## A LEARNING INSIGHT INTO DEMOGRAPHY



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## 1. Summary and discussion

## Introduction

1.1 The availability of sound intelligence and analysis is important for the development of evidence-based policy. Learning Insights have been designed so as to provide considered, robust and accessible overviews of subject areas and key issues relevant to the development of learning in Wales.
1.2 BMG Research was commissioned by ELWa to write a series of three 'Learning Insight' papers. The purpose of these papers was to review existing research and statistics relating to three thematic areas as the basis for assessing ELWa policy on learning and skills development in Wales. The three thematic areas were the demography of Wales, the phenomenon of economic in activity in Wales, and basic skills issues in Wales.
1.3 Each Learning Insight comprises a technical paper setting out some key statistics and analysis. This forms the main part of the document. However, the Insight begins with a general summary and discussion of findings which is sufficiently selfcontained to be read on its own by those who do not wish to consider the more detailed findings on which it draws.

## What is 'demography'

1.4 Demography is the statistical study of populations, and as such is key background information for policy formulation.
1.5 As well as considering overall population size from time to time, demography is concerned with the composition of the population by age and sex, and with its spatial distribution.
1.6 Populations and population change are always measured with respect to a particular geographical area. So for example, we might refer to the 'population of the world', or the 'population of Ceredigion'.
1.7 There are two main ways in which change in the size of a population or a population group in a given area can occur:

- births and deaths
- migration

In recent decades it has also become possible for people to change their sex, but this is rare, and can be ignored in the present context
1.8 While it is fairly clear what is meant by a birth or a death, the concept of migration is rather more complicated:

- Consider, for instance, a household that moves from Wrexham to Cardiff. Such a move would almost always involve not only a change in accommodation, but also changes in employment, schools and travel patterns. However, if Wales is one of the basic geographical units being used in an analysis, this disruption of almost all aspects of life would not be counted as a migratory move.
- Now consider a household moving from Wrexham to Chester. Such a move could be achieved with less disruption. In particular, employment could be maintained with some change in travel-to-work patterns. But even though this move is arguably less disruptive than a move from Wrexham to Cardiff, it would be counted as a migratory move.
1.9 The relative importance of the two ways in which population change occurs varies systematically with fineness of the geographical division used. Think of Great Britain divided into its constituent countries. In any year, there will be six distinct flows of internal migration:

| Wales to England | England to Wales |
| :--- | :--- |
| Wales to Scotland | Scotland to Wales |
| Scotland to England | England to Scotland |

1.10 In this context, Welsh migration consists of the first 4 of these flows. If we now subdivide Wales into its 4 constituent regions, measured migration will be higher, since some moves within Wales will be added to the ones counted in the threecountry analysis. Births and deaths will, of course, be unaffected by the subdivision of the country.

Another way of understanding this point is to observe that population change on a global scale is entirely caused by births and deaths.
1.11 Policy analysis is helped considerably the less uncertain the future is. Demography is one of the few social sciences in which there is some virtue in prediction, since many demographic phenomena can be predicted using our knowledge of the existing population. Thus, the number of 16 year olds in Wales can be predicted with some certainty over the next 15 years, because the people involved are already alive, and death rates for children over the age of one are low and stable. The main source of uncertainty is the rate at which young people will migrate in the future.
1.12 Since migratory moves increase in importance relative to births and deaths the finer the geographical division adopted, it is more difficult to make secure predictions at a local level than at a national level.

## Total population change

1.13 Between the 1991 and 2001 Censuses, the population of Wales grew only slightly, by $2.4 \%$ or about 68,000 people. The forecast is that the population will continue this pattern of slow growth. This growth results from natural population change (births minus deaths) interacting with net in-migration (of around 9,000 people in 2001). It is forecast that Wales' population will rise further by around 95,000 people between 2001 and 2021, an average of 4,500-5,000 people each year (less than $+0.2 \%$ per annum).
1.14 Whilst it might be tempting to read into this the implication that the total 'learning market' (just from a rising population) is, in principle, a growing one, it is important to note that the rate of growth is expected to be marginal, and would be unlikely to require sharp increases in the volume of provision.

