

Participation Rates for Welsh Students in Higher Education within the UK during 2005/06

April 2008

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Introduction

- 1 This report presents information about the levels of participation in higher education (HE) across Wales for the academic years 2003/04, 2004/05 and 2005/06.
- 2 The report follows the same structure as the previous report Participation Rates for Welsh Students in Higher Education within the UK during 2004/05 (W07/08HE). Information on participation rates in HE is presented in a series of maps and charts in Section 1. The analysis is displayed by Unitary Authority, and the maps show how participation levels vary with age, mode of study and gender across Wales. The corresponding charts provide an alternative method for displaying the data. Comparison between participation rates for each of the groups within each Unitary Authority follows and is presented in a series of charts in Section 2. Context statistics regarding both the HE sector in Wales and student participation trends between the academic years 2003/04 and 2005/06 are provided in the tables of Annex A.
- 3 It should be noted that participation rates for 2003/04 and 2004/05 have been recalculated using revised mid-year population estimates issued by the Office for National Statistics (ONS) following the introduction of an improved methodology for estimating international migration. Participation rates for 2003/04 and 2004/05 published in this report will therefore differ from those published in previous reports. For more information on revised mid-year estimates refer to the ONS statistical bulletin SB 40/2007: 2006 Mid Year Estimates of the Population, available at:
www.statswales.wales.gov.uk/tableviewer/document.aspx?FileId=1009

Background

- 4 'Reaching Higher' is the Welsh Assembly Government's (WAG) strategy for a competitive, robust and sustainable HE sector in Wales. As part of this strategy, a key educational priority of WAG and HEFCW is to increase the number of people studying for HE level qualifications. This policy drive focuses on widening participation; that is, increasing the number of HE students from neighbourhoods where the proportion of the population studying within the HE sector (i.e. the participation rate) is traditionally very low.
- 5 The published performance indicators for UK higher education institutions (HEIs), (published by the Higher Education Statistics Agency (HESA) \at, www.hesa.ac.uk/pi) show that Wales performs well in comparison with the rest of the UK in providing access to HE for people from disadvantaged areas. However, in order to maintain and improve on this position it is

necessary to analyse and review periodically the patterns of participation across Wales, as well as to encourage institutions to target students from disadvantaged areas through incentives such as funding premiums for widening access and other initiatives.

- 6 This report presents a snapshot of the distribution of Welsh domiciled HE students within publicly funded UK HEIs (including the Open University), and further education colleges (FECs), in the academic years 2003/04, 2004/05 and 2005/06. The analysis is based on data collected by HESA, WAG, the Learning and Skills Council and the Scottish Funding Council.

The Methodology

- 7 The participation rates in this report are presented according to the 22 Unitary Authorities of Wales. Each Welsh student's Unitary Authority of domicile was derived from the postcode of the student's home address. The student participation rates for these areas could most simply be defined as the number of HE students from the area divided by the resident population. However, such a definition of participation does not lead to figures which can be fairly compared between regions due to the difference in regional population gender and age profiles.
- 8 To take account of the different gender and age profiles of a local area, the Welsh national participation rates, aggregated by age and gender, were used to calculate the number of HE students that could be **expected** to come from any particular Unitary Authority. The expected number of students for an area is the number of students that would be domiciled in that area if the participation patterns mirrored those for all of Wales.
- 9 The **Standard Participation Rate (SPR)** used throughout this report allows regional participation rates to be fairly compared to each other. It is defined as the difference between the number of HE students domiciled in an area divided by the expected number of students for that area, from the Wales standardised national average (which is 100). Although not strictly a rate as the difference has been taken from the national average, it is referred to throughout this document as the SPR and is used for clarity.
- 10 If a particular region has a negative SPR then there were fewer HE students from that area than would be expected based on the Welsh national average. A region with an SPR value greater than 0 has a larger percentage of the population studying for a HE qualification than expected, and a region with an SPR of 0 has a level of participation exactly in line with the national average.
- 11 The participation rate data used in generating the maps, charts and tables in this report have taken account of:
 - students returning invalid or missing postcodes;

- amendments to census data to locate students at their home addresses;
- mid-year population estimates

Further technical details of the calculation methods used are given in Annex B.

- 12 To calculate an accurate participation rate for an area it is necessary to have the number of students from the area, determined by their home postcode, and the total number of people from the area, provided by population data which places students at their home address.
- 13 Population data used in this report are obtained from the 2001 Census. Due to changes in the way the census was collected in 2001 students are placed at their term-time address. Annex B explains why this is a problem and how a base population has been estimated to locate students at their home address.
- 14 Problems encountered in determining an appropriate base population may cause an issue for calculating accurate participation rates for full-time undergraduates aged under 25 years from Ceredigion. Participation of this group of students from Ceredigion is shown to be very low however previous publications have shown it to be high. This may be due to the very different profiles of the resident and domiciled student populations of Aberystwyth, which is impacting on the method used in this report to determine the base population. Details of this issue are discussed in Annex B.
- 15 Therefore, participation rates presented in this report provide a general picture and should be considered best estimates. In addition, the data are not sufficiently accurate to be analysed for geographies smaller than Unitary Authorities, therefore it has not been possible to provide participation maps for small areas.

Welsh Higher Education Students

- 16 In 2005/06 there were over 110,000 Welsh domiciled students studying for HE qualifications in HEIs and FECs in the UK. Three quarters of these students were studying in Wales (including Open University students). Of all the Welsh domiciled students over half (59 per cent) were female. Almost half of all students were full-time undergraduates and of these the majority were under 25 years old. However, of the 47 per cent of Welsh students studying on a part-time basis most were 25 years of age or older. This picture remains relatively unchanged across the three year period, as shown in the summary table below. A breakdown of the mode, gender, level and age of Welsh domiciled students is provided in Tables 1 to 3 of Annex A.

Summary Statistic	2003/04	2004/05	2005/06
Number of Welsh domiciled HE students	108,695	109,806	110,236
Proportion studying in Wales	75%	75%	75%
Proportion of females	59%	59%	59%
Proportion studying full-time	54%	53%	53%
Proportion of which aged under 25 years of age	81%	80%	81%
Proportion studying full-time undergraduate	48%	47%	47%
Proportion of which aged under 25 years of age	83%	83%	84%
Proportion studying part-time	46%	47%	47%
Proportion of which aged 25 years of age and over	82%	81%	82%

Welsh National Participation Rates

- 17 The calculated national participation rates for 2003/04 to 2005/06 are shown in Table 5 of Annex A. Nearly 4 per cent of the Welsh population were engaged in HE in 2005/06 with the participation of Welsh females in HE higher than that of males. The participation rates were highest for 18 to 19 year olds, with over one quarter studying for a HE qualification.
- 18 The percentage of the population engaged in HE has remained constant across the period between 2003/04 and 2005/06. However, there have been changes in participation amongst some age and gender categories. Overall the participation of Welsh males has dropped slightly whilst the participation of Welsh females has increased slightly. Participation of 16 to 17 year olds has fallen between 2004/05 and 2005/06 due to a drop in numbers of enrolments on the associate studentship scheme at the University of Glamorgan. Across the three year period there has been little change in the participation rate of males aged 25 and older, but participation of those aged 18 to 19 years has dropped by 0.6 of a percentage point and for those aged 20 to 24 years has dropped by 1.2 of a percentage point. There were slight increases in participation for females aged 25 and older, with the 25 to 29 year old age group seeing the biggest increase of 0.4 of a percentage point. Participation of females aged 18 to 19 fell by 0.4 of a percentage point and for those aged 20 to 24 fell by 0.7 of a percentage point. Table 5 shows how the national participation rates have changed over the three years by gender and age.

Interpreting the Maps

- 19 The maps in Section 1, broken down by Unitary Authority, show data for 2005/06 and have been drawn on the same fixed ranges of SPR so as to allow comparison between maps. Areas coloured in yellow show regions where the participation within HE was closely in line with the national average. Areas which are either red or orange had participation rates greatly below the national average, whilst areas in shades of green had high or very high participation in HE.

- 20 In each map legend the number of Unitary Authorities which fall into each participation range are shown in parentheses. The actual SPRs for each Unitary Authority are given in the tables beneath the maps. The SPRs for each Unitary Authority, in ranked order, are also displayed in a chart to allow an alternative method of comparison.
- 21 Maps for earlier years are not presented in this report; for SPRs for 2003/04 and 2004/05 please refer to Tables 6a-6d in Annex A. As noted in paragraph 3, these SPRs have been recalculated following the issue of revised mid-year estimates by ONS and differ from those published in previous reports.

Commentary on Maps

Overview

- 22 The maps in this report show the SPRs for 2005/06. They show that there were large variations in levels of participation in HE between Unitary Authorities in this year. Residents of certain Unitary Authorities were found to be two or three times as likely to be studying in HE than residents of other Unitary Authorities. For information on SPRs for 2003/04 and 2004/05 please refer to Annex A.
- 23 The Unitary Authorities with the lowest SPRs in the south were Blaenau Gwent, Caerphilly and Torfaen, and in the north were Wrexham and Flintshire. The highest SPRs were found in Conwy, Carmarthenshire, and Ceredigion.

Participation by mode of study

- 24 The SPRs for Welsh domiciled HE students were analysed by full-time and part-time study, shown in Maps 2 and 3 respectively. In these maps, postgraduate research students (PGR) have been excluded due to the different nature of their study. There were more Unitary Authorities with participation rates below the national average for part-time students, and the range was wider with Ceredigion having an SPR 67 per cent greater than the national average and Blaenau Gwent having an SPR 36 per cent below. For full-time students Monmouthshire had the greatest participation with a rate of 42 per cent above the national average and Blaenau Gwent had the lowest at 33 per cent below.
- 25 Excluding students studying for low-credit courses from the analysis for part-time study (Map 4), shows that the national variation in part-time participation rates is slightly less with Ceredigion having an SPR of 65 per cent above the national average and Blaenau Gwent having an SPR 34 per cent below. A student on a low-credit course is defined as a student who is

studying for less than 10 per cent of a full time equivalent (FTE). The Unitary Authorities with the largest proportion of part-time students who were enrolled on low-credit courses were Gwynedd with 30 per cent of part-time students on low-credit courses, Isle of Anglesey with 28 per cent and Swansea with 27 per cent. (See Table 7b, Annex A.)

Participation of full-time undergraduate students by age

- 26 SPRs for full-time undergraduate students were analysed by age (Maps 5 and 6). Over eighty per cent of full-time undergraduates were under 25 and the participation levels for this age group varied widely across Wales. Notably, Ceredigion had a very low participation rate for this group of students. This may to some extent be due to the limitations of the method used to determine a census population with students enumerated at their home address. Further details are given in Annex B. The participation rates for the full-time undergraduates aged over 25 also varied widely across Wales but the distribution was quite different to that for young undergraduates. For example, Unitary Authorities such as Pembrokeshire, Powys and Monmouthshire which had high SPRs for full-time undergraduate students aged under 25, had low SPRs for those aged 25 and older.

Participation by gender

- 27 The national participation rates for female students were higher than those for male students. There wasn't a strong regional component to the difference in rates between male and female students, both sharing a similar participation distribution across Wales. This can be seen in the similarities between Maps 7 and 8. Cardiff, Ceredigion, Powys and Denbighshire saw the largest differences between the participation of male and female students. In Cardiff, participation of female students was equivalent to the national average, and for male students was 18 per cent above average. In Ceredigion participation of female students was 27 per cent above average while for male students it was 10 per cent above average. In Powys the participation rate for female students was 13 per cent above average and for male students was 3 per cent below average. In Denbighshire the participation rate for female students was 12 per cent above average and for male students was 3 per cent below average.

Ethnicity

- 28 In the 2005/06 academic year, 5 per cent (4,833) of the Welsh domiciled student population were from ethnic minorities. The numbers of students from ethnic minorities coming from each Unitary Authority varied from 39 in Isle of Anglesey to 1,918 in Cardiff. Due to the small numbers involved and the high concentration of ethnic minorities living in urban Cardiff, Swansea

and Newport, it has not been possible to provide a meaningful map of participation rates broken down by ethnicity. However, it can be noted that the 2001 census showed that only 2.1 per cent of the Welsh population aged 16 and over were from ethnic minorities. Therefore, overall, ethnic minorities are well-represented within HE. However, this picture is unlikely to be consistently true across all ethnic groups and all areas of Wales.

Unitary Authority Profile

- 29 A comparison of the SPRs calculated for each age, mode of study and gender group within each Unitary Authority is displayed in the charts of Section 2. Whilst the SPRs may be similar across groups, in some Unitary Authorities they vary.
- 30 For example, in Blaenau Gwent with the exception of full-time undergraduates aged 25 and over, participation is greatly below the national average for each group (all more than 30 per cent below the national average) and appears highlighted in red in each relevant map. Participation amongst full-time undergraduates aged 25 and over in Blaenau Gwent, is however, still below average. In Conwy participation is greatly above the national average for each group (all more than 20 per cent above the national average) and appears highlighted in dark green on each relevant map.
- 31 In Swansea, although participation in the groups varies below and above the national average, participation is close to the national average for each group, except full-time undergraduates aged 25 and over and part-time students (excluding low credit), as they are all within +/- 5 per cent of the national average (appear highlighted in yellow in the relevant maps). Participation of part-time students (excluding low credit) from Swansea is below average, at 13 per cent below the national average and participation of full-time undergraduates aged 25 and over is above average at 13 per cent above. In Monmouthshire there is great variation in participation between the different groups. Participation of part-time students is close to the national average; participation of full-time undergraduates aged under 25 years is greatly above the national average (54 per cent above) but participation of full-time undergraduates aged 25 and over is below the national average (11 per cent below).

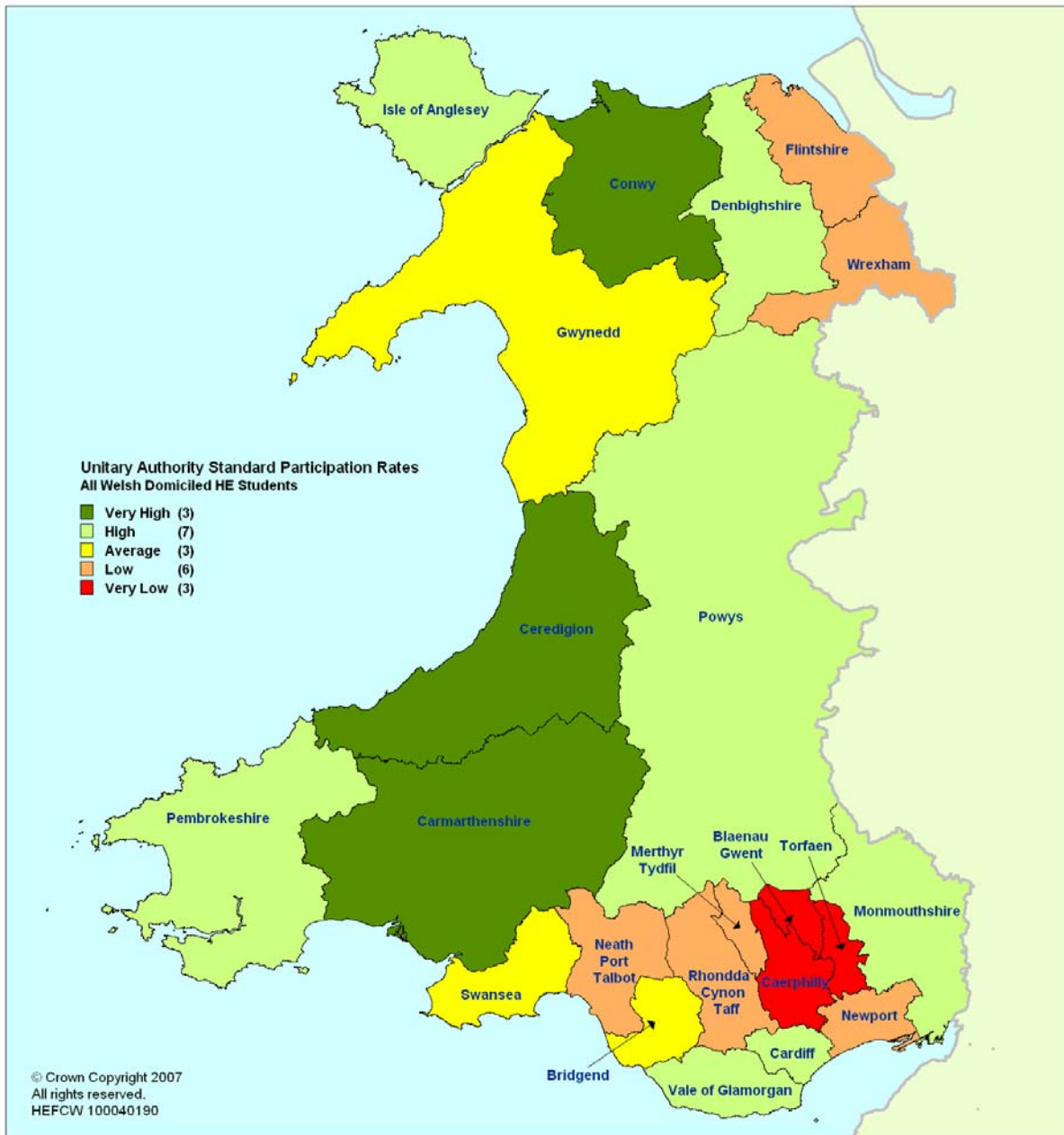
- 32 It can be seen that participation of full-time undergraduates aged under 25 from Ceredigion appears to be greatly below the national average (25 per cent below). As noted in paragraph 26 this may not reflect the true position due to the limitations of the census data available, discussed in Annex B. However, it can be seen in Ceredigion that participation of part-time students is greatly above average (67 per cent above). If insufficient students enumerated at their term-time address have been removed from the population as noted in Annex B, this implies that the part-time participation figure for Ceredigion would increase further if fully accurate population data were available.

