Cyngor Cyllido Addysg Uwch Cymru Higher Education Funding Council for Wales



Participation Rates for Welsh Students in Higher Education within the UK during 2006/07

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# Participation rates for Welsh students in Higher Education within the UK during 2006/07

# Introduction

- 1 This report presents information about the levels of participation in higher education (HE) across Wales for the academic years 2004/05, 2005/06 and 2006/07.
- 2 The report follows the same structure as the previous report Participation Rates for Welsh Students in Higher Education within the UK during 2005/06. 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 2004/05 and 2006/07 are provided in the tables of Annex A. In addition to the previous content, Tables 8a and 8b of Annex A have been provided to bring together data from previous reports to enable a longer term (2001/02 to 2006/07) analysis of national participation rates by gender and age group. A selection of this data is presented graphically in Section 3.

# Background

- 3 '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.
- 4 The published performance indicators for UK higher education institutions (HEIs), (published by the Higher Education Statistics Agency (HESA) at, <u>www.hesa.ac.uk/pi</u>) 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.

5 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 2004/05, 2005/06 and 2006/07. The analysis is based on data collected by HESA, WAG, the Learning and Skills Council and the Scottish Funding Council.

# The methodology

- 6 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.
- 7 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.
- 8 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.
- 9 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.
- 10 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.

- 11 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.
- 12 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.
- 13 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.
- 14 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

15 In 2006/07 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 (60 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	2004/05	2005/06	2006/07
Number of Welsh domiciled HE students	109,806	110,236	110,624
Proportion studying in Wales	75%	75%	75%
Proportion female	59%	59%	60%
Proportion studying full-time	53%	53%	53%
Proportion of which aged under 25 years of age	80%	81%	80%
Proportion studying full-time undergraduate	47%	47%	48%
Proportion of which aged under 25 years of age	83%	84%	83%
Proportion studying part-time	47%	47%	47%
Proportion of which aged 25 years of age and over	81%	82%	82%

# Welsh national participation rates

- 16 The calculated national participation rates for 2004/05 to 2006/07 are shown in Table 5 of Annex A. Nearly 4 per cent of the Welsh population were engaged in HE in 2006/07 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.
- 17 The percentage of the population engaged in HE has remained constant across the period between 2004/05 and 2006/07. This is also true for the male population and the female population. However, there have been changes in participation amongst some age and gender categories. Participation of 16 to 17 year olds continues to fall 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, and males aged 18 to 19 years, but there has been a drop of 0.9 of a percentage point for males aged 20 to 24. 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 20 to 24 fell by one percentage point. There was very little change in participation of females aged 18 to 19 years. Table 5 shows how the national participation rates have changed over the three years by gender and age.

# Long term trend in national participation rates by age and gender

- 18 National participation rates from 2001/02 to 2006/07 for males and females by age group can be found in Tables 8a – 8b of Annex A. They show that between 2001/02 and 2006/07 there was a very slight decrease in participation of males, while there was an increase in participation of females.
- 19 Across the period, there was little or no change in the level of participation of males aged 25 and over; males in the age groups between 25 and 49 saw a slight decrease in participation while there was no change for males

aged 50 to 59. However there was a drop in participation of nearly three percentage points for males in the 18 to 19 and 20 to 24 age groups. For females, the situation was quite different. Between 2001/02 and 2006/07 there were increases in participation of females in each age group for those aged 25 and over, and there were slight decreases in participation of females aged 18 to 19 and 20 to 24. There was considerable fluctuation in participation of both males and females aged 16 to 17 years, but this was mostly due to different levels of take up and provision in the associate studentship scheme at the University of Glamorgan.

20 Table 8c shows the difference in participation rates between females and males in each age group. When considering all age groups it can be seen that between 2001/02 and 2004/05 there was a widening of the gap between female and male participation which then appeared to level out between 2004/05 and 2006/07. When considering the differences in participation between females and males for the 18 to 19 and 20 to 24 age groups, this leveling out is slightly less obvious. In 2005/06 there was a narrowing of the gap in participation between males and females for these age groups. In 2006/07 the gap returned to the 2004/05 level. These differences are highlighted in the charts in section 3.

## Interpreting the maps

- 21 The maps in Section 1, broken down by Unitary Authority, show data for 2006/07 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 below the national average, whilst areas in shades of green had high or very high participation in HE.
- 22 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.
- 23 Maps for earlier years are not presented in this report but can be found in previous versions of this report; for SPRs for 2004/05 and 2005/06 please refer to Tables 6a-6d in Annex A.

## **Commentary on maps**

## Overview

24 The maps in this report show the SPRs for 2006/07. 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 2004/05 and 2005/06 please refer to Annex A.

25 The Unitary Authorities with the lowest SPRs in the south were Blaenau Gwent, Caerphilly and Torfaen, and in the north were Wrexham and Flintshire. Rhondda Cynon Taff, Neath Port Talbot and Merthyr Tydfil in the south also had SPRs lower than the national average. The highest SPRs were found in Isle of Anglesey, Conwy and Monmouthshire.

# Participation by mode of study

- 26 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 64 per cent greater than the national average and Blaenau Gwent having an SPR 27 per cent below. For full-time students Monmouthshire had the greatest participation with a rate of 36 per cent above the national average and Blaenau Gwent had the lowest at 34 per cent below.
- 27 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 55 per cent above the national average and Blaenau Gwent having an SPR 23 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 Isle of Anglesey with 30 per cent of part-time students on low-credit courses, Swansea with 25 per cent, Gwynedd with 24 per cent and Ceredigion with 22 per cent. (See Table 7b, Annex A.)

# Participation of full-time undergraduate students by age

28 SPRs for full-time undergraduate students were analysed by age (Maps 5 and 6). 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

29 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 Isle of Anglesey saw the largest differences between the participation of male and female students. In Cardiff, participation of female students was one per cent above the national average, and for male students was 18 per cent above average. In Ceredigion participation of female students was 26 per cent above average while for male students it was 5 per cent above average. In Powys the participation rate for female students was 14 per cent above average and for male students was 3 per cent below average. On the Isle of Anglesey the participation rate for female students was 34 per cent above average and for male students was 17 per cent above average.