## Change in the age structure of the population

1.15 In addition, growth of the total population does not necessarily translate into growth in the learning market. This is particularly true if population change takes place in parts of the population who do not demand learning. This means that there is a need to consider the age structure of the population.
1.16 Again this occurs as a result of two phenomena interacting together. Firstly, as historic periods of high or low birthrates 'work their way' through the age structure of the population, at any given point in time the numbers in a particular age band may be at a relatively high or low level. They also affect the numbers of births at any particular point - a smaller number of women in the 'fertile' age range producing a relatively lower number of new births. Secondly, migration patterns may disproportionately favour certain age groups depending on who leaves Wales and who moves in.
1.17 Through the 1990s these processes led to marked changes in Wales' population structure:

- Fall in the number of 0-9 year olds
- Rise in the number of 10-14 year olds
- Fall in the number of 15-29 year olds
- Rise in the number of those aged between 30 and retirement age
- Fall in the number of those between retirement age and age 74
- A big proportionate rise in the over 75 s
1.18 The major contributor to this pattern was the 'wave/ trough' effect in the age structure, but it has also been suggested (Centre for Economic and Social Inclusion) that a particularly large rise in the 45-59 year range may, in part, have been a consequence of 'returners to Wales' - people who left Wales at younger ages to enter higher education or to find work then returning later in life. Since this phenomenon is also quite obviously a feature of population change of English regions outside of South East England, we would believe that this is a significant factor - and, of course, English in-migration to Wales continues to be a visible trend.
1.19 The overall effect, taking the scale of changes affecting more detailed age bands into account, has been a shift towards the older age groups - 42\% of the population of Wales is now aged 45 or over compared with $39 \%$ a decade ago.
1.20 More pertinent to learning and skills policy, however, are the likely future trends. Broadly, these are likely to be
- $10 \%$ fall in the number of children ( $0-15$ years) over the next decade.
- A small, $2 \%$, rise in the working age ( 16 to retirement age) population over the period.
- A further increase in the proportion of those above retirement age.
1.21 More specifically, in respect of one of the 16-19 year old cohort, it is expected to grow from around 156,000 people in 2003 to a peak of around 162,000 people in 2008 and then to decline to a trough of around 135,000 people by 2021.
1.22 Considering just 16 year olds and assuming that their overall propensity to follow current 'destinations' remains constant, then we get the projections in Table 1.

Table 1 Numbers of 16 year olds following different destinations; selected years to 2021; assuming proportions following different destinations remain constant

|  | 2003 |  | 2008 |  | 2011 |  | $\mathbf{2 0 2 1}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\%$ | No. | $\%$ | No. | $\%$ | No. | $\%$ | No. |
| $6^{\text {th }}$ Form | 40.2 | 15,848 | 40.2 | 16,108 | 40.2 | 14,801 | 40.2 | 13,593 |
| FE College | 33.1 | 13,050 | 33.1 | 13,263 | 33.1 | 12,187 | 33.1 | 11,192 |
| Work based training | 8.7 | 3,430 | 8.7 | 3,486 | 8.7 | 3,203 | 8.7 | 2,941 |
| Employment without <br> government support | 6.2 | 2,444 | 6.2 | 2,484 | 6.2 | 2,282 | 6.2 | 2,096 |
| Not in education, <br> training or <br> employment | 6.5 | 2,562 | 6.5 | 2,604 | 6.5 | 2,393 | 6.5 | 2,198 |
| Not known/left area | 4.2 | 1,656 | 4.2 | 1,683 | 4.2 | 1,546 | 4.2 | 1,420 |
|  | 100.0 | 39,245 | 100.0 | 40,072 | 100.0 | 36,819 | 100.0 | 33,815 |

Source: Government Actuaries Office; Careers Wales
1.23 This analysis suggests a pattern in which entry to various education and training destinations will rise gently over the next 5 years but will then begin a period of consistent decline - with numbers in 6th Forms, Colleges and on Work Based Learning programmes being some 16\% lower than at the peak years of 2008 and 2009.
1.24 It is possible to forecast learning participation levels in Wales by analysing current levels of participation by mode of learning and age and comparing them with the age profile of Wales. This analysis may then be used as a starting point to produce learning forecasts.
1.25 Table 2 provides forecast estimates of Welsh learners up to the year 2015. These include Sixth Form learners and learners whose age is unknown. Whilst the overall trend is for an increase in learners up to 2007, after this, numbers start to decline. This pattern is generally followed by all age groups except those aged 25-39 where numbers are expected to first fall then rise, and the 60 plus group where numbers are expected to continue to increase throughout the period. This is illustrated in Graph 1.
1.26 Overall, the total number of learners is expected to decrease by around 4,300 or $1.3 \%$. Whilst large falls are expected amongst the 16-18 age group (9.5\%), the 60 plus age group is expected to increase by around 15.3\%. The introduction of the Education Maintenance Allowance is expected to have a marginal effect on participation numbers - roughly 4,700 additional young learners per year.

