

SECTION 3 : QR VOLUME MEASURES

BACKGROUND

- 1 Data used to underpin the calculation of Quality Research (QR) funding allocations for 2005/06 came from the 2001 Research Assessment Exercise (RAE). A Research Activity Survey (RAS) was undertaken in both 2003/04 and 2004/05 and the information collected was used to update that collected on the 2001 RAE. The updated information together with data collected on the RAE was used in the calculation of QR volume for 2005/06.
- 2 The main volume measure used in the QR model is the full-time equivalent (FTE) of category A staff and incoming category A* staff, who were on the payroll of the institution at 31 March 2001, in proportion to how much of their salary was paid from general and NHS funds (general funds only for units of assessment (UoAs) 10, 11 and 13), taken from 2001 RAE form RA1. The 2001 RAE quality rating of each UoA, on a scale from 1 to 5*, is also used in calculating QR allocations. Any UoA rated 1, 2, 3a or 3b was excluded.
- 3 The minor volume measures for 2005/06 were calculated using the average FTE numbers of research assistants (postdoctoral and postgraduate), research fellows and research students, and the average research grant and contract income received from UK charities, by unit of assessment, returned on the 2003/04 and 2004/05 RAS surveys.
- 4 The volume measures used for calculating QR depend on the volume of activity in each category and the weightings applied. Category A and incoming Category A*, staff paid from general funds or NHS funds (general funds only for UoAs 10, 11 and 13), multiplied by the proportion of salary attributable to such funds, were given a weighting of 1. Research assistants and fellows were weighted at 0.1, while research students had a weight of 0.15. Charity income was converted to full-time staff equivalents by dividing by £25,000, and a weight of 0.25 applied.
- 5 For comparison purposes, information on the volume measures used in 2004/05 funding is given in this section. These were calculated using data from the 2001 RAE and data collected on the RAS for 2002/03 and 2003/04.
- 6 It should be noted that, since the volume measures are affected by the number of staff institutions elected to submit to the RAE, it is not possible to draw any conclusions about the overall volume of activity in research departments from the data presented here.

CHANGES IN QR VOLUME MEASURES

- 7 The volumes of activity counted for 2004/05 and 2005/06 in each institution in receipt of QR funding are shown in Table 3.1 together with the weighted volume and the percentage that each measure contributes to that volume. Table 3.1b presents data for 2005/06, and Table 3.1a shows corresponding data for 2004/05. The data shown in Table 3.1a are equivalent to those shown in Table 10b of Circular W05/18HE.
- 8 Comparing the weighted volumes for the two consecutive years reveals minor changes in the contributions of each of the volume measures to the overall weighted volume; the contribution of staff decreased slightly in 2005/06, whilst the contribution of the minor volume measures increased. There were some variations within individual institutions between years, but none were particularly large. For example, the increase in the proportion of volume from research students (25.1 per cent to 27.3 per cent) at University of Wales, Lampeter meant that the proportion of volume from Category A and A* staff decreased (73.2 per cent to 70.5 per cent), whilst University of Wales,

Newport had a decrease in the proportion of volume from research students (18.0 per cent to 15.6 per cent) with a corresponding increase in the proportion of volume from Category A and A* staff (82.0 per cent to 84.4 per cent).

Table 3.1: QR Volume Measures

3.1a) Volume measures used in the calculation of QR funding 2004/05

Institution	Category A and Incoming A* Staff		Research Assistants		Research Students		Research Fellows		Average Charity Income		Weighted Volume Measure
	FTE (2001 RAE)	% of Volume Measure	FTE (2002/03 & 2003/04 RAS)	% of Volume Measure	FTE (2002/03 & 2003/04 RAS)	% of Volume Measure	FTE (2002/03 & 2003/04 RAS)	% of Volume Measure	£ (2002/03 & 2003/04 RAS)	% of Volume Measure	
University of Glamorgan	40.2	83.4	3.0	0.6	50.5	15.7	0.0	0.0	13,000	0.3	48.2
University of Wales, Aberystwyth	177.6	83.5	36.9	1.7	174.4	12.3	2.5	0.1	493,335	2.3	212.6
University of Wales, Bangor	196.6	76.8	150.1	5.9	245.8	14.4	5.9	0.2	678,812	2.7	255.8
Cardiff University	811.1	70.5	690.7	6.0	1,022.8	13.3	20.2	0.2	11,509,883	10.0	1,150.7
University of Wales, Lampeter	39.9	73.2	0.0	0.0	91.2	25.1	3.0	0.6	64,164	1.2	54.5
University of Wales Swansea	234.6	78.8	109.8	3.7	327.7	16.5	2.6	0.1	261,057	0.9	297.6
University of Wales Institute, Cardiff	32.8	97.4	0.0	0.0	5.8	2.6	0.0	0.0	2,500	0.1	33.7
University of Wales, Newport	6.5	82.0	0.0	0.0	9.5	18.0	0.0	0.0	0	0.0	7.9
CAWCS	12.2	98.3	0.0	0.0	0.0	0.0	0.0	0.0	20,919	1.7	12.4
Total	1,551.5	74.8	990.5	4.8	1,927.4	13.9	34.1	0.2	13,043,669	6.3	2,073.5

CAWCS = Centre for Advanced Welsh and Celtic Studies

1, 2, 3a and 3b rated UoAs have been excluded.