# Ethnicity

30 In the 2006/07 academic year, 5 per cent (5,292) of the Welsh domiciled student population were from ethnic minorities. The numbers of students from ethnic minorities coming from each Unitary Authority varied from 48 in Isle of Anglesey to 2,084 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**

- 31 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.
- 32 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 20 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.

- 33 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 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 12 per cent below the national average. 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 (45 per cent above) but participation of full-time undergraduates aged 25 and over is below the national average (11 per cent below).
- 34 It can be seen that participation of full-time undergraduates aged under 25 from Ceredigion appears to be greatly below the national average (26 per cent below). As noted in paragraph 28 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 (64 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**

- 35 Tables 6a-6d of Annex A compare student SPRs calculated for the academic years 2004/05, 2005/06 and 2006/07. 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.
- 36 The national variation in student participation rates by Unitary Authority of domicile in 2006/07 was fairly similar to that in 2004/05. That is, there was very little change in the relative gap between areas of high and low participation. When considering participation in full-time and part-time higher education separately it can be seen that there is less variation in 2006/07 than in 2004/05, indicating that the gap between participation levels in different areas for each mode of study has narrowed. This is most

notable for part-time students excluding those studying low credit courses where there has been a large drop in the SPR for the very high participation area of Ceredigion. The gap between participation levels in different areas for full-time undergraduates aged under 25 years, and 25 years and over has also narrowed, however when considering males and females it can be seen that the gap between participation levels in different areas has widened.

# **Section 1**

# Map 1: Standard Participation Rates for all Welsh Domiciled HE Students in 2006/07

PHOTO REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	27	Neath Port Talbot	-13
Gwynedd	4	Bridgend	0
Conwy	27	Vale of Glamorgan	14
Denbighshire	3	Rhondda Cynon Taff	-13
Flintshire	-8	Merthyr Tydfil	-8
Wrexham	-9	Caerphilly	-22
Powys	7	Blaenau Gwent	-31
Ceredigion	17	Torfaen	-21
Pembrokeshire	0	Monmouthshire	18
Carmarthenshire	16	Newport	-5
Swansea	-1	Cardiff	8

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 2006/07

Percentage above/below national participation rate

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	27	Neath Port Talbot	-13
Gwynedd	4	Bridgend	0
Conwy	27	Vale of Glamorgan	14
Denbighshire	3	Rhondda Cynon Taff	-13
Flintshire	-8	Merthyr Tydfil	-8
Wrexham	-9	Caerphilly	-22
Powys	7	Blaenau Gwent	-31
Ceredigion	17	Torfaen	-21
Pembrokeshire	0	Monmouthshire	18
Carmarthenshire	16	Newport	-5
Swansea	-1	Cardiff	8

Map 2: Standard Participation Rates for Full-time Welsh domiciled HE Students in 2006/07 (excluding PGR students)

PHOTO REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER	LEGAL ISSUES

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	17	Neath Port Talbot	-16
Gwynedd	1	Bridgend	13
Conwy	24	Vale of Glamorgan	24
Denbighshire	5	Rhondda Cynon Taff	-8
Flintshire	-3	Merthyr Tydfil	-10
Wrexham	-7	Caerphilly	-19
Powys	22	Blaenau Gwent	-34
Ceredigion	-18	Torfaen	-18
Pembrokeshire	11	Monmouthshire	36
Carmarthenshire	19	Newport	2
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 2: Standard Participation Rates for Full-time Welsh Domiciled HE Students in 2006/07 (excluding PGR students)



Percentage above/below national participation rate

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	17	Neath Port Talbot	-16
Gwynedd	1	Bridgend	13
Conwy	24	Vale of Glamorgan	24
Denbighshire	5	Rhondda Cynon Taff	-8
Flintshire	-3	Merthyr Tydfil	-10
Wrexham	-7	Caerphilly	-19
Powys	22	Blaenau Gwent	-34
Ceredigion	-18	Torfaen	-18
Pembrokeshire	11	Monmouthshire	36
Carmarthenshire	19	Newport	2
Swansea	-1	Cardiff	-7

# Map 3: Standard Participation Rates for Part-time Welsh domiciled HE Students in 2006/07 (excluding PGR students)

PHOTO REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	39	Neath Port Talbot	-8
Gwynedd	5	Bridgend	-11
Conwy	31	Vale of Glamorgan	2
Denbighshire	2	Rhondda Cynon Taff	-17
Flintshire	-11	Merthyr Tydfil	-3
Wrexham	-9	Caerphilly	-24
Powys	-7	Blaenau Gwent	-27
Ceredigion	64	Torfaen	-22
Pembrokeshire	-10	Monmouthshire	-1
Carmarthenshire	14	Newport	-12
Swansea	-2	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 3: Standard Participation Rates for Part-time Welsh Domiciled HE Students in 2006/07 (excluding PGR students)



Percentage above/below national participation rate

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	39	Neath Port Talbot	-8
Gwynedd	5	Bridgend	-11
Conwy	31	Vale of Glamorgan	2
Denbighshire	2	Rhondda Cynon Taff	-17
Flintshire	-11	Merthyr Tydfil	-3
Wrexham	-9	Caerphilly	-24
Powys	-7	Blaenau Gwent	-27
Ceredigion	64	Torfaen	-22
Pembrokeshire	-10	Monmouthshire	-1
Carmarthenshire	14	Newport	-12
Swansea	-2	Cardiff	24

Map 4: Standard Participation Rates for Part-time Welsh domiciled HE Students in 2006/07 (excluding PGR and low credit students)