Table 2: Participation Projections

|  | 2004 | 2007 | 2015 | $2004-2015$ |
| :--- | ---: | ---: | ---: | ---: |
| $16-18$ | 86,517 | 87,407 | 78,272 | $-8,244$ |
| $19-21$ | 29,096 | 30,230 | 28,725 | -371 |
| $22-24$ | 21,294 | 22,153 | 23,211 | 1,917 |
| $25-39$ | 73,931 | 71,213 | 71,755 | $-2,177$ |
| $40-59$ | 77,534 | 78,516 | 76,733 | -802 |
| 60 and over | 35,235 | 37,214 | 40,607 | 5,372 |
|  |  |  |  |  |
| Total Learners | 323,607 | 326,733 | 319,303 | $-4,304$ |


1.27 What do these trends mean for learning and skills policy?
1.28 Firstly, in revealing an ageing workforce, they imply a continuing need for strategies which place some emphasis on the skilling and re-skilling of older workers. This is obviously quite a difficult message to get across. Household surveys both in Wales and across the UK reveal consistently lower likelihood of older workers being trained by their employers and consistently lower levels of positive motivation towards training by older workers themselves. Indeed there is a considerable likelihood for men with redundant skills to leave the workforce entirely.
1.29 An ageing population also implies a rising demand for skills in caring for, and nursing of, older people, which will need to be met.
1.30 At the other end of the age spectrum, the changing numbers of young people in the 16-19 age range imply moderately rising demand for education and training places for the next five years or so, for which provision needs to be available. But in the longer term, the numbers are downwards for a further decade (and will rise only marginally thereafter). Clearly, responsiveness in the short term to modestly rising numbers should not conceal the fact that within 5 or 6 years the unit costs of provision will begin to rise unless the total cost of provision is itself cut back. The question in respect of 16-19 provision will be of whether to maintain (perhaps even increase) the 16-19 budget to allow higher quality per student as numbers decline, or whether to use the opportunity of falling numbers of young people to shift budget emphasis (currently 60\% of ELWa's total budget is spent on the foundation education of the $5 \%$ of the working-age population which is aged 16-19) into other areas of learning such as most obviously, workforce development for adults.

## Population distribution within Wales

1.31 These reflections on overall population change and on changes in age structure do not, however, tell the whole story. A further phenomenon is the differential effect of growth on different areas of Wales. Thus, in the 1990s the population of South West Wales grew by $+0.4 \%$, South East Wales by $+1.8 \%$ and North Wales by $+3.4 \%$. But the population of Mid-Wales grew by $10.8 \%$. At a more local level, differences were even more pronounced. The population of Merthyr Tydfil fell by $-5.6 \%$ whereas that of Ceredigion grew by $19.5 \%$.
1.32 Generally, the population picture for the 1990s can be summarised as....

- All of Mid Wales grew;
- All of North Wales grew (except the Isle of Anglesey, which fell);
- All of South West Wales grew (except Swansea, which remained stable).
- South East Wales was much more 'turbulent' (increases in the Vale of Glamorgan, Monmouthshire, Newport, Caerphilly and Bridgend were offset by falls in Merthyr Tydfil, Blaenau Gwent, Cardiff and Torfaen - Rhondda, Cynon, Taff remained stable).
1.33 There are two main processes at work here. Inward migrants to Wales were attracted by the more accessible areas of Mid and North Wales. House prices and the general attractiveness of these areas may also have contributed to this trend. Within the more populated areas of South Wales there was some shift of population from the less successful industrial areas into areas where economic performance has been more successful.
1.34 Considering the age distribution of those people who moved into Wales net of those who moved out, then the largest groups are 50-59 year olds, followed by 3539 year olds and 15-19 year olds. Population growth in Mid Wales and North Wales is likely to have resulted largely from early retirers or those who are preretirement, moving into those regions, supplemented to a lesser degree by midcareer movers and their families.
1.35 In respect of the other form of movement - mainly, out of the Valleys - it would be reasonable to suggest (no statistics available) that it is likely to be younger people who have left in search of better opportunities - emphasising the shift to an older age structure in those areas of decline.
1.36 In short, therefore, in the context of an ageing Welsh population both the former industrial areas and the attractive rural ones are likely to have particularly pronounced ageing effects for different reasons. In the case of the industrial areas, one might argue that educational provision should be cut as the brightest leave and, over the longer term, numbers fall. Maintaining viable ranges of courses may become more difficult. In the rural case, the influx of relatively welloff people may revitalise local service sector economies but rising house prices in areas where housing construction is limited may drive some energetic and able young people out of the area - again reducing the capacity to offer choice of curriculum.
1.37 It is not obvious, however, how learning and skills policy can respond to these trends and their effects - they are 'natural' socio-economic processes which will continue as long as their underlying rationales remain (low levels of employment opportunity in the Valleys, attractive house prices vis-à-vis UK averages in rural areas).


