25
University of Glasgow	2.96
Open University	2.74
University of Wales College of Medicine	2.72
Institute of Cancer Research	2.64
Imperial College	2.62

*

Ratio of total research funding : QR (some individual cases)

	Ratio
KCL	2.39
Oxford	2.23
Edinburgh	2.21
York	2.16
Cambridge	1.92
Warwick	1.49
LSE	1.15



"There are a number of ways of grouping universities. The institutions themselves have formed three groups:

- The **Russell Group** which is made up largely of the older more established universities. Over half of the top research departments those rated 5 or 5* in the Research Assessment Exercise are located in Russell Group universities.
- The **94 group**, mainly universities established before 1992 and including a number created after the Robbins Report in the 1960s.
- The **Coalition of Modern Universities**, a group of universities created in 1992 when the polytechnics joined the university sector.

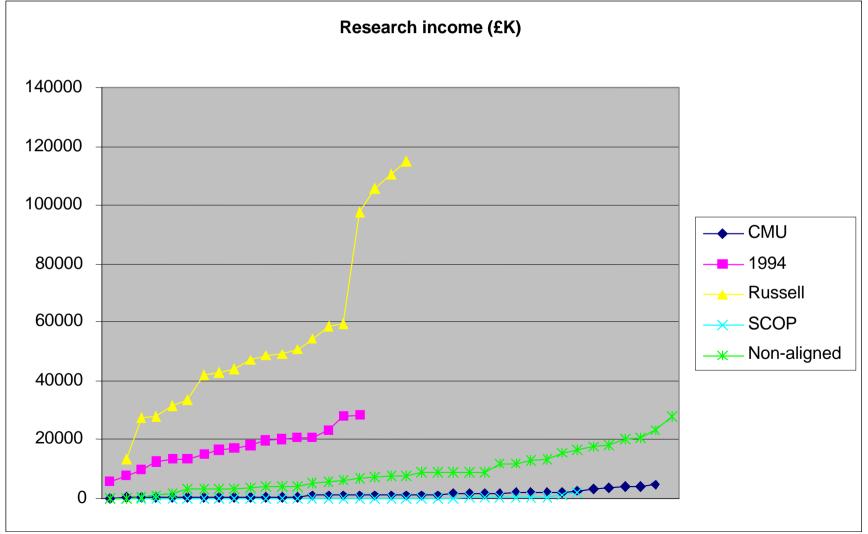
In addition the Sutton Trust, founded in 1997 by Peter Lampl to provide educational opportunities for able young people from non-privileged backgrounds, has grouped together a set of universities drawn from the Russell and 94 groups in order to analyse the pattern of admissions and applications". (DfES 2003: 10-11)



The territorial divergence

	FTEs	Income	R	Business
WALES	5.4%	4.7%	3.8%	4.4%
SCOTLAND	9.7%	11.3%	12.7%	15%
LONDON	17%	20%	23%	16%