PHOTO REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	18	Neath Port Talbot	-9
Gwynedd	-4	Bridgend	-9
Conwy	30	Vale of Glamorgan	6
Denbighshire	7	Rhondda Cynon Taff	-13
Flintshire	-4	Merthyr Tydfil	3
Wrexham	-2	Caerphilly	-22
Powys	-6	Blaenau Gwent	-23
Ceredigion	55	Torfaen	-19
Pembrokeshire	-3	Monmouthshire	0
Carmarthenshire	11	Newport	-15
Swansea	-12	Cardiff	23

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 2006/07 (excluding PGR and low credit students)



Percentage above/below national participation rate

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	18	Neath Port Talbot	-9
Gwynedd	-4	Bridgend	-9
Conwy	30	Vale of Glamorgan	6
Denbighshire	7	Rhondda Cynon Taff	-13
Flintshire	-4	Merthyr Tydfil	3
Wrexham	-2	Caerphilly	-22
Powys	-6	Blaenau Gwent	-23
Ceredigion	55	Torfaen	-19
Pembrokeshire	-3	Monmouthshire	0
Carmarthenshire	11	Newport	-15
Swansea	-12	Cardiff	23

Map 5:Standard Participation Rates Full-time Welsh domiciled HE Students in<br/>2006/07 (undergraduates under 25 years of age)

PHOTO REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	13	Neath Port Talbot	-14
Gwynedd	-3	Bridgend	18
Conwy	24	Vale of Glamorgan	31
Denbighshire	4	Rhondda Cynon Taff	-8
Flintshire	1	Merthyr Tydfil	-8
Wrexham	-11	Caerphilly	-18
Powys	32	Blaenau Gwent	-36
Ceredigion	-26	Torfaen	-15
Pembrokeshire	18	Monmouthshire	45
Carmarthenshire	23	Newport	3
Swansea	-2	Cardiff	-17

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 for Full-time Welsh Domiciled HE Students in 2006/07 (undergraduates under 25 years of age)



Percentage above/below national participation rate

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	13	Neath Port Talbot	-14
Gwynedd	-3	Bridgend	18
Conwy	24	Vale of Glamorgan	31
Denbighshire	4	Rhondda Cynon Taff	-8
Flintshire	1	Merthyr Tydfil	-8
Wrexham	-11	Caerphilly	-18
Powys	32	Blaenau Gwent	-36
Ceredigion	-26	Torfaen	-15
Pembrokeshire	18	Monmouthshire	45
Carmarthenshire	23	Newport	3
Swansea	-2	Cardiff	-17

# Map 6: Standard Participation Rates Full-time Welsh domiciled HE Students in 2006/07 (undergraduates 25 years of age or older)

PHOTO REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	21	Neath Port Talbot	-21
Gwynedd	-9	Bridgend	-4
Conwy	32	Vale of Glamorgan	-9
Denbighshire	17	Rhondda Cynon Taff	-9
Flintshire	-7	Merthyr Tydfil	-13
Wrexham	27	Caerphilly	-22
Powys	-24	Blaenau Gwent	-14
Ceredigion	25	Torfaen	-13
Pembrokeshire	-18	Monmouthshire	-11
Carmarthenshire	3	Newport	9
Swansea	5	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 6: Standard Participation Rates for Full-time Welsh Domiciled HE Students in 2006/07 (undergraduates 25 years of age or older)



Percentage above/below national participation rate

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	21	Neath Port Talbot	-21
Gwynedd	-9	Bridgend	-4
Conwy	32	Vale of Glamorgan	-9
Denbighshire	17	Rhondda Cynon Taff	-9
Flintshire	-7	Merthyr Tydfil	-13
Wrexham	27	Caerphilly	-22
Powys	-24	Blaenau Gwent	-14
Ceredigion	25	Torfaen	-13
Pembrokeshire	-18	Monmouthshire	-11
Carmarthenshire	3	Newport	9
Swansea	5	Cardiff	18

# Map 7: Standard Participation Rates for Male Welsh domiciled HE Students in 2006/07

PHOTO REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	17	Neath Port Talbot	-9
Gwynedd	4	Bridgend	4
Conwy	21	Vale of Glamorgan	19
Denbighshire	-6	Rhondda Cynon Taff	-11
Flintshire	-13	Merthyr Tydfil	-11
Wrexham	-17	Caerphilly	-22
Powys	-3	Blaenau Gwent	-36
Ceredigion	5	Torfaen	-22
Pembrokeshire	-2	Monmouthshire	20
Carmarthenshire	11	Newport	0
Swansea	3	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.

# Standard Participation Rates for Male Welsh Domiciled HE Students in 2006/07 Conwy

Chart 7:



Percentage above/below national participation rate

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	17	Neath Port Talbot	-9
Gwynedd	4	Bridgend	4
Conwy	21	Vale of Glamorgan	19
Denbighshire	-6	Rhondda Cynon Taff	-11
Flintshire	-13	Merthyr Tydfil	-11
Wrexham	-17	Caerphilly	-22
Powys	-3	Blaenau Gwent	-36
Ceredigion	5	Torfaen	-22
Pembrokeshire	-2	Monmouthshire	20
Carmarthenshire	11	Newport	0
Swansea	3	Cardiff	18

# Map 8: Standard Participation Rates for Female Welsh domiciled HE Students in 2006/07 PHOTO REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	34	Neath Port Talbot	-15
Gwynedd	4	Bridgend	-2
Conwy	31	Vale of Glamorgan	10
Denbighshire	9	Rhondda Cynon Taff	-14
Flintshire	-4	Merthyr Tydfil	-6
Wrexham	-3	Caerphilly	-22
Powys	14	Blaenau Gwent	-28
Ceredigion	26	Torfaen	-20
Pembrokeshire	1	Monmouthshire	17
Carmarthenshire	19	Newport	-8
Swansea	-3	Cardiff	1

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.