## Ethnic minorities in Wales

1.38 The non-white population of Wales is small. Only $2.1 \%$ of people (about 62,000 people) are non-white including people of mixed race. The highest proportion regionally is in South East Wales at $3.1 \%$. However, at a smaller spatial level, concentration becomes more evident. Cardiff has the largest local ethnic minority population at UA level ( $8.4 \%$ of Cardiff's population is from an ethnic minority background). Five Welsh Wards (4 of which are in Cardiff) have ethnic minority populations of over $20 \%$ whilst, at the other extreme, 22 of the 881 Welsh Wards, all in rural Wales, have no ethnic minority residents. In all $75 \%$ of Wales' nonwhite residents live in $20 \%$ of its Wards - and $27 \%$ live in only 10 Wards.
1.39 Whilst the ethnic minority population is locally concentrated it is also widely spread across different groups. Pakistanis (13.5\%), Indians (13.4\%), and Chinese ( $10.2 \%$ ) are the largest, but mixed race groups account for $28.6 \%$ of the total.
1.40 Some characteristics of the ethnic minority population are....

- Its relative youth.
- Its virtual parity between genders.
- A lower economic activity rate (many ethnic minority residents are students and some of the cultures have a tradition of non-working wives and daughters).
- A relatively high level of qualifications and of employment in professional occupations.
1.41 Ethnic minority people in Wales do not present the challenge to educational and social inclusion which has been faced by some English cities and towns over recent decades. They are either scattered in small numbers across rural and small towns in Wales (restaurants, doctors, nurses, etc.) or, as is more typical, resident in higher concentrations but, in absolute terms, fairly small numbers in urban areas. Overall, particularly in educational and occupational terms, it would not be correct to equate 'ethnic minority' with disadvantage. What is probably true (as in England) is that the populations tend to be rather more polarised in occupational and ability terms. Thus, the non-white population tends to have higher proportions in both higher and lower level jobs and fewer people in the middle-ranking occupations such as skilled trades. But the patterns are not the same between different ethnic minorities - some minorities have a disproportionate number of higher achievers and vice versa.
1.42 What are the implications of this summary analysis for learning and skills policy? The main concern is likely to revolve around the level of English literacy in specific communities. Clearly many of the groups are of fairly long-standing in Wales - a high proportion of people of mixed race is a characteristic of integration. However, there will continue to be some proportion of the ethnic minority population comprised of fairly recent primary immigrants - including refugees/ asylum seekers given the right to stay. A sufficient supply of English teaching to raise the language skills of those without adequate English to levels where they can take up jobs other than the most menial, is likely to bring a significant longterm economic and social return.


## Wealth, poverty and social class

1.43 Compared with the rest of the UK, the Welsh economy generates less wealth. Gross Value Added per head of population was 79\% of the UK level in 2001 - and the gap is increasing. Wales has lower levels of R\&D expenditure than all English regions except the North East. Though rising faster than in England, the proportion of the working age population in work remains lower in Wales. Average earnings in Wales are well behind those of England. Because the latter are biased by the particularly high earnings in London and South East England, a comparison with a region, the South West of England, which has obvious similarities with Wales is perhaps more instructive - but even in this comparison, Wales has a small disadvantage of about $2 \%$ on average for wages in all occupations.
1.44 Corresponding to these indicators of relatively low wealth-generation, Wales has a less-skilled workforce. $21 \%$ of the working age population has no qualifications ( $16 \%$ in England). $21 \%$ of the working age population has a degree ( $24 \%$ in England). 44\% of the working age population has qualifications below Level 2 ( $40 \%$ in England).
1.45 Of course, these statistics are descriptive indicators not value judgements. They simply reflect the nature of Wales' social and economic history....