3.1b) Volume measures used in the calculation of QR funding 2005/06

Institution	Category A and Incoming A* Staff		Research Assistants		Research Students		Research Fellows		Average Charity Income		Weighted Volume Measure
	FTE (2001 RAE)	% of Volume Measure	FTE (2003/04 & 2004/05 RAS)	% of Volume Measure	FTE (2003/04 & 2004/05 RAS)	% of Volume Measure	FTE (2003/04 & 2004/05 RAS)	% of Volume Measure	£ (2003/04 & 2004/05 RAS)	% of Volume Measure	
University of Glamorgan	40.2	83.3	3.0	0.6	51.0	15.8	0.0	0.0	13,500	0.3	48.3
University of Wales, Aberystwyth	177.6	84.4	42.7	2.0	163.8	11.7	1.8	0.1	373,248	1.8	210.3
University of Wales, Bangor	196.6	76.5	152.8	5.9	245.0	14.3	8.1	0.3	761,207	3.0	257.0
Cardiff University	811.1	68.9	717.4	6.1	1,067.5	13.6	20.4	0.2	13,178,765	11.2	1,176.8
University of Wales, Lampeter	39.9	70.5	0.0	0.0	103.0	27.3	3.9	0.7	84,122	1.5	56.5
University of Wales Swansea	234.6	79.5	94.2	3.2	319.2	16.2	5.3	0.2	259,690	0.9	295.1
University of Wales Institute, Cardiff	32.8	96.0	0.0	0.0	9.0	4.0	0.0	0.0	0	0.0	34.2
University of Wales, Newport	6.5	84.4	0.0	0.0	8.0	15.6	0.0	0.0	0	0.0	7.7
CAWCS	12.2	99.4	0.0	0.0	0.0	0.0	0.0	0.0	7,230	0.6	12.3
Total	1,551.5	73.9	1,010.0	4.8	1,966.5	14.1	39.4	0.2	14,677,761	7.0	2,098.2

CAWCS = Centre for Advanced Welsh and Celtic Studies

1, 2, 3a and 3b rated UoAs have been excluded.

- 9 Volumes for 2004/05 and 2005/06 are compared in Table 3.2. The overall weighted volume increased from 2004/05 to 2005/06 by 1 per cent. There were substantial increases in the charity income volume (13 per cent) and the research fellows volume (16 per cent) used in the 2005/06 funding calculations. The volume measure that was used for funding purposes increased in five institutions, with the largest rise being at University of Wales, Lampeter (4 per cent).

Table 3.2: Changes in QR Volume Measures used in Funding 2004/05 to 2005/06

Institution	Category A Staff % change	Research Assistants % change	Research Students % change	Research Fellows % change	Charity Income % change	Weighted Volume % change
University of Glamorgan	0.0	0.0	1.0	0.0	3.8	0.2
University of Wales, Aberystwyth	0.0	15.7	-6.1	-30.0	-24.3	-1.1
University of Wales, Bangor	0.0	1.8	-0.3	38.5	12.1	0.5
Cardiff University	0.0	3.9	4.4	1.2	14.5	2.3
University of Wales, Lampeter	0.0	0.0	13.0	28.3	31.1	3.8
University of Wales Swansea	0.0	-14.3	-2.6	106.8	-0.5	-0.9
University of Wales Institute, Cardiff	0.0	0.0	56.5	0.0	-100.0	1.4
University of Wales, Newport	0.0	0.0	-15.8	0.0	0.0	-2.8
CAWCS	0.0	0.0	0.0	0.0	-65.4	-1.1
Total	0.0	2.0	2.0	15.7	12.5	1.2

Percentages are based on figures to two decimal places and represent the change in the average over two years.

CAWCS = Centre for Advanced Welsh and Celtic Studies

1, 2, 3b and 3a rated UoAs have been excluded.

- 10 Table 3.3 shows changes in research volumes across groupings of UoAs between 2004/05 and 2005/06. All groupings showed small increases in the QR volume measures from 2004/05 to 2005/06; the largest percentage increase was in Natural Sciences (3 per cent).

Table 3.3: Changes in QR Volume Measures used in Funding 2004/05 to 2005/06 by Unit of Assessment Group

Unit of Assessment Group	2004/05 QR Weighted Volume	2004/05 % of Total Weighted Volume	2005/06 QR Weighted Volume	2005/06 % of Total Weighted Volume	% change 2004/05 to 2005/06
Medical Sciences	324.9	15.7	327.4	15.6	0.8
Natural Sciences	515.0	24.8	530.9	25.3	3.1
Engineering	304.1	14.7	305.2	14.5	0.3
Social Sciences	414.1	20.0	415.0	19.8	0.2
Arts	515.4	24.9	519.6	24.8	0.8
Total	2,073.5		2,098.2		1.2

1, 2, 3b and 3a rated UoAs have been excluded.

Medical Sciences: UoA 1 to 11
 Natural Sciences: UoA 13 to 15 and 18 to 24
 Engineering: UoA 16 and 25 to 33
 Social Sciences: UoA 34 to 44, 68 and 69
 Arts: UoA 45 to 67

- 11 Annex C contains the 2005/06 base rates for QR funding and the weighted volume measures for individual institutions by UoA for departments rated 4 or above.
- 12 Some of the funding previously allocated through QR funding was transferred to a Research Investment Fund (RIF) in 2004/05. Institutions were eligible for RIF funding where they had a UoA rated 3a in the 2001 RAE, or a UoA rated 3b where the rating was an improvement in performance from the 1996 RAE or the entry was new for the 2001 RAE. RIF funding was allocated on the basis of staff volume weighted for

subject. The staff volumes used in calculating RIF allocations for 2005/06 for individual institutions are shown in Annex C.