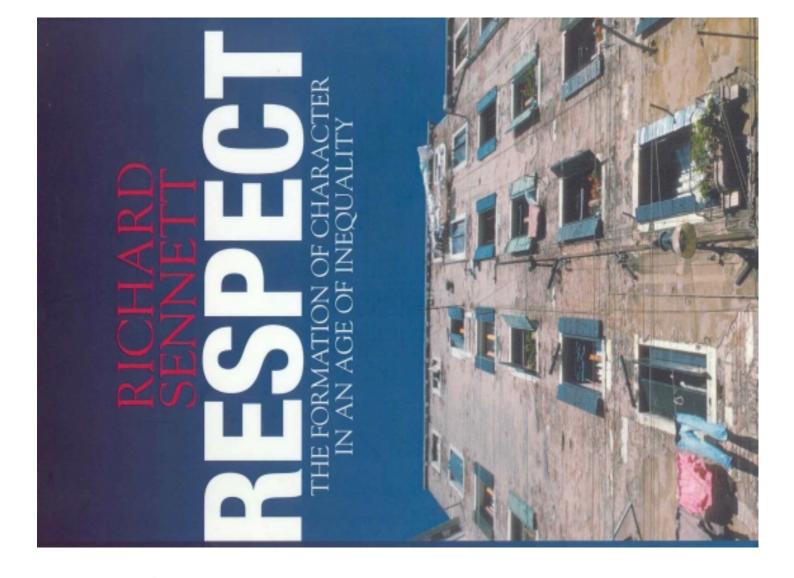






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Rank	Institution	Research %
1	Imperial College of Science, Technology and Medicine	60.30%
2	University of Oxford	59.40%
3	University of Cambridge	59.10%
4	University College London	59.00%
5	University of York	47.10%
6	University of Southampton	45.40%
7	University of Manchester Institute of Science & Techno	44.80%
8	University of Surrey	44.10%
9	University of Reading	42.90%
10	University of Manchester	42.30%
11	Royal Holloway, University of London	42.20%
12	King's College London	41.90%
13	University of Warwick	41.70%
14	University of Sheffield	40.90%
15	University of Bristol	39.70%
16	University of East Anglia	38.80%
17	University of Sussex	38.60%
18	Lancaster University	36.30%
19	University of Bath	36.20%
20	University of Newcastle upon Tyne	36.10%

Rank	Institution	Research %
21	University of Birmingham	36.00%
22	University of Nottingham	35.80%
23	University of Essex	33.50%
24	University of Leeds	33.40%
25	University of Durham	33.20%
26	Goldsmiths College, University of London	32.00%
27	University of Leicester	31.90%
28	University of Liverpool	30.70%
29	University of Exeter	28.30%
30	Birkbeck College	26.40%
31	Queen Mary, University of London	25.80%
32	Loughborough University	25.70%
33	Keele University	24.60%
34	Aston University	22.50%
35	City University, London	21.60%
36	University of Bradford	19.80%
37	Brunel University	17.60%
38	University of Kent at Canterbury	16.70%
39	University of Hull	15.30%
40	University of Salford	13.60%



Rank	Institution	Research %	Rank	Institution	Research %
41	University of Brighton	10.80%	61	University of Sunderland	2.60%
42	University of Portsmouth	8.20%	62	University of Central Lancashire	2.50%
43	De Montfort University	7.20%	63	Kingston University	2.30%
44	Oxford Brookes University	6.60%	64	Bournemouth University	2.20%
45	University of Surrey Roehampton	6.20%	65	University of Luton	2.10%
46	Sheffield Hallam University	5.20%	66	Coventry University	2.10%
47	Nottingham Trent University	5.20%	67	University of Northumbria at Newcastle	2.00%
48	Liverpool John Moores University	5.00%	68	University of Central England in Birmingham	1.70%
49	University of Hertfordshire	4.80%	69	Leeds Metropolitan University	1.60%
50	University of Plymouth	4.60%	70	Anglia Polytechnic University	1.60%
51	University of Gloucestershire	4.20%	71	Staffordshire University	1.50%
52	Manchester Metropolitan University	4.20%	72	University of Teesside	1.40%
53	London South Bank University	4.20%	73	University of Wolverhampton	1.30%
54	University of Huddersfield	4.00%	74	University of Derby	1.20%
55	Open University	3.90%	75	London Metropolitan University	1.00%
56	University of East London	3.90%	76	University of Lincoln	0.80%
57	University of the West of England, Bristol	3.80%	77	Thames Valley University	0.30%
58	Middlesex University	3.80%		HEI Total	25.20%
59	University of Westminster	3.70%		•	
60	University of Greenwich	3.20%			

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Roberts vs. the White Paper

- acknowledges that all HEIs do research, albeit at different levels;
- intends applied research/knowledge transfer to be considered alongside basic/fundamental research in each institutional setting;
- doesn't type-cast or limit institutional strategies; and
- explicitly tests institutional capabilities (training, EO etc.) and not just outputs.