# Isle of Anglesey Conwy Ceredigion Carmarthenshire Monmouthshire Powys Vale of Glamorgan Denbighshire Gwynedd Pembrokeshire Cardiff Bridgend Swansea Wrexham

Flintshire

Newport

Torfaen Caerphilly

-80

-60

-40

Blaenau Gwent

Merthyr Tydfil

Rhondda Cynon Taff Neath Port Talbot

# Chart 8: Standard Participation Rates for Female Welsh Domiciled HE Students in 2006/07

Percentage above/below national participation rate

20

40

60

80

0

-20

Unitary Authority	Standard Participation Rate	Unitary Authority	Standard Participation Rate
Isle of Anglesey	34	Neath Port Talbot	-15
Gwynedd	4	Bridgend	-2
Conwy	31	Vale of Glamorgan	10
Denbighshire	9	Rhondda Cynon Taff	-14
Flintshire	-4	Merthyr Tydfil	-6
Wrexham	-3	Caerphilly	-22
Powys	14	Blaenau Gwent	-28
Ceredigion	26	Torfaen	-20
Pembrokeshire	1	Monmouthshire	17
Carmarthenshire	19	Newport	-8
Swansea	-3	Cardiff	1

# **Section 2**



Percentage above/below national participation rate





Percentage above/below national participation rate

Denbighshire



#### Percentage above/below national participation rate





Percentage above/below national participation rate

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	27	17	39	18	13	21	17	34
Gwynedd	4	1	5	-4	-3	-9	4	4
Conwy	27	24	31	30	24	32	21	31
Denbighshire	3	5	2	7	4	17	-6	9



Percentage above/below national participation rate



Percentage above/below national participation rate

Percentage above/below national participation rate

Powys

Ceredigion



Percentage above/below national participation rate

20 40 60 80

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	-8	-3	-11	-4	1	-7	-13	-4
Wrexham	-9	-7	-9	-2	-11	27	-17	-3
Powys	7	22	-7	-6	32	-24	-3	14
Ceredigion	17	-18	64	55	-26	25	5	26



Percentage above/below national participation rate





Percentage above/below national participation rate



Percentage above/below national participation rate

**Neath Port Talbot** 



Percentage above/below national participation rate

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	0	11	-10	-3	18	-18	-2	1
Carmarthenshire	16	19	14	11	23	3	11	19
Swansea	-1	-1	-2	-12	-2	5	3	-3
Neath Port Talbot	-13	-16	-8	-9	-14	-21	-9	-15

#### Carmarthenshire



#### Vale of Glamorgan



Merthyr Tydfil



0 20 40 60 80

Percentage above/below national participation rate

Bridgend



All Welsh domiciled

Part-time (excluding low credit)

Full-time undergraduates (under 25 years)

Full-time undergraduates (25 years and over)

Full-time

Part-time

Male

-80 -60

-40 -20

Female

Percentage above/below national participation rate





#### Percentage above/below national participation rate

0 20

60 80

40

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	0	13	-11	-9	18	-4	4	-2
Vale of Glamorgan	14	24	2	6	31	-9	19	10
Rhondda Cynon Taff	-13	-8	-17	-13	-8	-9	-11	-14
Merthyr Tydfil	-8	-10	-3	3	-8	-13	-11	-6



Percentage above/below national participation rate

Monmouthshire



#### Percentage above/below national participation rate





Percentage above/below national participation rate





Percentage above/below national participation rate

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	-19	-24	-22	-18	-22	-22	-22
Blaenau Gwent	-31	-34	-27	-23	-36	-14	-36	-28
Torfaen	-21	-18	-22	-19	-15	-13	-22	-20
Monmouthshire	18	36	-1	0	45	-11	20	17

Blaenau Gwent



All Welsh domiciled Full-time Part-time Part-time Part-time (excluding low credit) Full-time undergraduates (under 25 years) Full-time undergraduates (25 years and over) Male Female -80 -60 -40 -20 0 20 40

Percentage above/below national participation rate

Newport

Percentage above/below national participation rate

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	2	-12	-15	3	9	0	-8
Cardiff	8	-7	24	23	-17	18	18	1

# **Section 3**



# National participation rates for Welsh domiciled students by gender for specific age groups 2001/02 – 2006/07

Difference in national participation rates for Welsh domiciled students by gender for specific age groups 2001/02 – 2006/07



Veer	All ages				18 to 19 years old		20 to 24 years old			
rear	Males	Females	Difference	Males	Females	Difference	Males	Females	Difference	
2001/02	3.2	3.9	0.7	24.9	30.1	5.2	16.8	18.8	2.0	
2002/03	3.2	4.1	0.9	23.6	29.7	6.1	16.2	19.2	3.0	
2003/04	3.2	4.2	1.0	22.9	29.8	6.9	15.9	19.4	3.5	
2004/05	3.1	4.3	1.2	22.4	30.0	7.6	14.9	19.4	4.5	
2005/06	3.1	4.3	1.2	22.3	29.4	7.1	14.7	18.7	4.0	
2006/07	3.1	4.3	1.2	22.4	29.9	7.5	14.0	18.4	4.4	

# Annexes

## Tables

Institutions		Full-time				Part-time					
	UG (degree)	UG (other)	PG (taught)	PG (research)	UG (degree)	UG (other)	PG (taught)	PG (research)			
Welsh HEIs	30,601	2,850	3,439	1,039	3,628	23,977	6,566	725	72,825		
UK (non-Welsh) HEIs	17,262	869	1,508	614	936	2,153	2,838	277	26,457		
Open University	0	0	0	2	3,159	2,569	509	22	6,261		
Welsh FECs	304	477	0	0	657	2,750	24	0	4,212		
GB (non-Welsh) FECs	82	109	2	0	27	577	72	0	869		
TOTAL	48,249	4,305	4,949	1,655	8,407	32,026	10,009	1,024	110,624		