Participation Rate Trends

- 33 Tables 6a-6d of Annex A compare student SPRs calculated for the academic years 2003/04, 2004/05 and 2005/06. As all three sets of figures are SPRs which have been normalised to the yearly national average rates broken down by gender and age, it is not appropriate to compare the SPRs from different years directly. However, the standard deviation (shown in the tables) can be used to measure the variation of participation rates across the country, where the larger the standard deviation the greater the variation in rates.
- 34 The national variation in student participation rates by Unitary Authority of domicile in 2005/06 was higher than in 2003/04. That is, between 2003/04 and 2005/06 there was a widening of the relative gap between areas of high and low participation. This trend is also true for part-time students, however there was less variation in participation rates in 2005/06 than 2003/04 for full-time students (Tables 6a and 6b). The difference in variation between 2005/06 and 2003/04 was greatest for part-time students excluding those studying low credit courses. This can be illustrated by considering the student numbers in Table 7b. The number of part-time students, excluding those studying low credit courses, in 2005/06 was similar to the number in 2003/04, however the total number of these students from the low participation areas Caerphilly, Torfaen and Blaenau Gwent has fallen by 9 per cent, while the number from the high participation areas Ceredigion, Conwy and Cardiff has risen by 9 per cent. It can be seen that the change varies widely across the Unitary Authorities. These differences between growth rates are causing the variation in participation to widen for this group of students.
- 35 Future analyses will continue to monitor the gap between low and high participation areas for all students, and in particular the widening gap for part-time students excluding those studying low credit courses.

SECTION 1

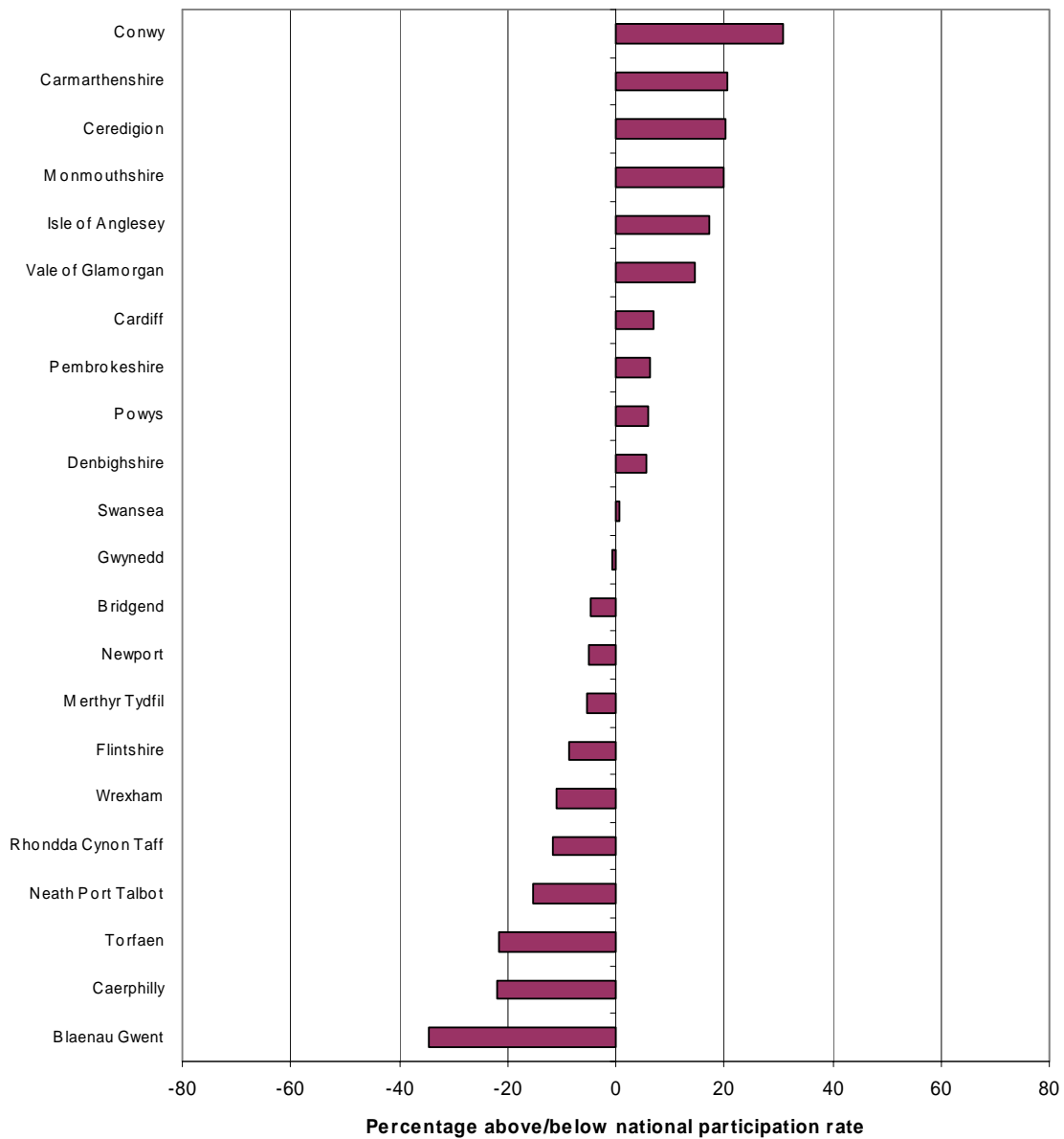
Map 1: Standard Participation Rates for all Welsh Domiciled HE Students in 2005/06



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	17	Neath Port Talbot	-15
Gwynedd	-1	Bridgend	-5
Conwy	31	Vale of Glamorgan	15
Denbighshire	6	Rhondda Cynon Taff	-12
Flintshire	-9	Merthyr Tydfil	-5
Wrexham	-11	Caerphilly	-22
Powys	6	Blaenau Gwent	-35
Ceredigion	20	Torfaen	-22
Pembrokeshire	6	Monmouthshire	20
Carmarthenshire	21	Newport	-5
Swansea	1	Cardiff	7

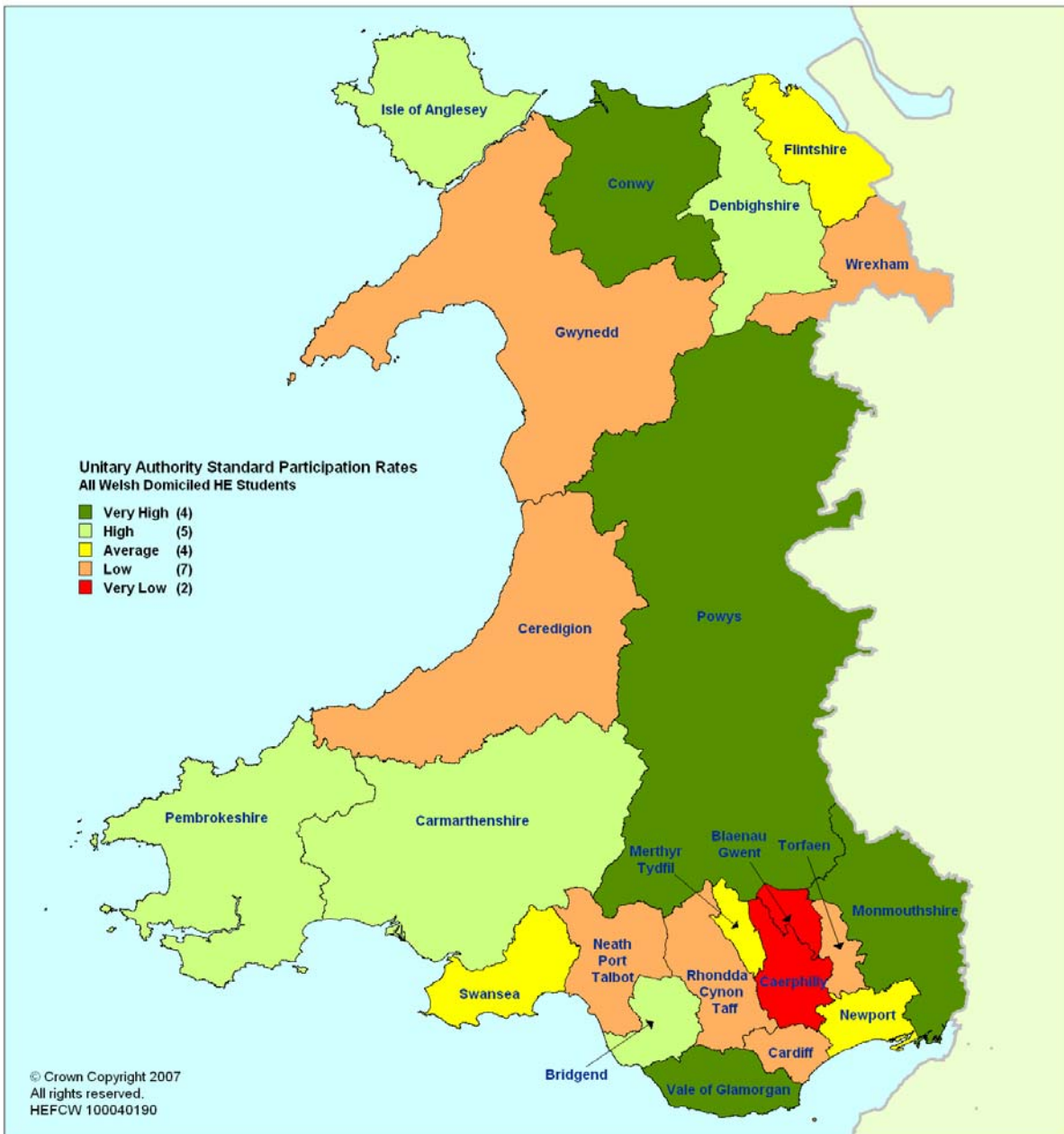
Note: Due to rounding the figures in this table may appear to indicate that a unitary authority lies in a different band to that shown in the map.

Chart 1: Standard Participation Rates for all Welsh Domiciled HE Students in 2005/06



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	17	Neath Port Talbot	-15
Gwynedd	-1	Bridgend	-5
Conwy	31	Vale of Glamorgan	15
Denbighshire	6	Rhondda Cynon Taff	-12
Flintshire	-9	Merthyr Tydfil	-5
Wrexham	-11	Caerphilly	-22
Powys	6	Blaenau Gwent	-35
Ceredigion	20	Torfaen	-22
Pembrokeshire	6	Monmouthshire	20
Carmarthenshire	21	Newport	-5
Swansea	1	Cardiff	7

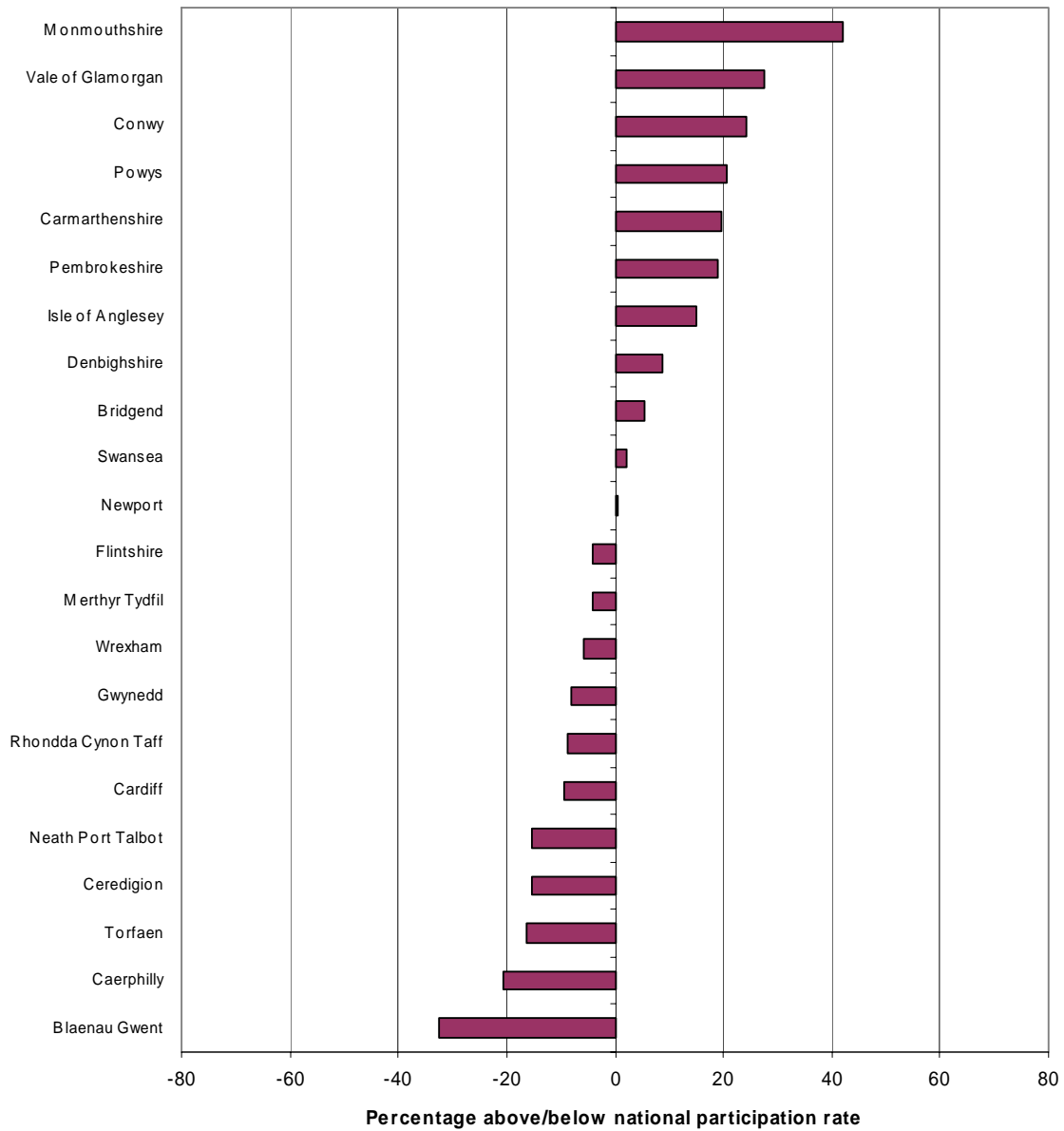
Map 2: Standard Participation Rates for Full-time Welsh domiciled HE Students in 2005/06 (excluding PGR students)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	15	Neath Port Talbot	-15
Gwynedd	-8	Bridgend	5
Conwy	24	Vale of Glamorgan	28
Denbighshire	9	Rhondda Cynon Taff	-9
Flintshire	-4	Merthyr Tydfil	-4
Wrexham	-6	Caerphilly	-21
Powys	21	Blaenau Gwent	-33
Ceredigion	-15	Torfaen	-16
Pembrokeshire	19	Monmouthshire	42
Carmarthenshire	19	Newport	0
Swansea	2	Cardiff	-9

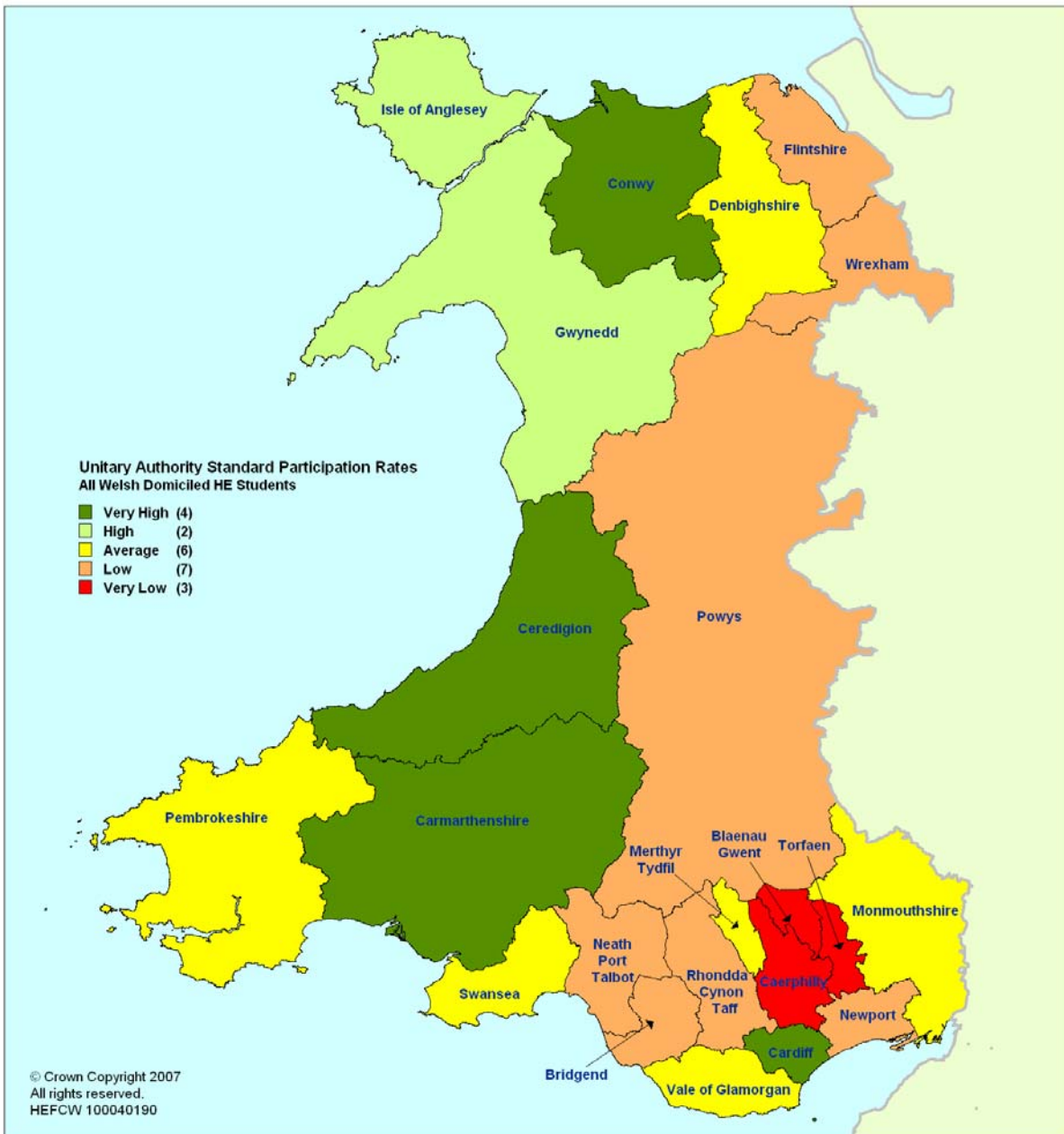
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Chart 2: Standard Participation Rates for Full-time Welsh domiciled HE Students in 2005/06 (excluding PGR students)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	15	Neath Port Talbot	-15
Gwynedd	-8	Bridgend	5
Conwy	24	Vale of Glamorgan	28
Denbighshire	9	Rhondda Cynon Taff	-9
Flintshire	-4	Merthyr Tydfil	-4
Wrexham	-6	Caerphilly	-21
Powys	21	Blaenau Gwent	-33
Ceredigion	-15	Torfaen	-16
Pembrokeshire	19	Monmouthshire	42
Carmarthenshire	19	Newport	0
Swansea	2	Cardiff	-9