- Industrial bases that required (and to some extent still require) practical skills rather than qualifications (in extraction, heavy industry, rural and tourism sectors, and so on) and which had/ have occupational structures weighted to intermediate and low skills.
- Industrial biases to small-firm sectors where skills are typically developed informally.
- A patchy history of regeneration, with effective modernisation in Cardiff, Newport and so on but with less success in the Valleys and in some deprived areas of the North Wales coast.
1.46 That the structural character and health of the economy is highly predictive of wealth, workforce skills and learning, health and a whole host of other social characteristics can, of course, be seen by reference to local areas within Wales. Merthyr Tydfil, Rhondda, Cynon, Taff, and Neath Port Talbot rank in the 1st to 3rd place ('worst') of Wales' twenty-two local authority areas on the Welsh Multiple Deprivation Index, with over twice as many people on means tested benefits as in the 22nd (best) area of Monmouthshire. The highest local mortality rates are in Blaenau Gwent, Merthyr Tydfil, Caerphilly, and Neath Port Talbot. More people in Blaenau Gwent, Rhondda, Cynon, Taff, Torfaen, and Neath Port Talbot are in 'routine' and 'semi-routine' jobs (at the lower end of the occupational scale). Fewer young people in Gwent stay-on into full-time education after GCSE than in any other area of Wales. Merthyr Tydfil, Blaenau Gwent, and Rhondda, Cynon, Taff have the lowest level of car ownership of Wales' local authority areas. And so on.
1.47 Overall, therefore, Wales as a whole, and particular areas within Wales, suffer disadvantages, extending into the skills and learning field, in comparison with English regions and UK averages. These are similar to those experienced by South Yorkshire, North East England and other areas of long-standing industrial decline and in consequent need of regeneration.
1.48 If this perspective is accepted, the question is of what meaning it has for learning and skills policy. There seem to be four broad messages.
1.49 The first is that it will be extremely difficult to effect change in Wales' overall position relative to the UK, other than over the long-term. Many of the learning characteristics are effectively 'embedded' in employer and workforce operating models and thought processes. The 'market' largely does not see skills development needs in the same way as do external commentators in government or elsewhere. The essential message is that targets set at the 'micro' level - say, to increase completion rates in Modern Apprenticeships, or to increase the number of students studying construction subjects in FE - are more effective measures of progress than 'macro' level comparisons of Wales' overall position vis-à-vis the UK averages. The latter may provide an incentive to change but are not a particularly useful measure of success or failure.
1.50 The second message is that where learning occurs less - geographically in the Valleys, sectorally in production sectors and in small firms, socially among older and less skilled people, and so on - is essentially a failure of demand not of supply. Improvements to the efficiency or quality of provision will raise the quality of experience and outputs largely for those who will anyway progress through the learning experience. They will not raise participation levels other than marginally and slowly. A centre of Vocational Excellence, for example, provides better training but won't in itself stimulate much greater volumes of participation. If significant increases in participation are sought, essentially this means influencing the demand side. Experience (say, that of TECs and latterly of LSCs in England) suggests that exhortation (marketing) is seldom enough on its own. What other tools exist to influence demand?
1.51 Basically, they comprise....
- Subsidy - to reduce the time/ cost barriers which figure strongly as 'barriers to learning' both for employers and individuals. But, of course, subsidies are expensive.
- Levies on industry - but this is not a route which the UK has historically followed with any conviction.
- Regulation - essentially the requirement that employment in an industry be accompanied by appropriate certification/ qualification. Again this is a route which has historically been much less prevalent (except at professional level) in the UK than in continental Europe - and may be seen as a labour market 'inflexibility' running counter to what is perceived as one of the UK's competitive advantages.
1.52 The third message (or question) concerns geographical focusing of learning resources within Wales. If some areas are manifestly 'deprived' in ways in which low skills/ low achievement/ low learning levels are implicated, to what extent should differential compensatory funding be applied? That is a philosophical/ political question which we are not equipped to attempt to answer here. However, statistics suggest two particular difficulties in focused resources. The first is that while geographical areas contain concentrations of educational deprivation, they do not contain all deprivation - which is found, more thinly spread, and of varying kinds, across all areas of Wales. How far can strategy be responsive both to significant 'pockets' of disadvantage and to the obvious locations of concentrated difficulties? The second concerns motivation. Whilst disadvantage can be enumerated from official statistics, surveys remind us that motivational levels amongst disadvantaged groups are often quite low. The question is one of how much resource should be devoted (say, to adult basic skills programmes) to groups (particularly older and inactive groups) where the marginal rate of return (in terms of enhanced economic activity and productivity) may be quite low.
1.53 The fourth message interacts with some of the others but it concerns the question of how far economic change and growth can be 'skills supply-led'. To what extent can the Welsh economy be pushed forward by developing workforce skills at foundation education and adult learning levels, and in what directions? If we develop more engineering skills can we revitalise the Welsh engineering sector in the same way as we believe that development of digital media skills can stimulate growth in that area of economic activity? Or have the terms of trade for some industries become so disadvantageous that we must view skills supply to them as a care-and-maintenance activity, not a stimulus to new growth?
1.54 A belief in 'skills supply-led growth', perhaps requires some reflection not just on the need for more skills outputs but on which skills should be supported. Once a desirable pattern of skills development has been identified, the question is of how people, young people particularly, can be persuaded, in aggregate, to fall into that pattern - given that recent history has been one in which subject choices have largely been determined by student interests and by a culture which has greatly favoured academic study over vocational skills development. The result has been that, of all students in FE in 2002/01, 18\% were studying IT, $16 \%$ were studying care, $9 \%$ were studying business and management, $8 \%$ were studying cultural studies - but only $1 \%$ were studying engineering and only $3 \%$ were studying other subjects directly relevant to manufacturing.