## Table 1 : Welsh Domiciled Students by Mode and Level of Study 2006/07

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 2006/07

Institutions		Male				Female				
	F	т	Р	PT		т	Р	т		
	Under 25	25 and over	Under 25	25 and over	Under 25	25 and over	Under 25	25 and over		
Welsh HEIs	12,045	3,111	2,875	9,637	16,206	6,567	3,378	19,006	72,825	
UK (non-Welsh) HEIs	8,375	817	514	2,129	10,110	951	536	3,025	26,457	
Open University	0	1	301	2,362	1	0	601	2,995	6,261	
Welsh FECs	233	102	370	1,063	236	210	335	1,663	4,212	
GB (non-Welsh) FECs	83	15	61	281	82	13	60	274	869	
TOTAL	20,736	4,046	4,121	15,472	26,635	7,741	4,910	26,963	110,624	

Notes :

UK = United Kingdom, GB = Great Britain, HEIs = Higher Education Institutions, FECs = Further Education Colleges
 Age is the student's age on 31<sup>st</sup> August 2006
 Unknown ages are assumed to be aged 25 and over

## Table 3 : Welsh Domiciled Students by Full-Time Equivalent 2006/07

Institutions	Less than 10%	Greater than 10%	Total
	of an FTE	of an FTE	
Welsh HEIs	7,303	65,522	72,825
UK (non-Welsh) HEIs	519	25,938	26,457
Open University	896	5,365	6,261
Welsh FECs	*	4,212	4,212
GB (non-Welsh) FECs	*	869	869
TOTAL	8,718	101,906	110,624

Notes :

UK = United Kingdom, GB = Great Britain HEIs = Higher Education Institutions, FECs = Further Education Colleges
 FTE = Full-time equivalent

3) \* FTE not available for FEC data

#### Table 4 : Welsh Domiciled Students by Postcode 2006/07

Institutions	Students with Identifiable	Students with Unidentified	% of postcodes which are	Total
	Postcodes	Postcodes	unidentifiable	
Welsh HEIs	72,082	743	1%	72,825
UK (non-Welsh) HEIs	26,228	229	1%	26,457
Open University	6,246	15	0%	6,261
Welsh FECs	4,089	123	3%	4,212
GB (non-Welsh) FECs	865	4	0%	869
TOTAL	109,510	1,114	1%	110,624

Notes :

1) Unidentifiable postcodes are invalid postcodes returned by institutions

## Table 5 : National Participation Rates for all Welsh Domiciled Students 2004/05 – 2006/07

AGE			Perce	ntage of Po	pulation in	Higher Edu	cation		
		2004/05			2005/06		2006/07		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
16 to 17 years old	3.1	3.8	3.4	2.4	2.8	2.6	1.8	2.3	2.1
18 to 19 years old	22.4	30.0	26.2	22.3	29.4	25.8	22.4	29.9	26.1
20 to 24 years old	14.9	19.4	17.1	14.7	18.7	16.7	14.0	18.4	16.1
25 to 29 years old	5.6	8.2	6.9	5.7	8.4	7.1	5.4	8.6	7.0
30 to 39 years old	3.6	5.7	4.7	3.6	5.8	4.7	3.6	6.0	4.9
40 to 49 years old	2.3	4.3	3.3	2.3	4.3	3.4	2.3	4.5	3.4
50 to 59 years old	1.3	1.9	1.6	1.2	2.0	1.6	1.2	2.1	1.6
All ages	3.1	4.3	3.7	3.1	4.3	3.7	3.1	4.3	3.7

Unitary Authority	Standard Pa	rticipation Rates f Students	or all Welsh	Standard Participation Rates for Full-time Students*				
	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07		
Isle of Anglesey	19	17	27	18	15	17		
Gwynedd	4	-1	4	-3	-8	1		
Conwy	17	31	27	22	24	24		
Denbighshire	-2	6	3	7	9	5		
Flintshire	-12	-9	-8	-4	-4	-3		
Wrexham	-13	-11	-9	-7	-6	-7		
Powys	4	6	7	17	21	22		
Ceredigion	25	20	17	-15	-15	-18		
Pembrokeshire	5	6	0	22	19	11		
Carmarthenshire	22	21	16	23	19	19		
Swansea	3	1	-1	2	2	-1		
Neath Port Talbot	-9	-15	-13	-9	-15	-16		
Bridgend	-5	-5	0	4	5	13		
Vale of Glamorgan	16	15	14	24	28	24		
Rhondda Cynon Taff	-8	-12	-13	-10	-9	-8		
Merthyr Tydfil	-2	-5	-8	-9	-4	-10		
Caerphilly	-18	-22	-22	-19	-21	-19		
Blaenau Gwent	-33	-35	-31	-37	-33	-34		
Torfaen	-21	-22	-21	-16	-16	-18		
Monmouthshire	20	20	18	45	42	36		
Newport	-9	-5	-5	0	0	2		
Cardiff	4	7	8	-10	-9	-7		
Standard Deviation	15.2	16.4	15.5	18.6	18.3	17.6		

#### Table 6a : Trends in Standard Participation Rates, Overall and for Full-Time students 2004/05 - 2006/07

Notes :

\* excludes PGR students

# Table 6b : Trends in Standard Participation Rates for Part-time Students 2004/05 – 2006/07

Unitary Authority	Standard Pa	rticipation Rates Students*	for Part-time	Standard Participation Rates for Part-time Students (excluding low-credit students)*				
	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07		
Isle of Anglesey	20	19	39	-1	5	18		
Gwynedd	10	6	5	-13	-10	-4		
Conwy	13	39	31	1	34	30		
Denbighshire	-9	4	2	-13	10	7		
Flintshire	-19	-12	-11	-11	-5	-4		
Wrexham	-17	-15	-9	-7	-6	-2		
Powys	-8	-8	-7	-11	-3	-6		
Ceredigion	81	67	64	74	65	55		
Pembrokeshire	-12	-4	-10	-7	4	-3		
Carmarthenshire	23	24	14	28	22	11		
Swansea	5	-2	-2	4	-13	-12		
Neath Port Talbot	-9	-15	-8	-4	-16	-9		
Bridgend	-12	-13	-11	-5	-10	-9		
Vale of Glamorgan	6	0	2	11	4	6		
Rhondda Cynon Taff	-5	-14	-17	-10	-10	-13		
Merthyr Tydfil	8	-4	-3	-6	3	3		
Caerphilly	-17	-22	-24	-15	-19	-22		
Blaenau Gwent	-29	-36	-27	-29	-34	-23		
Torfaen	-25	-26	-22	-21	-24	-19		
Monmouthshire	-5	-3	-1	0	-2	0		
Newport	-17	-11	-12	-11	-16	-15		
Cardiff	20	25	24	20	24	23		
Standard Deviation	23.3	23.1	21.9	21.0	21.6	18.4		