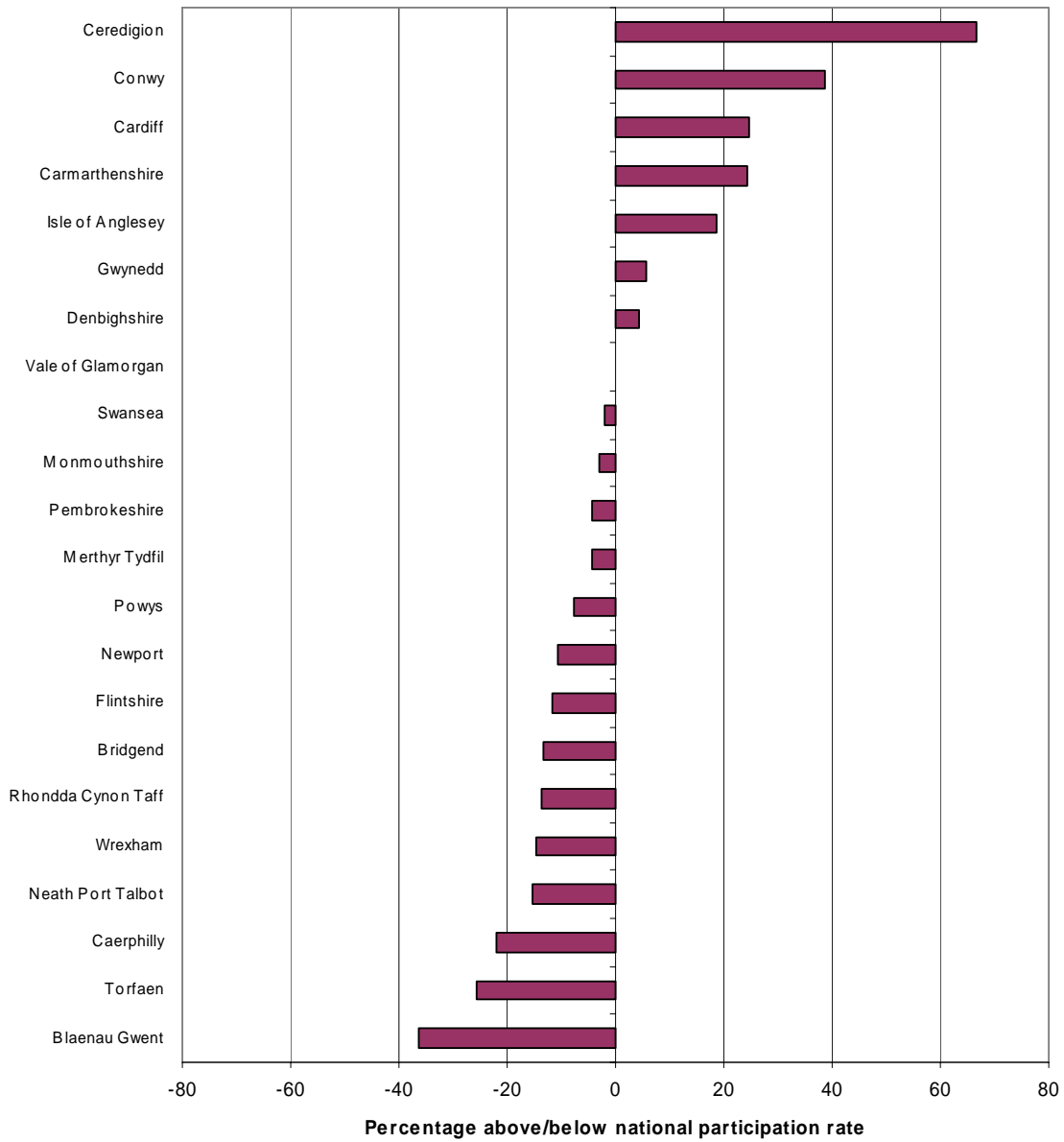
Map 3: Standard Participation Rates for Part-time Welsh domiciled HE Students in 2005/06 (excluding PGR students)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	19	Neath Port Talbot	-15
Gwynedd	6	Bridgend	-13
Conwy	39	Vale of Glamorgan	0
Denbighshire	4	Rhondda Cynon Taff	-14
Flintshire	-12	Merthyr Tydfil	-4
Wrexham	-15	Caerphilly	-22
Powys	-8	Blaenau Gwent	-36
Ceredigion	67	Torfaen	-26
Pembrokeshire	-4	Monmouthshire	-3
Carmarthenshire	24	Newport	-11
Swansea	-2	Cardiff	25

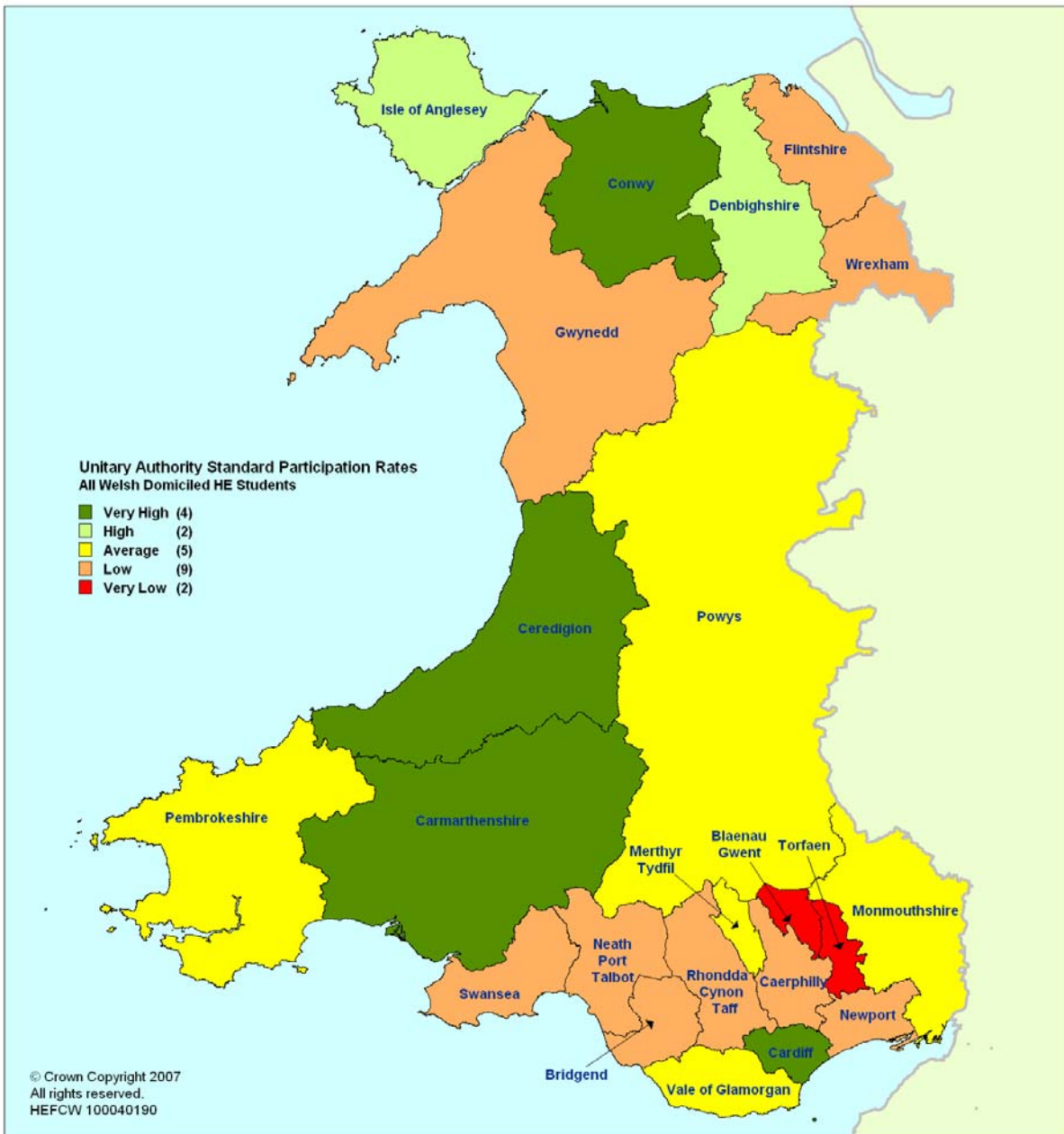
Note: Due to rounding the figures in this table may appear to indicate that a unitary authority lies in a different band to that shown in the map.

Chart 3: Standard Participation Rates for Part-time Welsh domiciled HE Students in 2005/06 (excluding PGR students)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	19	Neath Port Talbot	-15
Gwynedd	6	Bridgend	-13
Conwy	39	Vale of Glamorgan	0
Denbighshire	4	Rhondda Cynon Taff	-14
Flintshire	-12	Merthyr Tydfil	-4
Wrexham	-15	Caerphilly	-22
Powys	-8	Blaenau Gwent	-36
Ceredigion	67	Torfaen	-26
Pembrokeshire	-4	Monmouthshire	-3
Carmarthenshire	24	Newport	-11
Swansea	-2	Cardiff	25

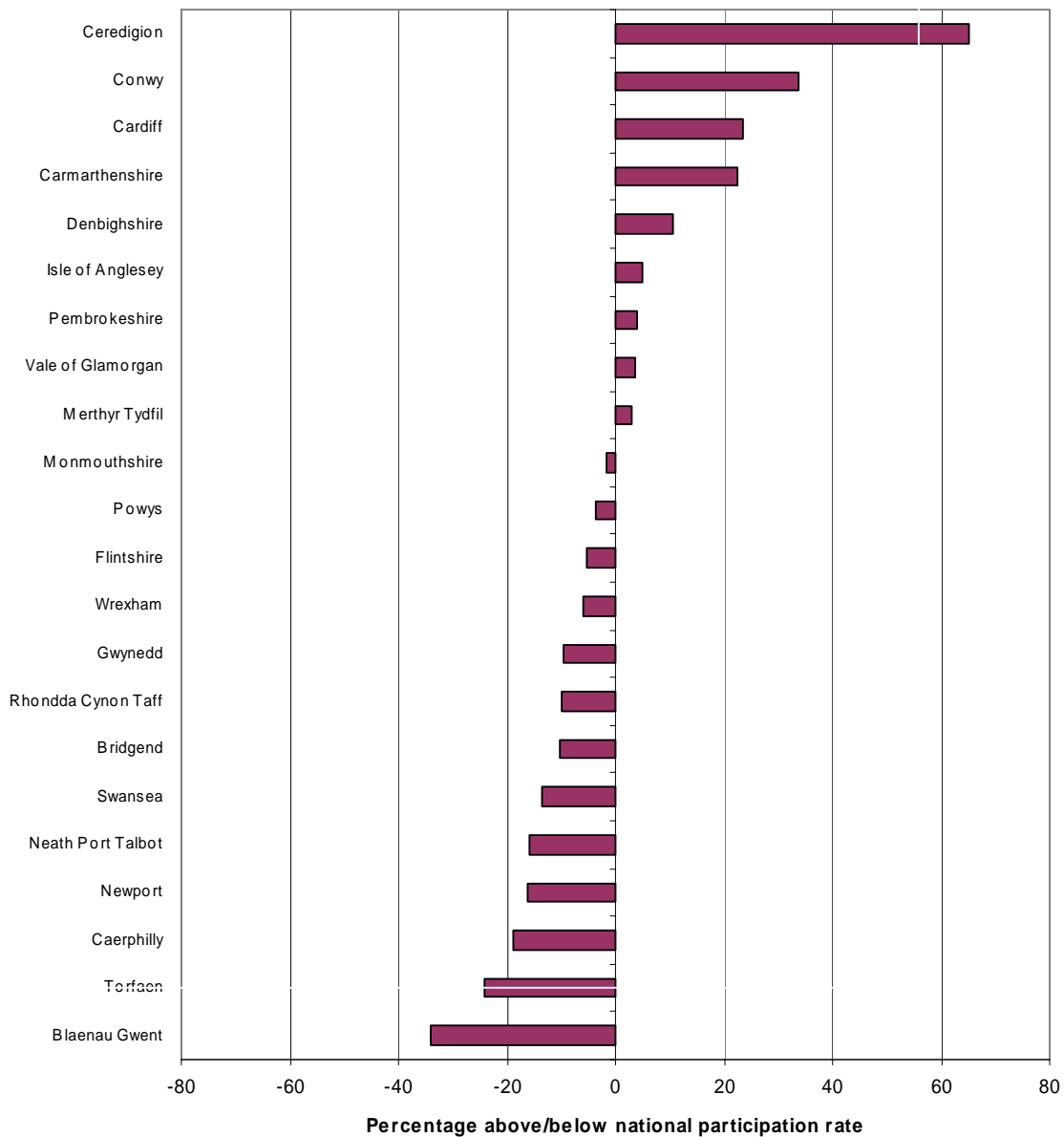
Map 4: Standard Participation Rates for Part-time Welsh domiciled HE Students in 2005/06 (excluding PGR and low credit students)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	5	Neath Port Talbot	-16
Gwynedd	-10	Bridgend	-10
Conwy	34	Vale of Glamorgan	4
Denbighshire	10	Rhondda Cynon Taff	-10
Flintshire	-5	Merthyr Tydfil	3
Wrexham	-6	Caerphilly	-19
Powys	-3	Blaenau Gwent	-34
Ceredigion	65	Torfaen	-24
Pembrokeshire	4	Monmouthshire	-2
Carmarthenshire	22	Newport	-16
Swansea	-13	Cardiff	24

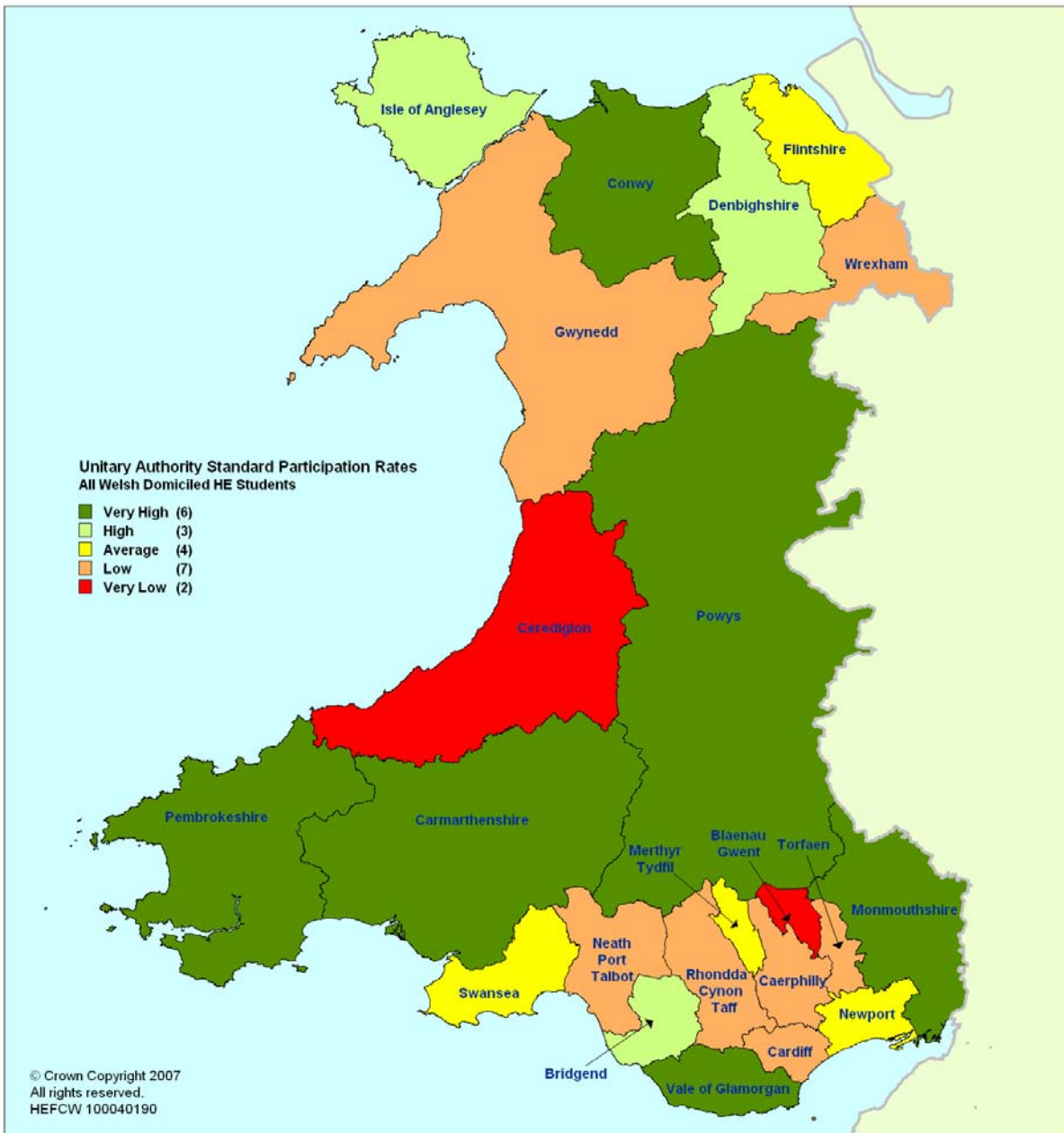
Note: Due to rounding the figures in this table may appear to indicate that a unitary authority lies in a different band to that shown in the map.