## Gender

1.55 Finally, in terms of the relationship between gender, employment and skills, some key facts are....

- In 2002 78\% of girls continued in full-time education after GCSE but only 69\% of boys.
- Of some 18,500 enrolments into LEA-funded Adult Continuing Education in December 2001, $77 \%$ were by women.
- $55 \%$ of women work compared with $68 \%$ of men - but only $56 \%$ work full-time compared with $91 \%$ of men.
- Sector of employment is still heavily 'gendered', with male employment much more likely to be in manufacturing, construction and transport, whereas female employment is much stronger in education, health and hotels and restaurants.
- Correspondingly, men still dominate in skilled and semi-skilled manual jobs whilst women are much more likely to be employed in clerical, personal services and sales occupations.
1.56 The questions which these simple statistics provoke concern the ability of public policy to challenge a double paradox.
1.57 Employment is still often distributed along traditional gender lines. Though some sectors/ occupations are fairly balanced (in the proportions of men and women who work in them) others are not. And part-time employment is still mainly the preserve of women. But, as we know, employment patterns are changing - in favour of 'flexible' jobs in service sectors, more likely to be held by women. Manufacturing jobs, in aggregate, are forecast to undergo long-term decline putting traditional male employment at continuing risk. The first paradox is that boys are falling behind girls in post-16 academic participation and achievement even as the changing world of work implies that they should be striving harder. The challenge is, of course, to stop boys, particularly at the lower end of the ability spectrum, becoming 'disaffected' and disappearing from education, training or conventional employment.
1.58 The second paradox concerns the need to square the vocational skills circle. If the economy is moving in the direction of service activities why should we be so concerned about the delivery of manufacturing skills as our last paragraph implied? Is it legitimate (and possible) to persuade young people (predominantly young men) into manufacturing when the prospects are apparently downwards? Some of the answer lies in the observation that needs to replace existing workers generate a positive level of demand for skills even when absolute job numbers are downwards. But employers and sectors need to articulate their future skills needs with some clarity if the manual/ technical vocational message to young people is to be transmitted effectively in Wales.


## Summary

1.59 In summary, a review of demographic features of Welsh society does not reveal many surprises. The main characteristics of the population, its distribution, and its association with other economic and social characteristic are mostly well-known. However, the review prompts reflection on the meaning of Welsh demography for Learning and skills strategy. Again, much of this is well-understood. It would be surprising if, say, strategy was not conscious of issues of disadvantage in particular areas of Wales, of inherent difficulties in delivering education to the sparse populations of rural areas, and so on. However, a number of ideas, some relatively specific, others more general in character, have been drawn out of the analysis which may be of interest and which are set out here in outline....