Notes :

\* excludes PGR students

# Table 6c : Trends in Standard Participation Rates for Full-time Undergraduate Students by Age 2004/05 – 2006/07

Unitary Authority	Standard Pa Undergraduate	articipation Rates Students (under 2	for Full-time 25 years of age)	Standard Participation Rates for Full-time Undergraduate Students (25 years of age or older)			
	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	
Isle of Anglesey	16	15	13	16	14	21	
Gwynedd	-10	-14	-3	0	-5	-9	
Conwy	22	27	24	28	21	32	
Denbighshire	6	11	4	18	5	17	
Flintshire	0	-1	1	-9	-7	-7	
Wrexham	-11	-9	-11	22	21	27	
Powys	27	31	32	-22	-16	-24	
Ceredigion	-26	-25	-26	46	38	25	
Pembrokeshire	32	26	18	-14	-18	-18	
Carmarthenshire	26	24	23	11	0	3	
Swansea	0	0	-2	5	13	5	
Neath Port Talbot	-10	-15	-14	-6	-18	-21	
Bridgend	8	11	18	-11	-5	-4	
Vale of Glamorgan	32	35	31	-8	-3	-9	
Rhondda Cynon Taff	-8	-8	-8	-7	-8	-9	
Merthyr Tydfil	-5	-2	-8	-18	-6	-13	
Caerphilly	-16	-18	-18	-26	-24	-22	
Blaenau Gwent	-40	-34	-36	-13	-17	-14	
Torfaen	-14	-14	-15	-9	-16	-13	
Monmouthshire	58	54	45	-18	-11	-11	
Newport	0	0	3	7	11	9	
Cardiff	-18	-19	-17	12	16	18	
Standard Deviation	22.8	22.3	20.8	18.2	16.2	17.3	

# Table 6d : Trends in Standard Participation Rates by Gender 2004/05 - 2006/07

	Standard Parti	cipation Rates for	Male Students	Standard Participation Rates for Female Students			
Onitary Authority	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	
Isle of Anglesey	12	11	17	24	21	34	
Gwynedd	1	-1	4	6	0	4	
Conwy	12	24	21	20	35	31	
Denbighshire	-7	-3	-6	3	12	9	
Flintshire	-14	-14	-13	-10	-5	-4	
Wrexham	-15	-17	-17	-11	-7	-3	
Powys	-5	-3	-3	10	13	14	
Ceredigion	15	10	5	31	27	26	
Pembrokeshire	2	2	-2	6	9	1	
Carmarthenshire	19	16	11	24	24	19	
Swansea	3	4	3	4	-2	-3	
Neath Port Talbot	-8	-12	-9	-10	-18	-15	
Bridgend	-3	0	4	-6	-8	-2	
Vale of Glamorgan	17	19	19	15	12	10	
Rhondda Cynon Taff	-5	-11	-11	-10	-12	-14	
Merthyr Tydfil	-2	-10	-11	-2	-3	-6	
Caerphilly	-18	-22	-22	-18	-21	-22	
Blaenau Gwent	-36	-35	-36	-31	-34	-28	
Torfaen	-21	-23	-22	-21	-20	-20	
Monmouthshire	21	22	20	20	18	17	
Newport	-3	-3	0	-12	-7	-8	
Cardiff	13	18	18	-1	0	1	
Standard Deviation	14.6	16.0	15.5	16.4	17.6	16.8	

	Nu	mber of all V	Velsh Studer	nts	Nu	mber of Full	time Studen	ts*
Unitary Authority	2004/05	2005/06	2006/07	% change 04/05 to 06/07	2004/05	2005/06	2006/07	% change 04/05 to 06/07
Isle of Anglesey	2,785	2,756	2,996	8%	1,376	1,344	1,393	1%
Gwynedd	4,523	4,378	4,565	1%	2,230	2,139	2,380	7%
Conwy	4,200	4,693	4,589	9%	2,101	2,119	2,198	5%
Denbighshire	3,246	3,481	3,428	6%	1,744	1,754	1,759	1%
Flintshire	4,823	4,970	4,994	4%	2,581	2,551	2,593	0%
Wrexham	4,238	4,288	4,380	3%	2,252	2,227	2,221	-1%
Powys	4,458	4,567	4,623	4%	2,429	2,520	2,596	7%
Ceredigion	3,920	3,742	3,659	-7%	1,548	1,507	1,482	-4%
Pembrokeshire	4,182	4,279	4,039	-3%	2,425	2,373	2,263	-7%
Carmarthenshire	7,474	7,451	7,195	-4%	3,760	3,674	3,739	-1%
Swansea	9,265	9,002	8,930	-4%	4,924	4,877	4,812	-2%
Neath Port Talbot	4,531	4,229	4,366	-4%	2,304	2,119	2,131	-8%
Bridgend	4,582	4,631	4,899	7%	2,489	2,542	2,773	11%
Vale of Glamorgan	5,162	5,197	5,168	0%	2,808	2,934	2,906	3%
Rhondda Cynon Taff	8,120	7,800	7,671	-6%	4,080	4,094	4,139	1%
Merthyr Tydfil	2,045	1,956	1,918	-6%	980	1,007	971	-1%
Caerphilly	5,176	4,953	4,958	-4%	2,578	2,515	2,618	2%
Blaenau Gwent	1,701	1,676	1,773	4%	824	880	872	6%
Torfaen	2,623	2,611	2,646	1%	1,410	1,405	1,412	0%
Monmouthshire	3,513	3,527	3,511	0%	2,016	2,001	1,993	-1%
Newport	4,776	5,004	5,054	6%	2,686	2,729	2,845	6%
Cardiff	14,466	15,044	15,263	6%	7,006	7,107	7,404	6%
All Wales	109,809	110,235	110,625	1%	56,551	56,418	57,500	2%