Chart 4: Standard Participation Rates for Part-time Welsh domiciled HE Students in 2005/06 (excluding PGR and low credit students)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	5	Neath Port Talbot	-16
Gwynedd	-10	Bridgend	-10
Conwy	34	Vale of Glamorgan	4
Denbighshire	10	Rhondda Cynon Taff	-10
Flintshire	-5	Merthyr Tydfil	3
Wrexham	-6	Caerphilly	-19
Powys	-3	Blaenau Gwent	-34
Ceredigion	65	Torfaen	-24
Pembrokeshire	4	Monmouthshire	-2
Carmarthenshire	22	Newport	-16
Swansea	-13	Cardiff	24

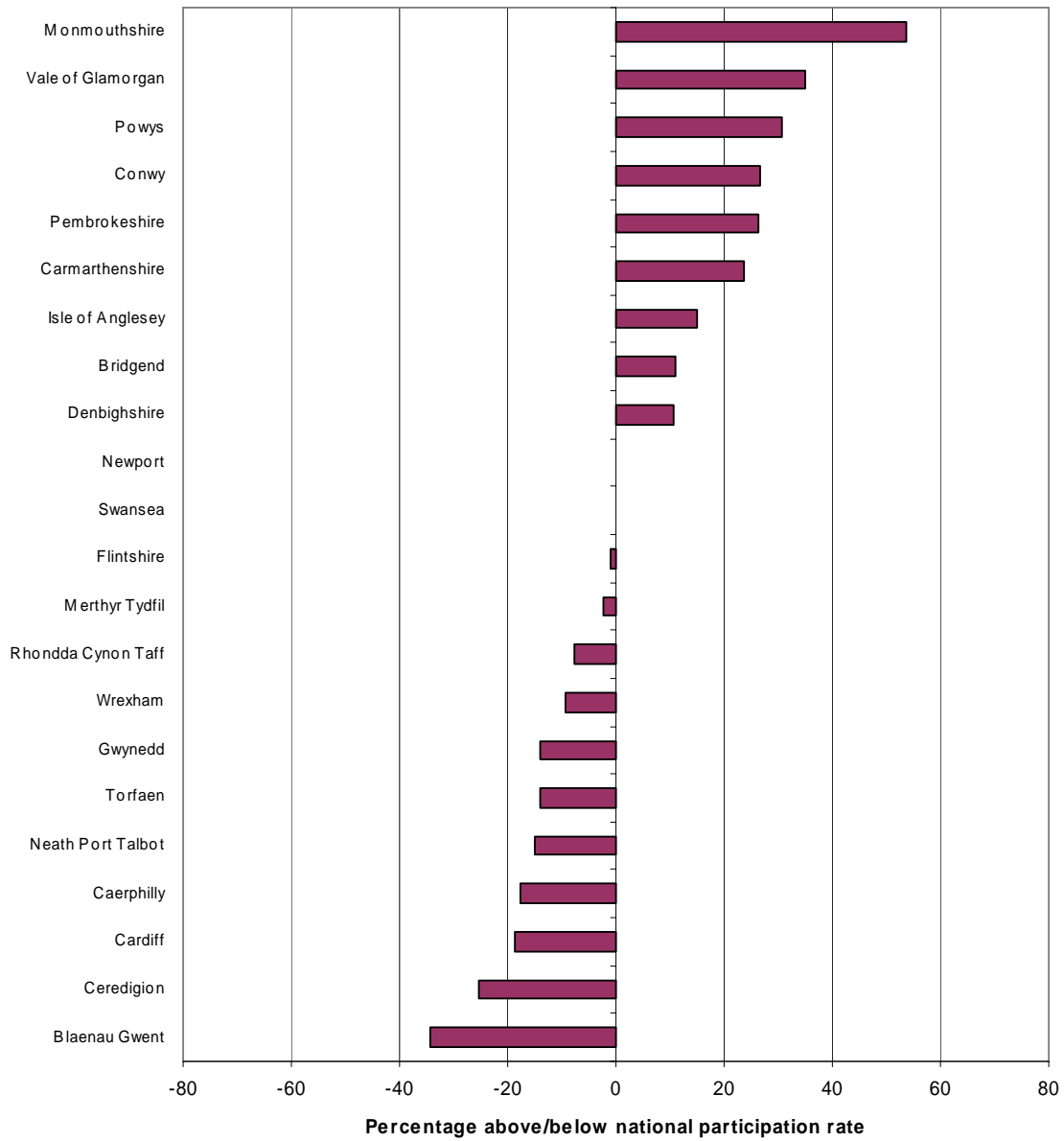
Map 5: Standard Participation Rates Full-time Welsh domiciled HE Students in 2005/06 (undergraduates under 25 years of age)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	15	Neath Port Talbot	-15
Gwynedd	-14	Bridgend	11
Conwy	27	Vale of Glamorgan	35
Denbighshire	11	Rhondda Cynon Taff	-8
Flintshire	-1	Merthyr Tydfil	-2
Wrexham	-9	Caerphilly	-18
Powys	31	Blaenau Gwent	-34
Ceredigion	-25	Torfaen	-14
Pembrokeshire	26	Monmouthshire	54
Carmarthenshire	24	Newport	0
Swansea	0	Cardiff	-19

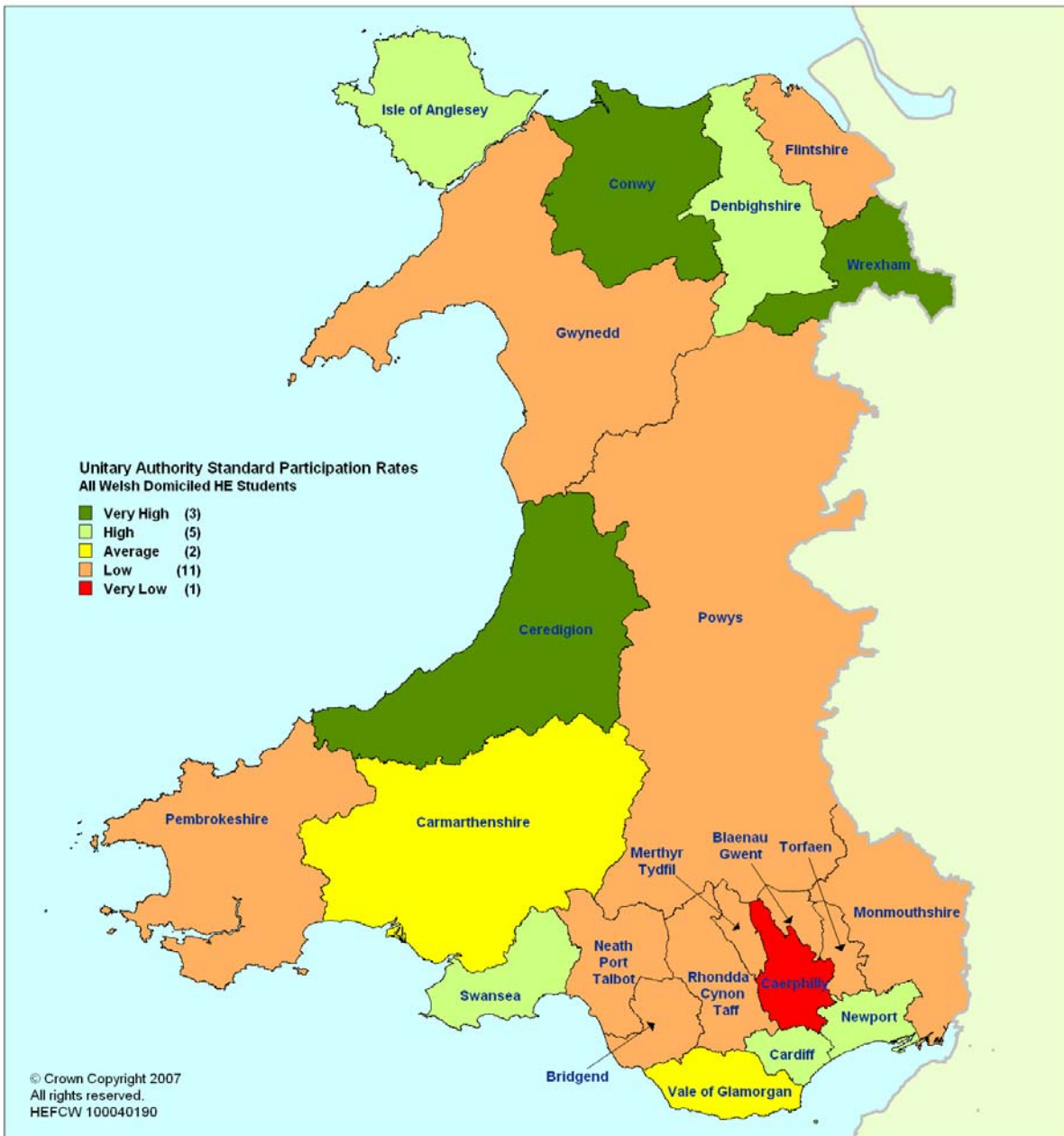
Note: Due to rounding the figures in this table may appear to indicate that a unitary authority lies in a different band to that shown in the map.

Chart 5: Standard Participation Rates Full-time Welsh domiciled HE Students in 2005/06 (undergraduates under 25 years of age)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	15	Neath Port Talbot	-15
Gwynedd	-14	Bridgend	11
Conwy	27	Vale of Glamorgan	35
Denbighshire	11	Rhondda Cynon Taff	-8
Flintshire	-1	Merthyr Tydfil	-2
Wrexham	-9	Caerphilly	-18
Powys	31	Blaenau Gwent	-34
Ceredigion	-25	Torfaen	-14
Pembrokeshire	26	Monmouthshire	54
Carmarthenshire	24	Newport	0
Swansea	0	Cardiff	-19

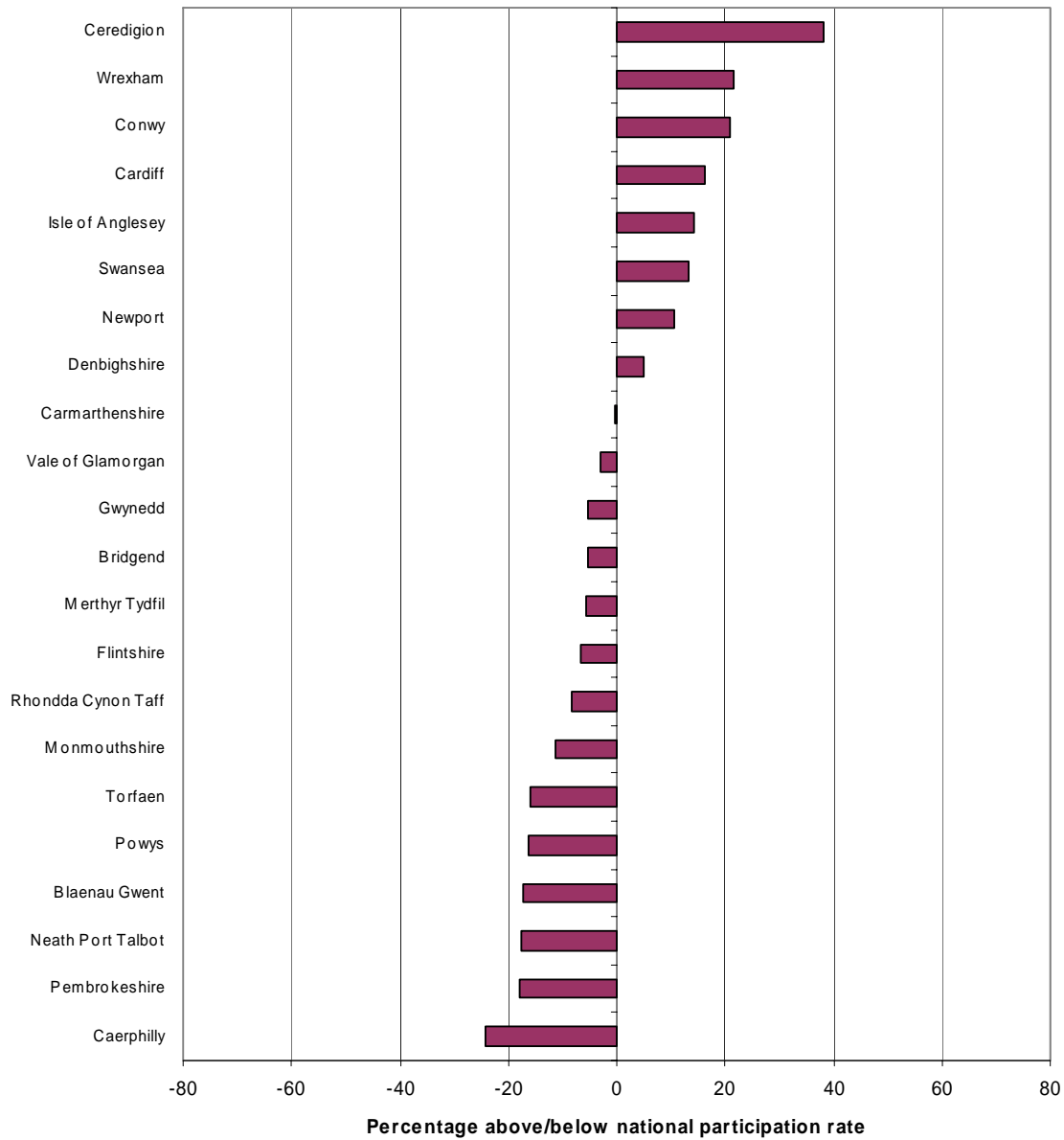
Map 6: Standard Participation Rates Full-time Welsh domiciled HE Students in 2005/06 (undergraduates 25 years of age or older)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	14	Neath Port Talbot	-18
Gwynedd	-5	Bridgend	-5
Conwy	21	Vale of Glamorgan	-3
Denbighshire	5	Rhondda Cynon Taff	-8
Flintshire	-7	Merthyr Tydfil	-6
Wrexham	21	Caerphilly	-24
Powys	-16	Blaenau Gwent	-17
Ceredigion	38	Torfaen	-16
Pembrokeshire	-18	Monmouthshire	-11
Carmarthenshire	0	Newport	11
Swansea	13	Cardiff	16

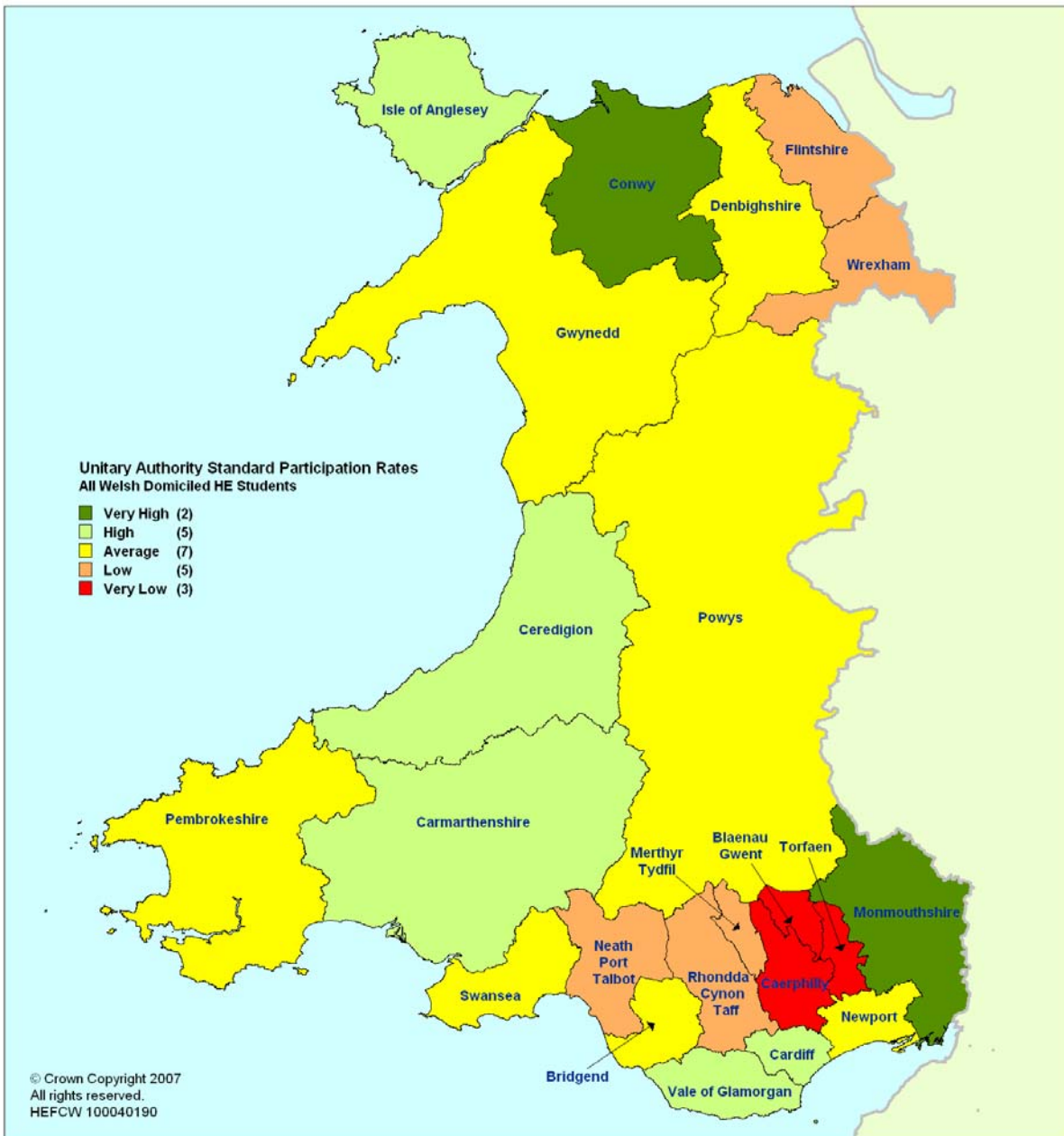
Note: Due to rounding the figures in this table may appear to indicate that a unitary authority lies in a different band to that shown in the map.