- Slow population growth shouldn't present a particularly difficult 'provision challenge' for the foreseeable future.
- But the proportion of older people within the population will continue to rise. What are the implications for policy? They may include need for the development of more care and nursing skills, need to encourage employers to be more attentive to the employment and skill needs of older workers, and need to fund more adult learning as a contribution to the social well-being of older people.
- After a period of modest growth, the number of 16-19 year olds will begin a significant period of decline. Should funding be reduced proportionately to maintain unit costs? Or maintain funding to increase quality? Will some courses/ institutions become less viable?
- Some areas of Wales have more significant changes in population numbers than others. These changes are age-related and may imply more significant local declines in numbers of young people than the overall decline. There may be increasing problems in delivering adequate choice in these areas.
- Ethnic minorities in Wales are small overall and are often well-established and integrated - but there are new immigrants, including refugees/ asylum seekers who, given right to stay, require social and economic integration to which adequate provision for English language teaching will be important.
- Overall, Wales has a disadvantage (compared to the UK averages) on many economic and social indicators - including those of levels of learning and skills. These disadvantages are, of course, even more apparent when local areas within Wales are compared with each other - they are not evenly distributed. What are the implications?
- It is argued that these indicators, at an overall level, are simply descriptive of Wales' economic history and position now and are extremely difficult to move in aggregate. It is suggested that public policy should be less concerned about relative positions vis-à-vis UK averages, and measure its success at a lower level ('what have particular programmes achieved?' rather than 'how does Wales compare with the UK?' or, even, 'how does the current position compare with the overall position in Wales a year or two ago?').
- It is argued that behaviour and outcomes in respect of learning and skills are largely market failures - of demand - not primarily the consequences of supply-side weakness. Their solutions lie, therefore, in changes in demand. But the most powerful tools of public policy to induce change - subsidy, levies, regulation, are not ones which might be deployed on a wide scale.
- The issue of resource allocation biased to areas of particular disadvantage is raised. The obvious problem, that all disadvantage is not contained within target areas is raised; and it is also noted that disadvantage often equates with low motivation - it is not always in pursuing difficult cases that the best returns on investment occur.
- The issue of the direction of learning is also discussed. Whilst more learning is obviously a legitimate goal, should patterns of study which are more clearly aligned with industrial needs in Wales than current student choices be sought?
- In terms of gender, it is observed that girls now outperform boys in most areas of education and that the labour market is moving job opportunities more strongly in those sectors and occupations which favour female employment (assuming that they remain gender-biased in traditional patterns). A key objective may be to bring special attention to the 'male deficit' in education, not least to avoid disaffection and the loss of less able young men from productive activity. It is also suggested that the demand for manufacturing skills, taking replacement need into account, needs to be articulated more clearly and precisely, if a better fit between learning patterns and employment opportunities is to be achieved.


## 2. Technical report: introduction

## Scope of report

2.1 It is assumed that readers are familiar not only with Wales's main geographic and economic features, but also with labour market concepts and dynamics, learning motivation, and established patterns of participation.

What do we mean by 'demography'?
2.2 'Demography', the statistical study of populations, is chiefly concerned with resident numbers and densities, population trends, age profiles, social characteristics (e.g. ethnic origin, employment status, occupation) and 'vital statistics' (e.g. births, health indicators and deaths).
2.3 The subjects of other 'Learning Insights' (economic inactivity and basic skills) also have a demographic dimension (e.g. who is likely to be economically inactive, what are their most frequent characteristics, where are they most often found, and so on). Consequently, we do not address the demography of economic inactivity and basic skills in this report, leaving such data for the other 'Learning Insights'.
2.4 As the reports are concerned mainly with learning and skill issues, drawing out the implications of the data, consideration of demographic issues such as marital status and household composition are omitted.

## ELWa remit and strategy

2.5 ELWa's 2003-06 Corporate Plan reveals that around $60 \%$ of its expenditure is directed towards learners in schools and FE colleges ( $£ 303 \mathrm{~m}$ in 2002-03, rising to over $£ 332 \mathrm{~m}$ by 2005-06). Logically, therefore, the main focus of this report should be upon young people, aged approximately 16-19. The second principal item, work-based learning for young people and adults, receives around $17 \%$ of expenditure (equivalent to $£ 85 \mathrm{~m}$ in 2002-03, rising to $£ 103 \mathrm{~m}$ by 2005-06). This suggests paying special attention to residents aged, say $20-44$, who tend to be the most frequent learning participants.
2.6 These age groups are simply the main interest in this report and other age groups are not ignored (e.g. 'Learning Pathways' is a strategy aimed at 14-19 year olds and people aged 50+ are sometimes particularly interested in adult and continuing education).

## Geographic analyses

2.7 Much is already known about spatial variations across Wales - statistics are presented at the national, regional, unitary authority (UA) and occasionally wardlevel, as appropriate, using ELWa's four regions as the main focal point.