#### Table 7a : Trends in Student Numbers, Overall and for Full-time Students 2004/05 - 2006/07

Note :

Totals might differ slightly to figures in Tables 1 to 3 due to rounding.
 \* Excludes PGR students

	Nu	mber of Part	-time Studen	its*	Number of Part-time Students (excluding low-credit students)*				
Unitary Authority	2004/05	2005/06	2006/07	% change 04/05 to 06/07	2004/05	2005/06	2006/07	% change 04/05 to 06/07	
Isle of Anglesey	1,344	1,339	1,531	14%	923	968	1,067	16%	
Gwynedd	2,146	2,084	2,025	-6%	1,429	1,468	1,535	7%	
Conwy	2,027	2,491	2,301	14%	1,505	1,955	1,883	25%	
Denbighshire	1,448	1,674	1,619	12%	1,161	1,449	1,399	20%	
Flintshire	2,160	2,345	2,327	8%	1,989	2,083	2,086	5%	
Wrexham	1,905	1,989	2,084	9%	1,817	1,816	1,885	4%	
Powys	1,942	1,964	1,944	0%	1,573	1,676	1,617	3%	
Ceredigion	2,260	2,101	2,044	-10%	1,830	1,717	1,600	-13%	
Pembrokeshire	1,693	1,854	1,703	1%	1,494	1,639	1,514	1%	
Carmarthenshire	3,596	3,673	3,340	-7%	3,145	2,970	2,683	-15%	
Swansea	4,107	3,890	3,859	-6%	3,437	2,846	2,886	-16%	
Neath Port Talbot	2,148	2,012	2,147	0%	1,895	1,645	1,768	-7%	
Bridgend	2,025	2,016	2,050	1%	1,830	1,725	1,756	-4%	
Vale of Glamorgan	2,224	2,128	2,139	-4%	1,933	1,813	1,843	-5%	
Rhondda Cynon Taff	3,898	3,562	3,383	-13%	3,101	3,072	2,953	-5%	
Merthyr Tydfil	1,045	926	921	-12%	755	821	812	8%	
Caerphilly	2,496	2,345	2,244	-10%	2,144	2,022	1,924	-10%	
Blaenau Gwent	847	762	866	2%	706	651	747	6%	
Torfaen	1,170	1,164	1,195	2%	1,038	980	1,036	0%	
Monmouthshire	1,400	1,419	1,410	1%	1,216	1,175	1,177	-3%	
Newport	2,007	2,168	2,101	5%	1,794	1,678	1,683	-6%	
Cardiff	6,865	7,285	7,213	5%	5,844	6,052	6,051	4%	
All Wales	50,753	51,191	50,446	-1%	42,559	42,221	41,905	-2%	

#### Table 7b : Trends in Student Numbers for Part-time Students 2004/05 - 2006/07

Note :

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 2004/05 - 2006/07

	Number of	f Full-time Ur (under 25 ye	ndergraduate ears of age)	e Students	Number of Full-time Undergraduate Students (25 years of age or older)				
Unitary Authority	2004/05	2005/06	2006/07	% change 04/05 to 06/07	2004/05	2005/06	2006/07	% change 04/05 to 06/07	
Isle of Anglesey	1,033	1,030	1,034	0%	217	208	224	3%	
Gwynedd	1,616	1,572	1,770	10%	326	301	296	-9%	
Conwy	1,588	1,637	1,648	4%	374	344	382	2%	
Denbighshire	1,317	1,360	1,326	1%	318	273	309	-3%	
Flintshire	1,989	1,963	2,001	1%	431	426	433	0%	
Wrexham	1,606	1,591	1,546	-4%	505	496	535	6%	
Powys	2,010	2,094	2,159	7%	266	275	255	-4%	
Ceredigion	1,110	1,094	1,082	-3%	269	254	241	-10%	
Pembrokeshire	2,002	1,943	1,842	-8%	270	252	258	-4%	
Carmarthenshire	2,932	2,920	2,937	0%	545	476	506	-7%	
Swansea	3,762	3,717	3,679	-2%	703	743	713	1%	
Neath Port Talbot	1,736	1,625	1,646	-5%	380	321	317	-17%	
Bridgend	1,937	2,024	2,181	13%	361	376	391	8%	
Vale of Glamorgan	2,287	2,397	2,344	2%	328	339	329	0%	
Rhondda Cynon Taff	3,143	3,141	3,125	-1%	681	658	677	-1%	
Merthyr Tydfil	786	786	757	-4%	136	152	145	7%	
Caerphilly	1,999	1,963	1,995	0%	397	398	418	5%	
Blaenau Gwent	604	659	645	7%	177	165	176	-1%	
Torfaen	1,095	1,106	1,112	2%	245	218	230	-6%	
Monmouthshire	1,654	1,654	1,634	-1%	195	202	205	5%	
Newport	2,054	2,098	2,183	6%	453	454	455	0%	
Cardiff	4,980	5,005	5,114	3%	1,161	1,209	1,297	12%	
All Wales	43,240	43,379	43,760	1%	8,738	8,540	8,792	1%	