Chart 6: Standard Participation Rates for Full-time Welsh domiciled HE Students in 2005/06 (undergraduates 25 years of age or older)



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	14	Neath Port Talbot	-18
Gwynedd	-5	Bridgend	-5
Conwy	21	Vale of Glamorgan	-3
Denbighshire	5	Rhondda Cynon Taff	-8
Flintshire	-7	Merthyr Tydfil	-6
Wrexham	21	Caerphilly	-24
Powys	-16	Blaenau Gwent	-17
Ceredigion	38	Torfaen	-16
Pembrokeshire	-18	Monmouthshire	-11
Carmarthenshire	0	Newport	11
Swansea	13	Cardiff	16

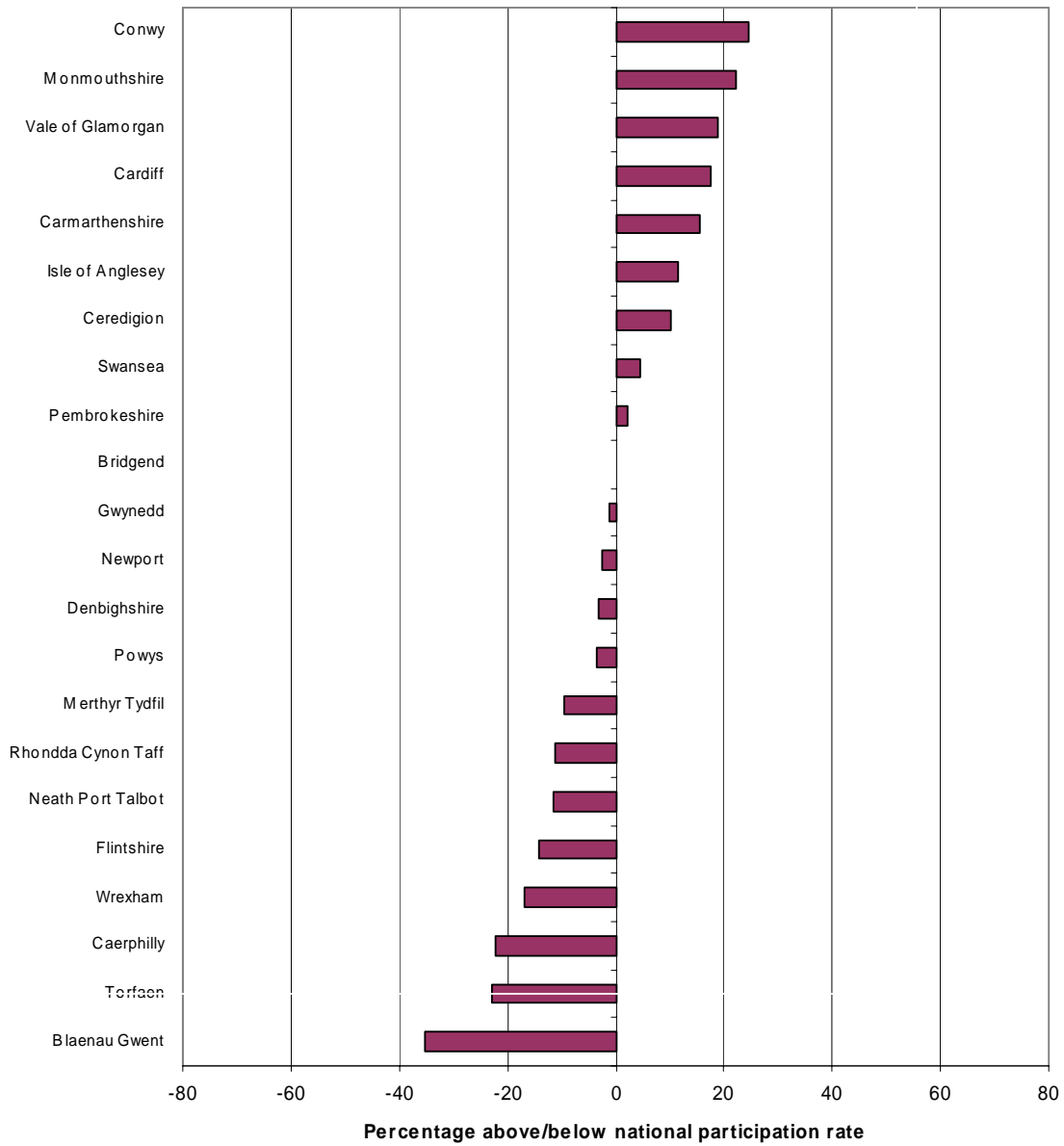
Map 7: Standard Participation Rates for Male Welsh domiciled HE Students in 2005/06



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	11	Neath Port Talbot	-12
Gwynedd	-1	Bridgend	0
Conwy	24	Vale of Glamorgan	19
Denbighshire	-3	Rhondda Cynon Taff	-11
Flintshire	-14	Merthyr Tydfil	-10
Wrexham	-17	Caerphilly	-22
Powys	-3	Blaenau Gwent	-35
Ceredigion	10	Torfaen	-23
Pembrokeshire	2	Monmouthshire	22
Carmarthenshire	16	Newport	-3
Swansea	4	Cardiff	18

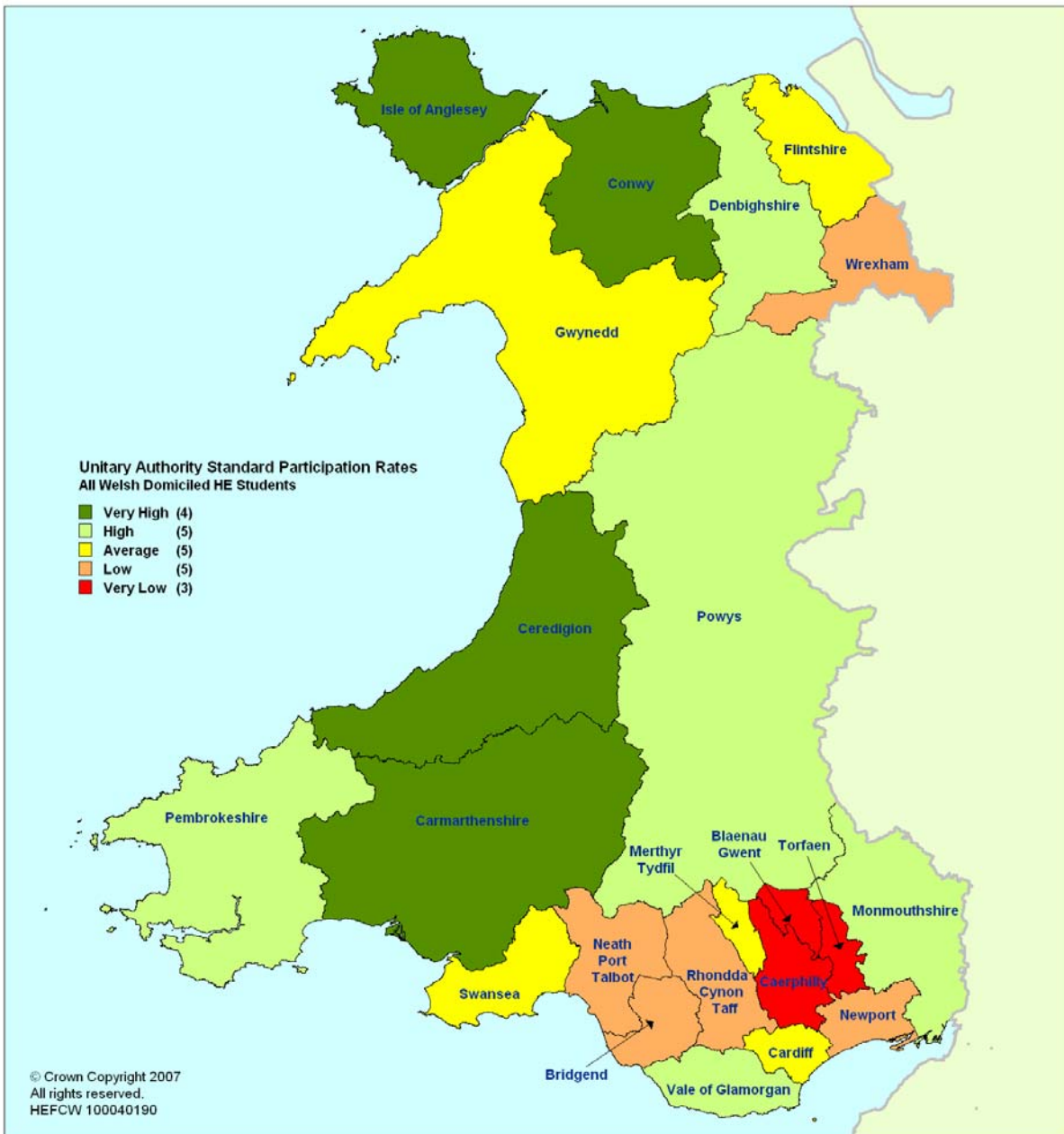
Note: Due to rounding the figures in this table may appear to indicate that a unitary authority lies in a different band to that shown in the map.

Chart 7: Standard Participation Rates for Male Welsh domiciled HE Students in 2005/06



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	11	Neath Port Talbot	-12
Gwynedd	-1	Bridgend	0
Conwy	24	Vale of Glamorgan	19
Denbighshire	-3	Rhondda Cynon Taff	-11
Flintshire	-14	Merthyr Tydfil	-10
Wrexham	-17	Caerphilly	-22
Powys	-3	Blaenau Gwent	-35
Ceredigion	10	Torfaen	-23
Pembrokeshire	2	Monmouthshire	22
Carmarthenshire	16	Newport	-3
Swansea	4	Cardiff	18

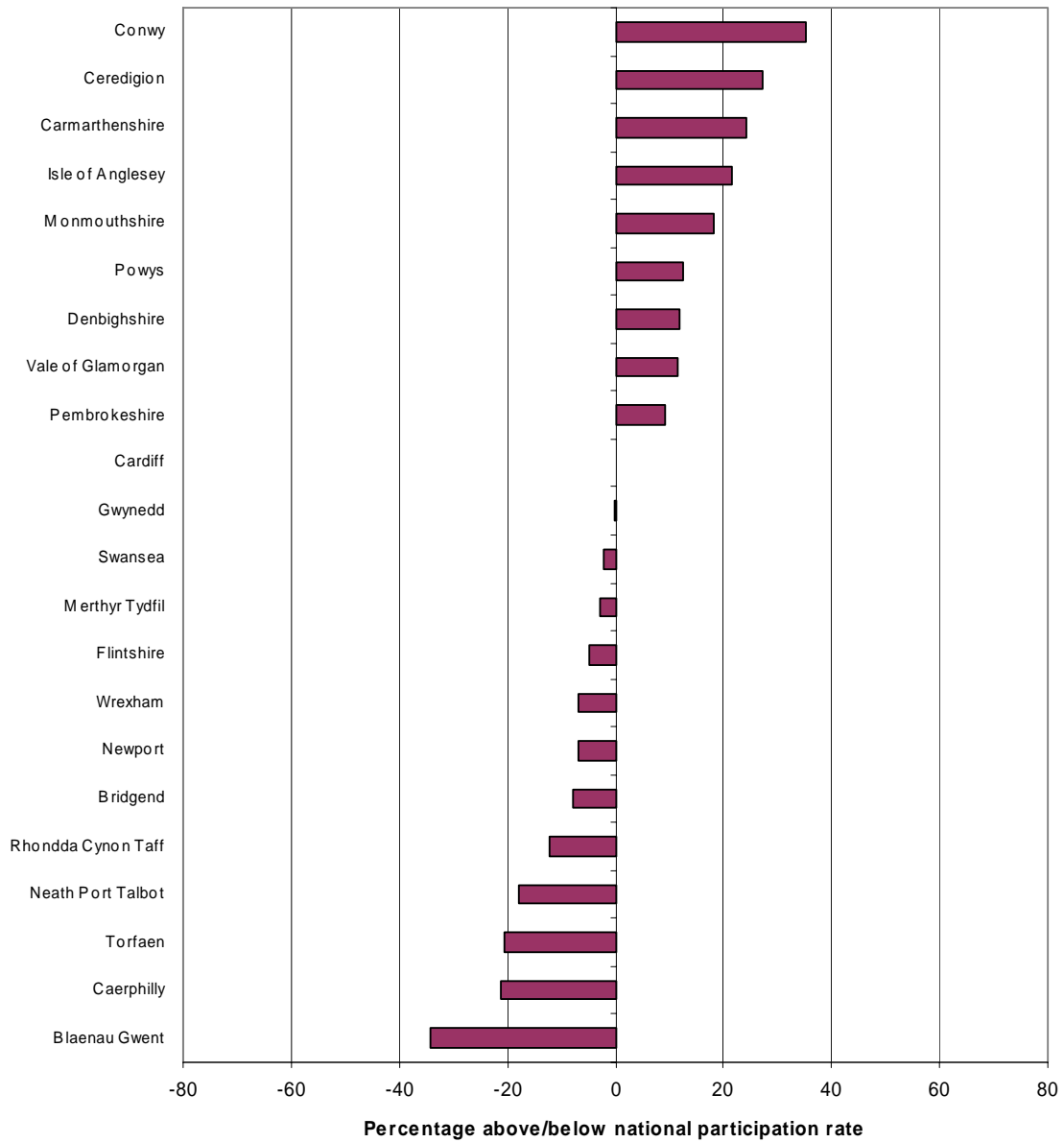
Map 8: Standard Participation Rates for Female Welsh domiciled HE Students in 2005/06



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	21	Neath Port Talbot	-18
Gwynedd	0	Bridgend	-8
Conwy	35	Vale of Glamorgan	12
Denbighshire	12	Rhondda Cynon Taff	-12
Flintshire	-5	Merthyr Tydfil	-3
Wrexham	-7	Caerphilly	-21
Powys	13	Blaenau Gwent	-34
Ceredigion	27	Torfaen	-20
Pembrokeshire	9	Monmouthshire	18
Carmarthenshire	24	Newport	-7
Swansea	-2	Cardiff	0

Note: Due to rounding the figures in this table may appear to indicate that a unitary authority lies in a different band to that shown in the map.

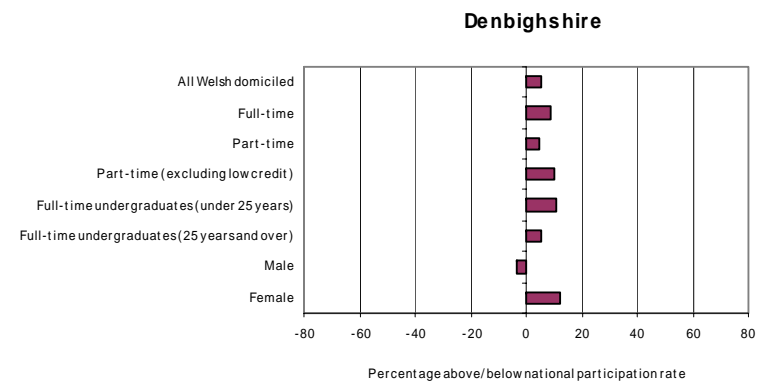
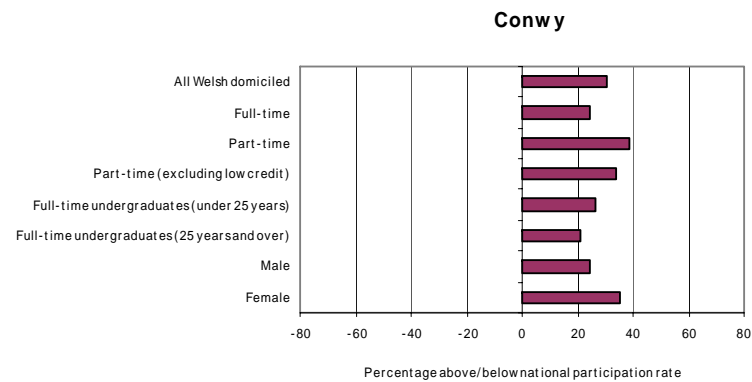
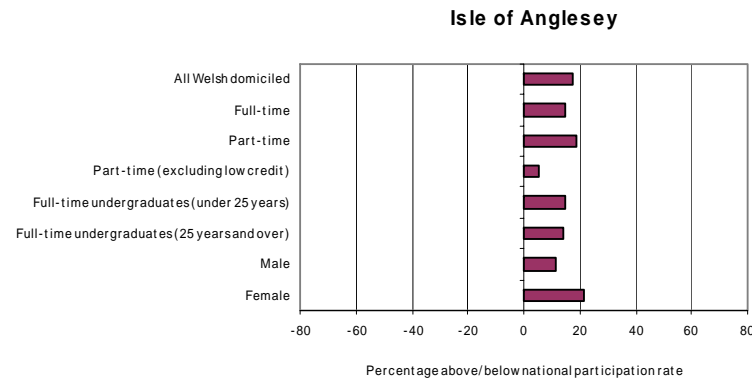
Chart 8: Standard Participation Rates for Female Welsh domiciled HE Students in 2005/06



Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	21	Neath Port Talbot	-18
Gwynedd	0	Bridgend	-8
Conwy	35	Vale of Glamorgan	12
Denbighshire	12	Rhondda Cynon Taff	-12
Flintshire	-5	Merthyr Tydfil	-3
Wrexham	-7	Caerphilly	-21
Powys	13	Blaenau Gwent	-34
Ceredigion	27	Torfaen	-20
Pembrokeshire	9	Monmouthshire	18
Carmarthenshire	24	Newport	-7
Swansea	-2	Cardiff	0

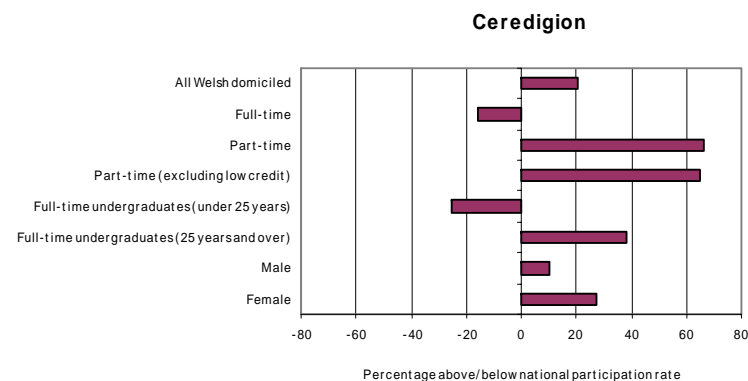
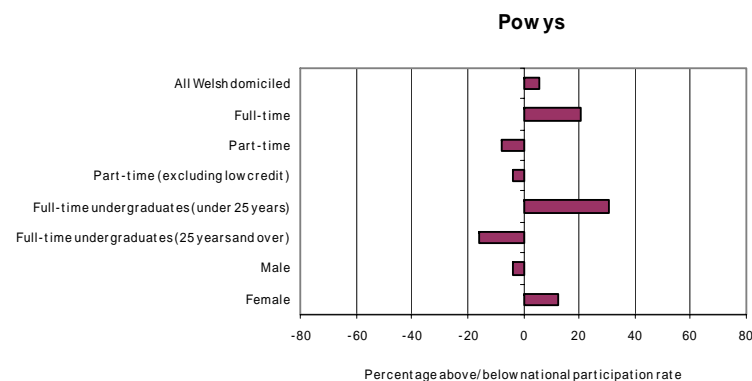
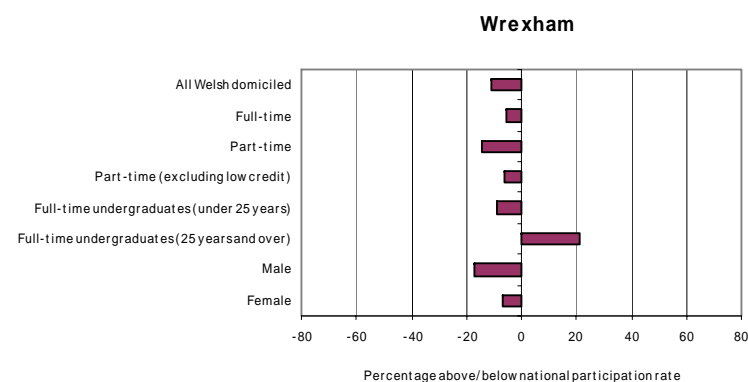
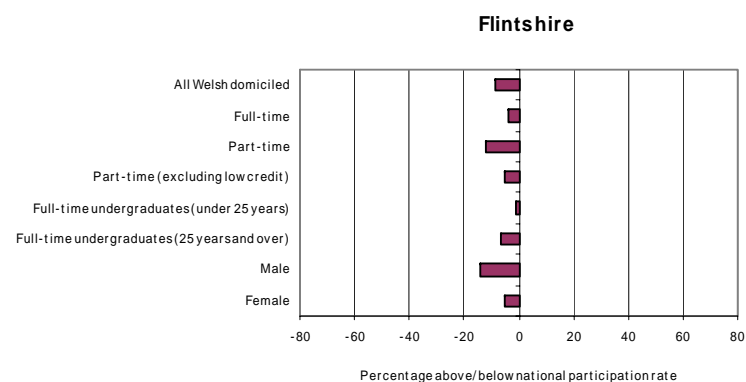
SECTION 2

Comparison of Standard Participation Rates for each Unitary Authority by age, mode of study and gender in 2005/06



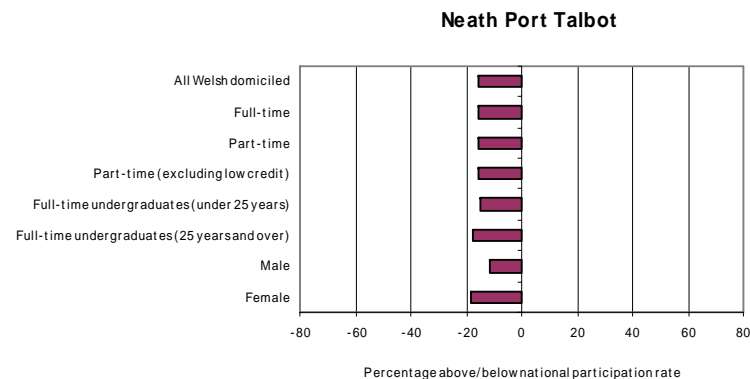
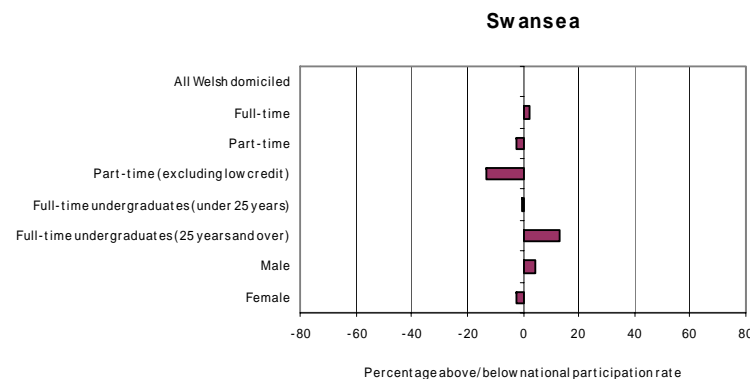
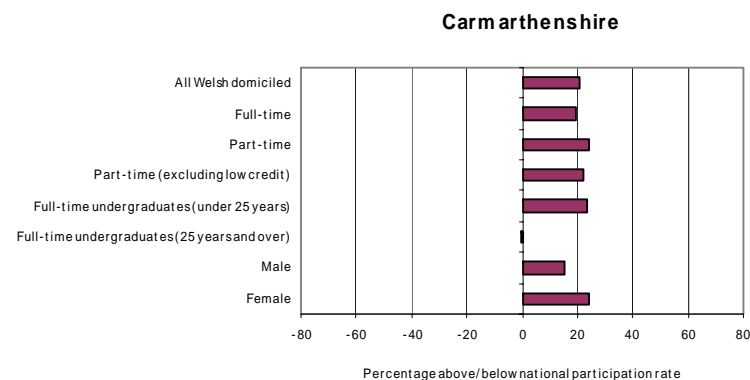
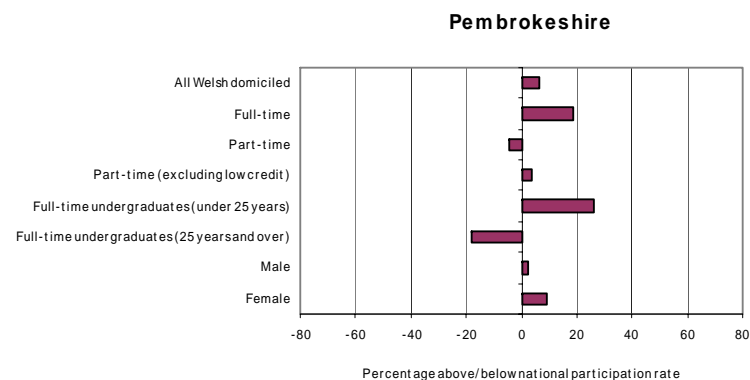
Unitary Authority	All Welsh domiciled	Full-time (excluding PGR)	Part-time (excluding PGR)	Part-time (excluding PGR and low credit)	Full-time undergraduates (under 25 years)	Full-time undergraduates (25 years and over)	Male	Female
Isle of Anglesey	17	15	19	5	15	14	11	21
Gwynedd	-1	-8	6	-10	-14	-5	-1	0
Conwy	31	24	39	34	27	21	24	35
Denbighshire	6	9	4	10	11	5	-3	12

Comparison of Standard Participation Rates for each Unitary Authority by age, mode of study and gender in 2005/06



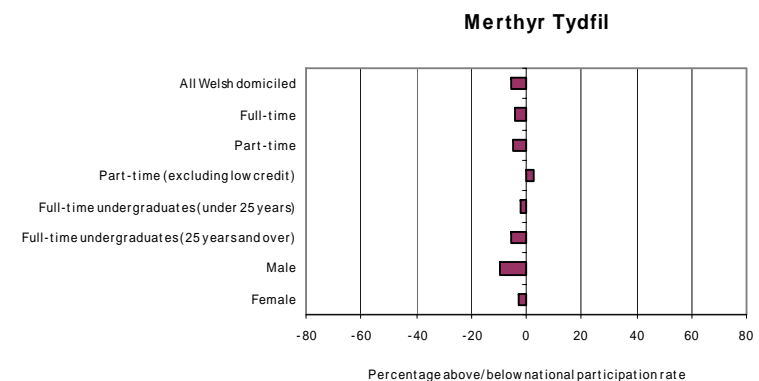
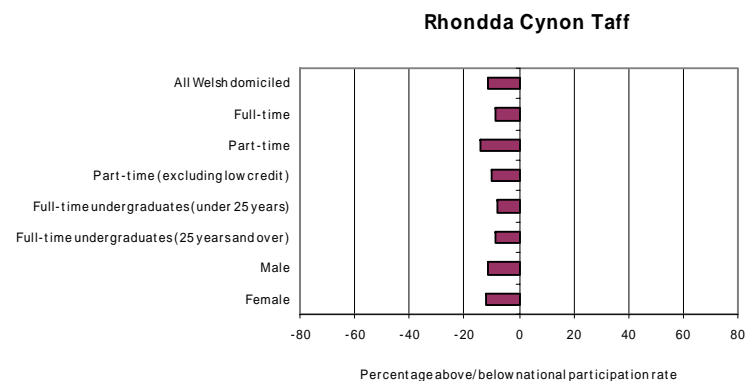
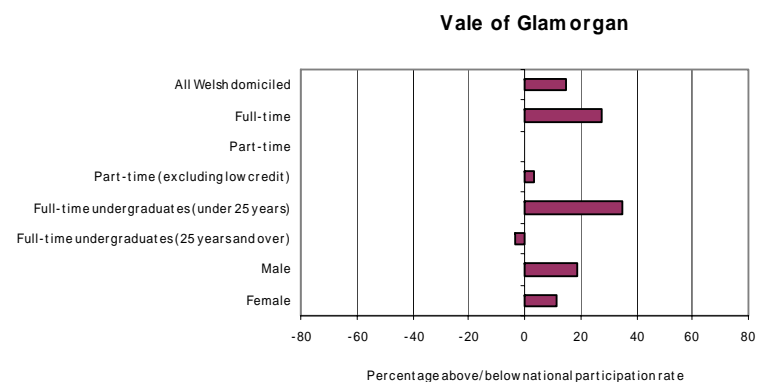
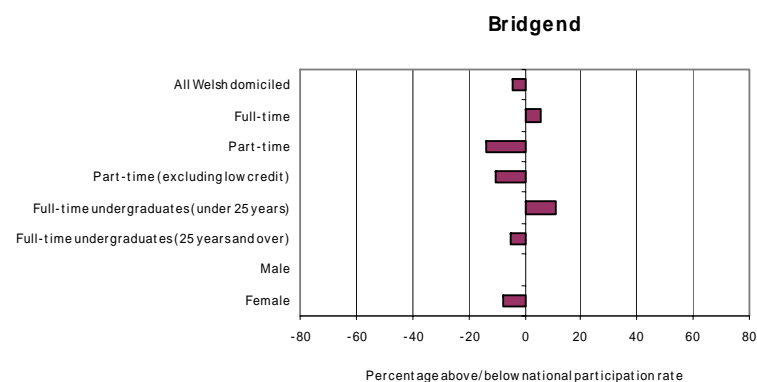
Unitary Authority	All Welsh domiciled	Full-time (excluding PGR)	Part-time (excluding PGR)	Part-time (excluding PGR and low credit)	Full-time undergraduates (under 25 years)	Full-time undergraduates (25 years and over)	Male	Female
Flintshire	-9	-4	-12	-5	-1	-7	-14	-5
Wrexham	-11	-6	-15	-6	-9	21	-17	-7
Powys	6	21	-8	-3	31	-16	-3	13
Ceredigion	20	-15	67	65	-25	38	10	27

Comparison of Standard Participation Rates for each Unitary Authority by age, mode of study and gender in 2005/06



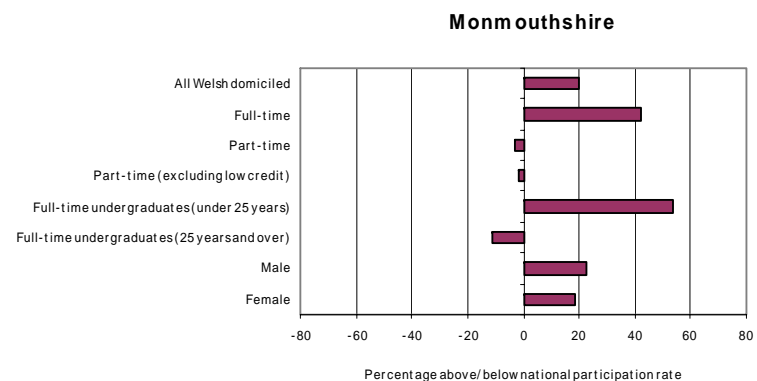
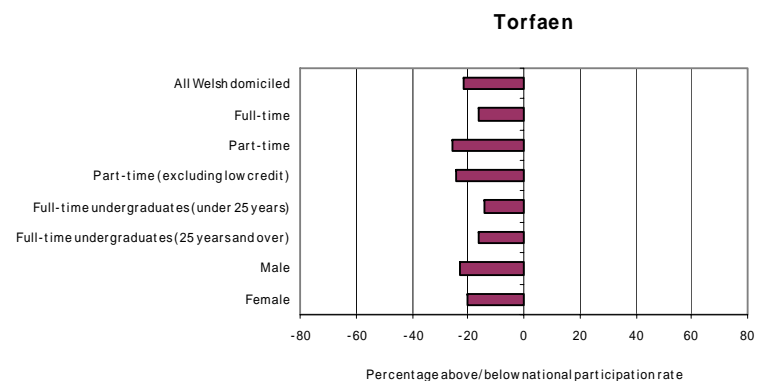
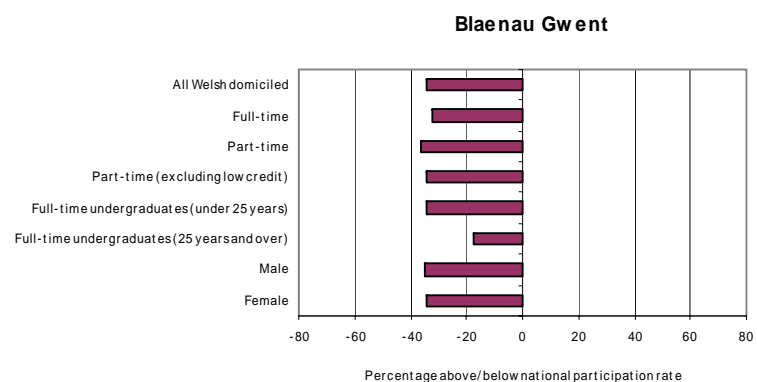
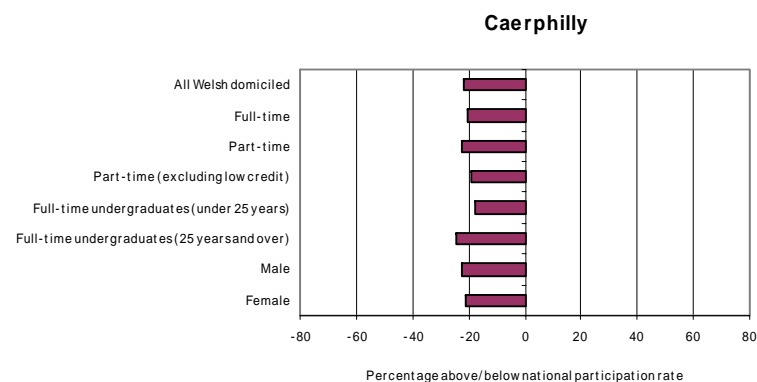
Unitary Authority	All Welsh domiciled	Full-time (excluding PGR)	Part-time (excluding PGR)	Part-time (excluding PGR and low credit)	Full-time undergraduates (under 25 years)	Full-time undergraduates (25 years and over)	Male	Female
Pembrokeshire	6	19	-4	4	26	-18	2	9
Carmarthenshire	21	19	24	22	24	0	16	24
Swansea	1	2	-2	-13	0	13	4	-2
Neath Port Talbot	-15	-15	-15	-16	-15	-18	-12	-18