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

## Table 7d : Trends in Student Numbers by Gender 2004/05 - 2006/07

		Number of M	ale Students	i	Number of Female Students				
Unitary Authority	2004/05	2005/06	2006/07	% change 04/05 to 06/07	2004/05	2005/06	2006/07	% change 04/05 to 06/07	
Isle of Anglesey	1,102	1,086	1,126	2%	1,683	1,671	1,870	11%	
Gwynedd	1,798	1,766	1,819	1%	2,726	2,612	2,747	1%	
Conwy	1,670	1,848	1,787	7%	2,530	2,845	2,802	11%	
Denbighshire	1,274	1,327	1,283	1%	1,971	2,154	2,145	9%	
Flintshire	1,941	1,950	1,940	0%	2,882	3,021	3,054	6%	
Wrexham	1,716	1,651	1,620	-6%	2,522	2,637	2,759	9%	
Powys	1,724	1,748	1,743	1%	2,734	2,819	2,880	5%	
Ceredigion	1,468	1,394	1,331	-9%	2,452	2,348	2,327	-5%	
Pembrokeshire	1,676	1,687	1,598	-5%	2,506	2,592	2,440	-3%	
Carmarthenshire	2,957	2,867	2,727	-8%	4,517	4,584	4,467	-1%	
Swansea	3,833	3,873	3,772	-2%	5,432	5,129	5,158	-5%	
Neath Port Talbot	1,877	1,804	1,834	-2%	2,653	2,426	2,532	-5%	
Bridgend	1,927	2,006	2,062	7%	2,655	2,626	2,836	7%	
Vale of Glamorgan	2,145	2,206	2,169	1%	3,017	2,991	2,999	-1%	
Rhondda Cynon Taff	3,414	3,167	3,103	-9%	4,706	4,634	4,567	-3%	
Merthyr Tydfil	818	741	721	-12%	1,227	1,215	1,197	-2%	
Caerphilly	2,113	2,004	1,969	-7%	3,062	2,949	2,989	-2%	
Blaenau Gwent	653	664	646	-1%	1,048	1,012	1,127	8%	
Torfaen	1,080	1,047	1,053	-3%	1,543	1,564	1,593	3%	
Monmouthshire	1,459	1,481	1,446	-1%	2,054	2,045	2,066	1%	
Newport	2,045	2,076	2,114	3%	2,730	2,928	2,939	8%	
Cardiff	6,237	6,541	6,509	4%	8,229	8,503	8,754	6%	
All Wales	44,927	44,934	44,372	-1%	64,879	65,305	66,248	2%	

Note :

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

	Percentage of Male Population in Higher Education									
AGE	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	Difference 2001/02 to 2006/07			
16 to 17 years old	0.9	1.9	2.2	3.1	2.4	1.8	0.9			
18 to 19 years old	24.9	23.6	22.9	22.4	22.3	22.4	-2.5			
20 to 24 years old	16.8	16.2	15.9	14.9	14.7	14.0	-2.8			
25 to 29 years old	5.6	5.6	5.7	5.6	5.7	5.4	-0.2			
30 to 39 years old	3.9	3.8	3.6	3.6	3.6	3.6	-0.3			
40 to 49 years old	2.5	2.5	2.4	2.3	2.3	2.3	-0.2			
50 to 59 years old	1.2	1.2	1.2	1.3	1.2	1.2	0.0			
All ages	3.2	3.2	3.2	3.1	3.1	3.1	-0.1			

Table 8a : National Participation Rates for Male Welsh Domiciled Students 2001/02 – 2006/07

# Table 8b : National Participation Rates for Female Welsh Domiciled Students 2001/02 – 2006/07

	Percentage of Female Population in Higher Education									
AGE	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	Difference 2001/02 to 2006/07			
16 to 17 years old	1.2	2.7	3.3	3.8	2.8	2.3	1.1			
18 to 19 years old	30.1	29.7	29.8	30.0	29.4	29.9	-0.2			
20 to 24 years old	18.8	19.2	19.4	19.4	18.7	18.4	-0.4			
25 to 29 years old	7.1	7.6	8.0	8.2	8.4	8.6	1.5			
30 to 39 years old	5.1	5.4	5.6	5.7	5.8	6.0	0.9			
40 to 49 years old	3.9	4.2	4.2	4.3	4.3	4.5	0.6			
50 to 59 years old	1.7	1.8	1.9	1.9	2.0	2.1	0.4			
All ages	3.9	4.1	4.2	4.3	4.3	4.3	0.4			

# Table 8c : Difference in National Participation Rates Welsh Domiciled Students 2001/02 – 2006/07

	Difference in Percentage of Population in Higher Education (Female – Male)									
AGE	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	Difference 2001/02 to 2006/07			
16 to 17 years old	0.3	0.8	1.1	0.7	0.4	0.5	0.2			
18 to 19 years old	5.2	6.1	6.9	7.6	7.1	7.5	2.3			
20 to 24 years old	2.0	3.0	3.5	4.5	4.0	4.4	2.4			
25 to 29 years old	1.5	2.0	2.3	2.6	2.7	3.2	1.7			
30 to 39 years old	1.2	1.6	2.0	2.1	2.2	2.4	1.2			
40 to 49 years old	1.4	1.7	1.8	2.0	2.0	2.2	0.8			
50 to 59 years old	0.5	0.6	0.7	0.6	0.8	0.9	0.4			
All ages	0.7	0.9	1.0	1.2	1.2	1.2	0.5			

# **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.

- 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



where *x* is each age and gender group and where

Expected number of full-time students from Unitary Authority<sub>x</sub> =

Population of Unitary Authority  $_x \times$  National participation rate for full-time students  $_x$ 

and

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 110,624 Welsh HE students in 2006/07 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 midyear population estimate data. For example, 2007 mid-year population estimate data was used to grow the Census 2001 data for use in calculating the 2006/07 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 6,155 full-time undergraduate enrolments at this HEI in 2006/07 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 overestimated, 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 five Unitary Authorities, however the participation rate calculated by the original method for each 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.

# Future analyses

22 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**

- 23 This analysis includes individual students, returned on the HESA student record, who were active within the academic year, that is between 1 August 2006 and 31 July 2007 for 2006/07, and excludes:
  - 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
- 24 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 database is derived from data provided by Ordnance Survey and Royal Mail. Postcodes are mapped to the geographies within which the centroid of the postcode falls.