Comparison of Standard Participation Rates for each Unitary Authority by age, mode of study and gender in 2005/06



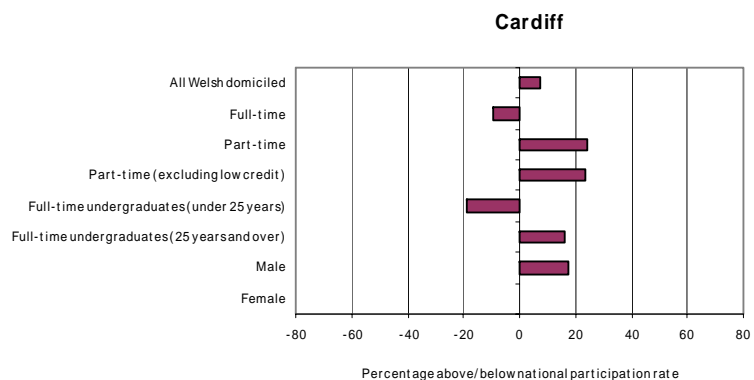
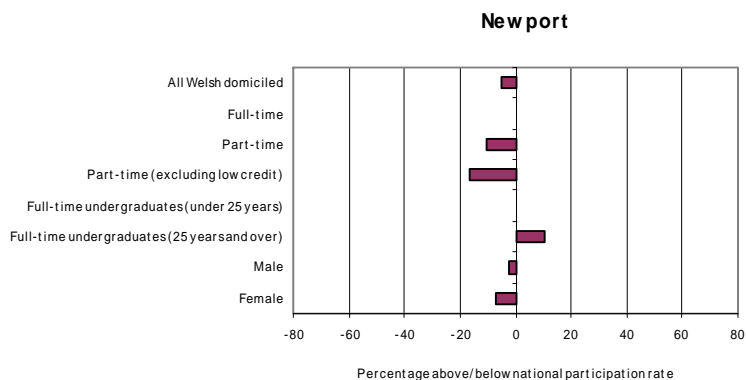
Unitary Authority	All Welsh domiciled	Full-time (excluding PGR)	Part-time (excluding PGR)	Part-time (excluding PGR and low credit)	Full-time undergraduates (under 25 years)	Full-time undergraduates (25 years and over)	Male	Female
Bridgend	-5	5	-13	-10	11	-5	0	-8
Vale of Glamorgan	15	28	0	4	35	-3	19	12
Rhondda Cynon Taff	-12	-9	-14	-10	-8	-8	-11	-12
Merthyr Tydfil	-5	-4	-4	3	-2	-6	-10	-3

Comparison of Standard Participation Rates for each Unitary Authority by age, mode of study and gender in 2005/06



Unitary Authority	All Welsh domiciled	Full-time (excluding PGR)	Part-time (excluding PGR)	Part-time (excluding PGR and low credit)	Full-time undergraduates (under 25 years)	Full-time undergraduates (25 years and over)	Male	Female
Caerphilly	-22	-21	-22	-19	-18	-24	-22	-21
Blaenau Gwent	-35	-33	-36	-34	-34	-17	-35	-34
Torfaen	-22	-16	-26	-24	-14	-16	-23	-20
Monmouthshire	20	42	-3	-2	54	-11	22	18

Comparison of Standard Participation Rates for each Unitary Authority by age, mode of study and gender in 2005/06



Unitary Authority	All Welsh domiciled	Full-time (excluding PGR)	Part-time (excluding PGR)	Part-time (excluding PGR and low credit)	Full-time undergraduates (under 25 years)	Full-time undergraduates (25 years and over)	Male	Female
Newport	-5	0	-11	-16	0	11	-3	-7
Cardiff	7	-9	25	24	-19	16	18	0

ANNEXES

ANNEX A : TABLES

Table 1 : Welsh Domiciled Students by Mode and Level of Study 2005/06

INSTITUTIONS	Full-time				Part-time				TOTAL
	UG (degree)	UG (other)	PG (taught)	PG (research)	UG (degree)	UG (other)	PG (taught)	PG (research)	
Welsh HEIs	29,118	2,905	3,008	1,023	3,899	24,954	6,269	696	71,872
UK (non-Welsh) HEIs	18,091	906	1,476	612	939	2,064	2,788	272	27,148
Open University	0	0	0	1	3,214	2,173	515	23	5,926
Welsh FECs	265	438	19	0	628	2,984	90	0	4,424
GB (non-Welsh) FECs	82	109	2	0	27	574	72	0	866
TOTAL	47,556	4,358	4,505	1,636	8,707	32,749	9,734	991	110,236

Notes :

- 1) UG = undergraduate, PG = postgraduate
- 2) UK = United Kingdom, GB = Great Britain, HEIs = Higher Education Institutions, FECs = Further Education Colleges

Table 2 : Welsh Domiciled Students by Gender, Mode of Study and Age Group 2005/06

INSTITUTIONS	Male				Female				TOTAL
	FT		PT		FT		PT		
	Under 25	25 and over	Under 25	25 and over	Under 25	25 and over	Under 25	25 and over	
Welsh HEIs	11,448	3,114	3,130	10,213	15,399	6,093	3,612	18,863	71,872
UK (non-Welsh) HEIs	8,803	871	472	2,177	10,547	864	505	2,909	27,148
Open University	0	1	242	2,199	0	0	499	2,985	5,926
Welsh FECs	213	112	395	1,105	206	191	401	1,801	4,424
GB (non-Welsh) FECs	83	15	61	279	81	14	60	273	866
TOTAL	20,547	4,113	4,300	15,973	26,233	7,162	5,077	26,831	110,236

Notes :

- 1) UK = United Kingdom, GB = Great Britain, HEIs = Higher Education Institutions, FECs = Further Education Colleges
- 2) Age is the student's age on 31st August 2005
- 3) Unknown ages are assumed to be aged 25 and over

Table 3 : Welsh Domiciled Students by Full-Time Equivalent 2005/06

INSTITUTIONS	Less than 10% of an FTE	Greater than 10% of an FTE	TOTAL
Welsh HEIs	7,905	63,967	71,872
UK (non-Welsh) HEIs	489	26,659	27,148
Open University	755	5,171	5,926
Welsh FECs	*	4,424	4,424
GB (non-Welsh) FECs	*	866	866
TOTAL	9,149	101,087	110,236

Notes :

1) UK = United Kingdom, GB = Great Britain HEIs = Higher Education Institutions, FECs = Further Education Colleges

2) FTE = Full-time equivalent

3) * FTE not available for FEC data

Table 4 : Welsh Domiciled Students by Postcode 2005/06

INSTITUTIONS	Students with Identifiable Postcodes	Students with Unidentified Postcodes	% of postcodes which are unidentifiable	TOTAL
Welsh HEIs	71,011	861	1%	71,872
UK (non-Welsh) HEIs	26,728	420	2%	27,148
Open University	5,900	26	0%	5,926
Welsh FECs	4,345	79	2%	4,424
GB (non-Welsh) FECs	861	5	1%	866
TOTAL	108,845	1,391	1%	110,236

Notes :

1) Unidentifiable postcodes are invalid postcodes returned by institutions

Table 5 : National Participation Rates for all Welsh Domiciled Students 2003/04 – 2005/06

AGE	Percentage of Population in Higher Education								
	2003/04			2004/05			2005/06		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
16 to 17 years old	2.2	3.3	2.8	3.1	3.8	3.4	2.4	2.8	2.6
18 to 19 years old	22.9	29.8	26.3	22.4	30.0	26.2	22.3	29.4	25.8
20 to 24 years old	15.9	19.4	17.6	14.9	19.4	17.1	14.7	18.7	16.7
25 to 29 years old	5.7	8.0	6.9	5.6	8.2	6.9	5.7	8.4	7.1
30 to 39 years old	3.6	5.6	4.6	3.6	5.7	4.7	3.6	5.8	4.7
40 to 49 years old	2.4	4.2	3.3	2.3	4.3	3.3	2.3	4.3	3.4
50 to 59 years old	1.2	1.9	1.6	1.3	1.9	1.6	1.2	2.0	1.6
All ages	3.2	4.2	3.7	3.1	4.3	3.7	3.1	4.3	3.7

Table 6a : Trends in Standard Participation Rates by Mode of Study 2003/04 – 2005/06

Unitary Authority	Standard Participation Rates for all Welsh Students			Standard Participation Rates for Full-time Students*		
	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
Isle of Anglesey	12	19	17	20	18	15
Gwynedd	0	4	-1	1	-3	-8
Conwy	12	17	31	18	22	24
Denbighshire	-1	-2	6	6	7	9
Flintshire	-14	-12	-9	-4	-4	-4
Wrexham	-18	-13	-11	-9	-7	-6
Powys	5	4	6	18	17	21
Ceredigion	23	25	20	-13	-15	-15
Pembrokeshire	11	5	6	27	22	19
Carmarthenshire	26	22	21	24	23	19
Swansea	7	3	1	1	2	2
Neath Port Talbot	-9	-9	-15	-6	-9	-15
Bridgend	-4	-5	-5	3	4	5
Vale of Glamorgan	15	16	15	24	24	28
Rhondda Cynon Taff	-8	-8	-12	-8	-10	-9
Merthyr Tydfil	-3	-2	-5	-11	-9	-4
Caerphilly	-17	-18	-22	-18	-19	-21
Blaenau Gwent	-32	-33	-35	-36	-37	-33
Torfaen	-19	-21	-22	-18	-16	-16
Monmouthshire	23	20	20	48	45	42
Newport	-11	-9	-5	-4	0	0
Cardiff	4	4	7	-13	-10	-9
Standard Deviation	15.3	15.2	16.4	19.2	18.6	18.3

Notes :

* excludes PGR students

Table 6b : Trends in Standard Participation Rates for Part-time Students 2003/04 – 2005/06

Unitary Authority	Standard Participation Rates for Part-time Students*			Standard Participation Rates for Part-time Students (excluding low-credit students)*		
	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
Isle of Anglesey	0	20	19	-7	-1	5
Gwynedd	-4	10	6	-13	-13	-10
Conwy	8	13	39	13	1	34
Denbighshire	-8	-9	4	-5	-13	10
Flintshire	-23	-19	-12	-16	-11	-5
Wrexham	-27	-17	-15	-19	-7	-6
Powys	-7	-8	-8	-6	-11	-3
Ceredigion	75	81	67	60	74	65
Pembrokeshire	-2	-12	-4	2	-7	4
Carmarthenshire	29	23	24	23	28	22
Swansea	13	5	-2	13	4	-13
Neath Port Talbot	-11	-9	-15	-7	-4	-16
Bridgend	-9	-12	-13	-5	-5	-10
Vale of Glamorgan	4	6	0	5	11	4
Rhondda Cynon Taff	-7	-5	-14	-8	-10	-10
Merthyr Tydfil	8	8	-4	2	-6	3
Caerphilly	-14	-17	-22	-14	-15	-19
Blaenau Gwent	-27	-29	-36	-24	-29	-34
Torfaen	-20	-25	-26	-15	-21	-24
Monmouthshire	-2	-5	-3	2	0	-2
Newport	-17	-17	-11	-14	-11	-16
Cardiff	22	20	25	18	20	24
Standard Deviation	22.3	23.3	23.1	18.4	21.0	21.6

Notes :

* excludes PGR students

Table 6c : Trends in Standard Participation Rates for Full-time Undergraduate Students by Age 2003/04 – 2005/06

Unitary Authority	Standard Participation Rates for Full-time Undergraduate Students (under 25 years of age)			Standard Participation Rates for Full-time Undergraduate Students (25 years of age or older)		
	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
Isle of Anglesey	19	16	15	21	16	14
Gwynedd	-7	-10	-14	13	0	-5
Conwy	15	22	27	32	28	21
Denbighshire	6	6	11	23	18	5
Flintshire	1	0	-1	-8	-9	-7
Wrexham	-13	-11	-9	22	22	21
Powys	25	27	31	-12	-22	-16
Ceredigion	-24	-26	-25	45	46	38
Pembrokeshire	37	32	26	-5	-14	-18
Carmarthenshire	27	26	24	13	11	0
Swansea	-1	0	0	8	5	13
Neath Port Talbot	-6	-10	-15	0	-6	-18
Bridgend	7	8	11	-4	-11	-5
Vale of Glamorgan	31	32	35	-7	-8	-3
Rhondda Cynon Taff	-7	-8	-8	-1	-7	-8
Merthyr Tydfil	-10	-5	-2	-6	-18	-6
Caerphilly	-13	-16	-18	-32	-26	-24
Blaenau Gwent	-37	-40	-34	-22	-13	-17
Torfaen	-15	-14	-14	-20	-9	-16
Monmouthshire	63	58	54	-21	-18	-11
Newport	-3	0	0	-12	7	11
Cardiff	-20	-18	-19	0	12	16
Standard Deviation	23.1	22.8	22.3	19.3	18.2	16.2

Table 6d : Trends in Standard Participation Rates by Gender 2003/04 – 2005/06

Unitary Authority	Standard Participation Rates for Male Students			Standard Participation Rates for Female Students		
	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
Isle of Anglesey	3	12	11	18	24	21
Gwynedd	-3	1	-1	2	6	0
Conwy	7	12	24	17	20	35
Denbighshire	-8	-7	-3	4	3	12
Flintshire	-16	-14	-14	-13	-10	-5
Wrexham	-24	-15	-17	-13	-11	-7
Powys	-9	-5	-3	16	10	13
Ceredigion	14	15	10	29	31	27
Pembrokeshire	10	2	2	13	6	9
Carmarthenshire	22	19	16	28	24	24
Swansea	6	3	4	8	4	-2
Neath Port Talbot	-6	-8	-12	-11	-10	-18
Bridgend	-5	-3	0	-2	-6	-8
Vale of Glamorgan	16	17	19	13	15	12
Rhondda Cynon Taff	-7	-5	-11	-9	-10	-12
Merthyr Tydfil	-1	-2	-10	-5	-2	-3
Caerphilly	-16	-18	-22	-18	-18	-21
Blaenau Gwent	-32	-36	-35	-33	-31	-34
Torfaen	-16	-21	-23	-21	-21	-20
Monmouthshire	25	21	22	22	20	18
Newport	-1	-3	-3	-17	-12	-7
Cardiff	15	13	18	-4	-1	0
Standard Deviation	14.7	14.6	16.0	16.9	16.4	17.6

Table 7a : Trends in Student Numbers by Mode of Attendance 2003/04 – 2005/06

Unitary Authority	Number of all Welsh Students				Number of Full-time Students*			
	2003/04	2004/05	2005/06	% change 03/04 to 05/06	2003/04	2004/05	2005/06	% change 03/04 to 05/06
Isle of Anglesey	2,588	2,785	2,756	6%	1,406	1,376	1,344	-4%
Gwynedd	4,314	4,523	4,378	1%	2,320	2,230	2,139	-8%
Conwy	4,053	4,200	4,693	16%	2,086	2,101	2,119	2%
Denbighshire	3,195	3,246	3,481	9%	1,703	1,744	1,754	3%
Flintshire	4,689	4,823	4,970	6%	2,625	2,581	2,551	-3%
Wrexham	4,013	4,238	4,288	7%	2,277	2,252	2,227	-2%
Powys	4,487	4,458	4,567	2%	2,462	2,429	2,520	2%
Ceredigion	3,869	3,920	3,742	-3%	1,608	1,548	1,507	-6%
Pembrokeshire	4,406	4,182	4,279	-3%	2,512	2,425	2,373	-6%
Carmarthenshire	7,625	7,474	7,451	-2%	3,814	3,760	3,674	-4%
Swansea	9,482	9,265	9,002	-5%	4,879	4,924	4,877	0%
Neath Port Talbot	4,520	4,531	4,229	-6%	2,380	2,304	2,119	-11%
Bridgend	4,564	4,582	4,631	1%	2,447	2,489	2,542	4%
Vale of Glamorgan	5,024	5,162	5,197	3%	2,775	2,808	2,934	6%
Rhondda Cynon Taff	8,029	8,120	7,800	-3%	4,161	4,080	4,094	-2%
Merthyr Tydfil	2,011	2,045	1,956	-3%	971	980	1,007	4%
Caerphilly	5,191	5,176	4,953	-5%	2,600	2,578	2,515	-3%
Blaenau Gwent	1,701	1,701	1,676	-1%	829	824	880	6%
Torfaen	2,658	2,623	2,611	-2%	1,388	1,410	1,405	1%
Monmouthshire	3,560	3,513	3,527	-1%	2,053	2,016	2,001	-3%
Newport	4,587	4,776	5,004	9%	2,545	2,686	2,729	7%
Cardiff	14,130	14,466	15,044	6%	6,764	7,006	7,107	5%
All Wales	108,696	109,809	110,235	1%	56,605	56,551	56,418	0%

Note :

1) Totals might differ slightly to figures in Tables 1 to 3 due to rounding.

* Excludes PGR students

Table 7b : Trends in Student Numbers for Part-time Students 2003/04 – 2005/06

Unitary Authority	Number of Part-time Students*				Number of Part-time Students (excluding low-credit students)*			
	2003/04	2004/05	2005/06	% change 03/04 to 05/06	2003/04	2004/05	2005/06	% change 03/04 to 05/06
Isle of Anglesey	1,101	1,344	1,339	22%	869	923	968	11%
Gwynedd	1,849	2,146	2,084	13%	1,420	1,429	1,468	3%
Conwy	1,894	2,027	2,491	32%	1,671	1,505	1,955	17%
Denbighshire	1,430	1,448	1,674	17%	1,256	1,161	1,449	15%
Flintshire	1,990	2,160	2,345	18%	1,863	1,989	2,083	12%
Wrexham	1,650	1,905	1,989	21%	1,561	1,817	1,816	16%
Powys	1,930	1,942	1,964	2%	1,643	1,573	1,676	2%
Ceredigion	2,138	2,260	2,101	-2%	1,683	1,830	1,717	2%
Pembrokeshire	1,836	1,693	1,854	1%	1,621	1,494	1,639	1%
Carmarthenshire	3,677	3,596	3,673	0%	2,992	3,145	2,970	-1%
Swansea	4,337	4,107	3,890	-10%	3,702	3,437	2,846	-23%
Neath Port Talbot	2,047	2,148	2,012	-2%	1,827	1,895	1,645	-10%
Bridgend	2,039	2,025	2,016	-1%	1,816	1,830	1,725	-5%
Vale of Glamorgan	2,130	2,224	2,128	0%	1,824	1,933	1,813	-1%
Rhondda Cynon Taff	3,720	3,898	3,562	-4%	3,143	3,101	3,072	-2%
Merthyr Tydfil	1,014	1,045	926	-9%	819	755	821	0%
Caerphilly	2,504	2,496	2,345	-6%	2,145	2,144	2,022	-6%
Blaenau Gwent	848	847	762	-10%	759	706	651	-14%
Torfaen	1,222	1,170	1,164	-5%	1,106	1,038	980	-11%
Monmouthshire	1,402	1,400	1,419	1%	1,241	1,216	1,175	-5%
Newport	1,955	2,007	2,168	11%	1,724	1,794	1,678	-3%
Cardiff	6,764	6,865	7,285	8%	5,654	5,844	6,052	7%
All Wales	49,477	50,753	51,191	3%	42,339	42,559	42,221	0%

Note :

1) Totals might differ slightly to figures in Tables 1 to 3 due to rounding.

* Excludes PGR students

**Table 7c : Trends in Student Numbers for Full-time Undergraduate Students by Age
2003/04 – 2005/06**

Unitary Authority	Number of Full-time Undergraduate Students (under 25 years of age)				Number of Full-time Undergraduate Students (25 years of age or older)			
	2003/04	2004/05	2005/06	% change 03/04 to 05/06	2003/04	2004/05	2005/06	% change 03/04 to 05/06
Isle of Anglesey	1,055	1,033	1,030	-2%	222	217	208	-6%
Gwynedd	1,655	1,616	1,572	-5%	364	326	301	-17%
Conwy	1,535	1,588	1,637	7%	386	374	344	-11%
Denbighshire	1,285	1,317	1,360	6%	326	318	273	-16%
Flintshire	2,050	1,989	1,963	-4%	430	431	426	-1%
Wrexham	1,635	1,606	1,591	-3%	493	505	496	1%
Powys	1,987	2,010	2,094	5%	300	266	275	-8%
Ceredigion	1,167	1,110	1,094	-6%	260	269	254	-2%
Pembrokeshire	2,071	2,002	1,943	-6%	295	270	252	-15%
Carmarthenshire	2,966	2,932	2,920	-2%	547	545	476	-13%
Swansea	3,728	3,762	3,717	0%	704	703	743	6%
Neath Port Talbot	1,815	1,736	1,625	-10%	396	380	321	-19%
Bridgend	1,892	1,937	2,024	7%	385	361	376	-2%
Vale of Glamorgan	2,235	2,287	2,397	7%	326	328	339	4%
Rhondda Cynon Taff	3,187	3,143	3,141	-1%	702	681	658	-6%
Merthyr Tydfil	753	786	786	4%	152	136	152	0%
Caerphilly	2,055	1,999	1,963	-4%	359	397	398	11%
Blaenau Gwent	617	604	659	7%	159	177	165	4%
Torfaen	1,093	1,095	1,106	1%	212	245	218	3%
Monmouthshire	1,688	1,654	1,654	-2%	188	195	202	7%
Newport	1,967	2,054	2,098	7%	366	453	454	24%
Cardiff	4,869	4,980	5,005	3%	1,002	1,161	1,209	21%
All Wales	43,305	43,240	43,379	0%	8,574	8,738	8,540	0%

Note :

1) Totals might differ slightly to figures in Tables 1 to 3 due to rounding.

Table 7d : Trends in Student Numbers by Gender 2003/04 – 2005/06

Unitary Authority	Number of Male Students				Number of Female Students			
	2003/04	2004/05	2005/06	% change 03/04 to 05/06	2003/04	2004/05	2005/06	% change 03/04 to 05/06
Isle of Anglesey	1,010	1,102	1,086	8%	1,578	1,683	1,671	6%
Gwynedd	1,722	1,798	1,766	3%	2,592	2,726	2,612	1%
Conwy	1,620	1,670	1,848	14%	2,433	2,530	2,845	17%
Denbighshire	1,255	1,274	1,327	6%	1,940	1,971	2,154	11%
Flintshire	1,940	1,941	1,950	1%	2,749	2,882	3,021	10%
Wrexham	1,577	1,716	1,651	5%	2,436	2,522	2,637	8%
Powys	1,671	1,724	1,748	5%	2,815	2,734	2,819	0%
Ceredigion	1,463	1,468	1,394	-5%	2,406	2,452	2,348	-2%
Pembrokeshire	1,806	1,676	1,687	-7%	2,600	2,506	2,592	0%
Carmarthenshire	3,029	2,957	2,867	-5%	4,597	4,517	4,584	0%
Swansea	3,967	3,833	3,873	-2%	5,515	5,432	5,129	-7%
Neath Port Talbot	1,945	1,877	1,804	-7%	2,575	2,653	2,426	-6%
Bridgend	1,877	1,927	2,006	7%	2,687	2,655	2,626	-2%
Vale of Glamorgan	2,138	2,145	2,206	3%	2,886	3,017	2,991	4%
Rhondda Cynon Taff	3,339	3,414	3,167	-5%	4,691	4,706	4,634	-1%
Merthyr Tydfil	831	818	741	-11%	1,180	1,227	1,215	3%
Caerphilly	2,182	2,113	2,004	-8%	3,008	3,062	2,949	-2%
Blaenau Gwent	708	653	664	-6%	993	1,048	1,012	2%
Torfaen	1,156	1,080	1,047	-9%	1,502	1,543	1,564	4%
Monmouthshire	1,521	1,459	1,481	-3%	2,039	2,054	2,045	0%
Newport	2,072	2,045	2,076	0%	2,515	2,730	2,928	16%
Cardiff	6,257	6,237	6,541	5%	7,873	8,229	8,503	8%
All Wales	45,086	44,927	44,934	0%	63,610	64,879	65,305	3%

Note :

1) Totals might differ slightly to figures in Tables 1 to 3 due to rounding.

ANNEX B : TECHNICAL DETAILS

Participation Rates

- 1 A basic measure of participation of people in HE from a Unitary Authority might be:

$$\frac{\text{Total number of students from Unitary Authority}}{\text{Population of Unitary Authority}} \times 100$$

but this definition does not lead to figures which can be fairly compared between Unitary Authorities due to the difference in population gender and age profiles in each area.

- 2 For example, a particular Unitary Authority may have an average or above average participation rate for young people, but may also have a higher than average number of older people living there which would result in an overall lower participation rate, as older people have either already completed their HE studies or are less likely to enter HE for other reasons. To allow for fair comparison and to account for regional variations, we have calculated standardised participation rates. To do this, we have used the expected number of students in a particular Unitary Authority as the denominator. Furthermore, the expected number of students in the denominator is the sum of the expected number of students for each of 18 age and gender groups and this helps to further account for regional variations.
- 3 In mathematical terms, the definition used within this report to calculate a “Standard Participation Rate” for each Unitary Authority and category of students to be considered (e.g. full-time) is

$$\left(\frac{\text{Actual number of full-time students from Unitary Authority}}{\sum_{\text{all } x} \text{Expected number of full-time students from Unitary Authority}_x} \right) \times 100 - 100$$

where x is each age and gender group and where

$$\text{Expected number of full-time students from Unitary Authority}_x = \text{Population of Unitary Authority}_x \times \text{National participation rate for full-time students}_x$$

and

$$\text{National participation rate for full-time students}_x = \frac{\text{Total number of full-time Welsh students}_x}{\text{Population of Wales}_x}$$

- 4 This provides a standardised measure, showing the per cent variation from the standardised national participation rate, which is 100. Therefore if a standard participation rate is calculated as 0, participation is in line with the national average, if it is calculated to be a negative figure then participation is below the national average and if positive is above the national average.

Methods of Postcode Analysis

- 5 To arrive at standard participation rates for each of the 22 Unitary Authorities in Wales, every student's home postcode must be mapped to its own particular Unitary Authority. Out of 110,236 Welsh HE students in 2005/06 it was found that 1 per cent had missing, unreadable or invalid postcodes.
- 6 A 99 per cent success rate at mapping students to Unitary Authorities is good compared to earlier years; however, the geographical distribution of students with unidentified postcodes is not known and may not necessarily be uniform across Wales. The missing data could therefore result in distortion of the participation rate profile. Unitary Authorities have been assigned to students with unidentifiable postcodes by assuming that they are from the same Unitary Authorities as fellow Welsh domiciled students from their particular institution, dividing them proportionately between the Unitary Authorities according to the profile of their fellow students.

Population Data

- 7 To derive participation rates it is necessary to have a breakdown of the local population, thus the data used in this analysis are split according to gender and 9 age categories.
- 8 The population figures used have been arrived at by combining census based population data with population growth rate data. The base population data used were 2001 census output area data modified to place students at their home address. For each academic year a growth rate has been applied to the population data. This has been derived for combinations of gender, age group and Unitary Authority from revised mid-year population estimate data. For example, 2006 mid-year population estimate data was used to grow the Census 2001 data for use in calculating the 2005/06 participation rates.
- 9 To calculate the participation rate of people from a particular area involved in HE, as noted in paragraph 12 of the main text, we require the number of students from the area, determined by their home postcode, and the total number of people from the area, provided by population data which places students at their home address.

- 10 The way in which the population was enumerated during the 2001 Census changed from the method used during the 1991 Census. Full-time students were enumerated at their term-time address only, with limited information collected in relation to their home address. The base population used in all Census 2001 statistics places students at their term-time address. The limited information collected on students at their home address does not allow the flexibility of accurately changing the base population to place students at their home address. This is an issue when calculating participation rates, particularly for areas which have high densities of students during term-time such as Cardiff and Aberystwyth, as the population count will be too high resulting in a participation rate lower than the true participation rate of those domiciled in these areas.

Determining the base population

- 11 To determine an appropriate base population, students enumerated at their term-time address need to be removed from the Census 2001 data and the same students, enumerated at their home address need to be added back.
- 12 It is possible to determine from Census 2001 data the exact number of students whose term-time and home addresses are different, enumerated at their home address, but it is not possible to cross reference this data with all students enumerated at their term-time address in order to identify which students to remove, therefore the number of students to be removed must be estimated from available data.
- 13 Students studying in Wales could be from anywhere else in the UK, therefore UK census data is used to estimate the proportion of students to remove. Using UK census data, we know that the number of students to remove will be equal to the number of students to be added. Therefore dividing the number of UK students whose term-time and home addresses are different (enumerated at their home address) by the number of UK students not living with parents (enumerated at their term-time address) gives a proportion of forty one per cent. This proportion of students, enumerated at their term-time address, is removed from each Unitary Authority population.
- 14 However, it is likely that the majority of the students whose term-time and home addresses are different are younger. Therefore to take this into account the students which are removed are profiled according to the age/gender proportions of UK students whose term-time and home addresses are different.
- 15 Finally, the actual number of students whose term-time and home addresses are different, enumerated at their home address is then added back to each appropriate Unitary Authority to derive an estimate of the population with students located as far as is possible at their home address.

Rationale for method of determining base population

- 16 The advantage of this method is that it produces the best estimate, given available data, of a population with students located at their home address which is essential for calculating participation rates. The disadvantage of this method is that it assumes that the same proportion of the population in each Unitary Authority was recorded as a full-time student living away from home when the 2001 Census was taken, and that the age distribution of these students was also the same in each Unitary Authority.
- 17 This may particularly be an issue for participation rates calculated for Ceredigion. Map 5 shows that participation of full-time undergraduates from Ceredigion aged under 25 years is very low. When calculating participation rates for earlier years, using population data available from the 1991 Census which placed students at their home address, participation of this group of students from Ceredigion has been shown to be high, for example, see figure H7 of the joint HEFCW and ELWa publication Higher Education, Further Education and Training Statistics in Wales: 2002/03.
- 18 Ceredigion is the Unitary Authority within which Aberystwyth University is located. There were 6,355 full-time undergraduate enrolments at this HEI in 2005/06 and more than 60% of full-time undergraduate new entrants at Aberystwyth University come from England. It is well known that the term-time population of Aberystwyth is much greater than the population during vacation times, although data from Census 2001 is not available to show this.
- 19 It may be that the proportion of students enumerated at their term-time address to be removed from the Census 2001 data is substantially greater than the forty one percent calculated above, and the number of students from the area added back is considerably smaller. As noted in paragraph 10 this will result in the size of the population of the area being over-estimated, causing the participation rate to be lower than the true participation rate of those domiciled in the area.
- 20 A sensitivity analysis was conducted recalculating participation rates for increasing proportions of students enumerated at their term-time address removed from Ceredigion and correspondingly reduced proportions removed from the other Unitary Authorities, maintaining overall forty one per cent of students not living with their parents enumerated at their term-time address removed from the Welsh population. There was little or no effect for most student groups and most Unitary Authorities. Undergraduate students aged under 25 years were the most affected. When the proportion removed from Ceredigion was increased to 80 per cent, the thematic banding (Very Low, Low, Average, High, Very High) reduced one level for four Unitary Authorities, although the participation rate calculated by the original method for two of these areas was within five percentage points of

the boundary of the thematic banding. The banding for Ceredigion increased to Average.

- 21 In light of the results of this sensitivity analysis and the absence of population data with students placed at their home address or suitable data that may provide information to enable the correct proportions of students at their term-time address to be removed from the population data, the method of determining a best estimate of the population with students enumerated at their home address used in this report was considered to be acceptable.

Changes due to revised mid-year population estimates

- 22 An analysis of the differences between SPRs previously calculated for 2003/04 and 2004/05 and calculated using revised mid-year population estimates showed that SPRs moved up or down one thematic band for between one and four Unitary Authorities in each of the eight groups of students considered in this report. In all cases the difference between the original SPR and the recalculated SPR was less than six percentage points.

Future analyses

- 23 The HESA student record has undergone a review and has been restructured for the 2007/08 academic year. The home postcode of the student is already collected, however, the introduction of a field to collect the student's term-time postcode will allow, for the first time, the mapping of the movements of students between term-time and home addresses. This information may present the opportunity to further improve the method for modifying the population to locate students at their home address. However, it will not be possible to calculate accurate participation rates until the 2011 Census becomes available, when it may be possible to determine a population with students enumerated at their home address.

Student Data

- 24 This analysis includes individual students, returned on the HESA student record, who were active within the academic year, that is between 1 August 2005 and 31 July 2006 for 2005/06 except:
- dormant students (those who have ceased studying but have not formally de-registered),
 - incoming and visiting exchange students
 - students studying for the whole of their programme of study outside of the UK
 - students who are writing up and
 - sabbatical students

- 25 To select Welsh domiciled students, the student's home postcode was mapped using HEFCW's postcode database which contains postcodes which are either presently in use in the UK or have historically been in use sometime within the period since 1997. The postcode data are derived from data provided by Ordnance Survey and Royal Mail. Postcodes are mapped to the geographies within which the centroid of the postcode falls.