## ELWa regions

2.8 ELWa is organised into four regions (North Wales, Mid Wales, South West Wales and South East Wales) and all references to 'regions' imply such areas. (Where used, 'national' implies all of Wales.)
2.9 Although the boundaries of ELWa's regions largely follow Unitary Authority boundaries, Gwynedd is shared between North Wales (the Lleyn Peninsula) and Mid Wales (the old county of Meirionnydd). There are practical difficulties involved in subdividing and reassigning Gwynedd's data to ELWa's North Wales and Mid Wales regions. Accordingly, all of Gwynedd's data are to be included in North Wales. (Thus, North Wales's true position is somewhat overstated, whereas Mid Wales's is slightly understated. However, bearing in mind South Gwynedd's small population and very low population density, the regional positions will not differ significantly from the reported results.)

## Sources and references

2.10 The statistical data are drawn mainly from the 2001 Census of Population, supplemented from other sources as necessary. Sources are referenced, where relevant and as appropriate. Crown Copyright is acknowledged.

## Structure of report

2.11 This technical analysis is arranged as follows:

- Total population and age structure
- Gender
- Ethnic origin
- Social indicators
- Access to jobs and learning
- Key points and implications


## 3. Total population and age structure

## Introduction

3.1 First, Wales's total population, recent population changes and trends, population forecasts and the population age structure are considered.
3.2 The main source of data is the 2001 Census, although occasionally other sources (e.g. Mid-Year Population Estimates, ONS; population forecasts, Government Actuary's Department) are used. To avoid unnecessary repetition, readers should assume the source is the 2001 Census, unless otherwise stated.

## Total population

Census 2001
3.3 According to the Census, Wales's total population consisted of $2,903,085$ individuals in 2001.
3.4 The following Table shows the regional distribution of this population in 2001. Almost half live in South East Wales.

|  | Total <br> population | Percent |
| :--- | :---: | :---: |
| North Wales | 663,403 | 22.9 |
| Mid Wales | 201,295 | 6.9 |
| South West Wales | 644,742 | 22.2 |
| South East Wales | $1,393,645$ | 48.0 |
| All Wales | $2,903,085$ | 100.0 |

## Mid-year estimates

3.5 In addition to the Census figures, the Office for National Statistics (ONS) publishes mid-year population estimates, intended to track population change between the ten-year censuses. ${ }^{1}$
3.6 Mid-year estimates start from the benchmark provided by the 2001 Census. Although a census might appear more reliable than an estimate, there are a number of reasons why this may not necessarily be true (e.g. certain groups, such as young adult males and those who move frequently, may be under-represented in a Census). (The accuracy of Census results and Mid-Year Population Estimates are kept under constant review by the ONS.)

[^0]3.7 The 2002 mid-Year Population Estimates put Wales's total population at $2,923,500$. This is $0.7 \%$ higher than the 2001 Census total, although mid-Year Estimates and Census totals are not directly comparable, for various reasons. A comparison of the mid-year estimates for 2001 and 2002 gives a slightly lower percentage increase of 0.45\%

|  | 2001 | 2002 |
| :--- | ---: | ---: |
| North Wales | 664,500 | 667,500 |
| Mid Wales | 201,800 | 203,300 |
| South West Wales | 644,700 | 647,700 |
| South East Wales | $1,399,200$ | $1,405,000$ |
| All Wales | $2,910,200$ | $2,923,500$ |

Population change (1991-2001)
3.8 Whilst the population distribution is widely known, the pattern of population change is perhaps more significant for learning policy. Although Wales's total population has increased by $2.4 \%$ over the last ten years (to the 2001 Census), there are sharp differences at both the regional and UA levels.
3.9 Regionally:

- South West Wales is stable;
- South East Wales has grown a little overall, but there are stark differences between different UAs (Cardiff and Monmouthshire have grown by more than $6 \%$, but the industrial valleys are stable or falling, especially in Merthyr Tydfil and Blaenau Gwent);
- North Wales has grown more than the national (Wales) average, especially in the north east of the region, but the Isle of Anglesey has fallen by 3.4\%;
- Mid Wales shows a remarkable percentage increase, despite the absence of significant industrial and commercial development, the usual causes of population growth;
- to summarise ...

| 1991-2001 | Population <br> change (nos.) | Percent <br> change |
| :--- | :---: | :---: |
| North Wales | $+21,412$ | +3.4 |
| Mid Wales | $+19,579$ | +10.8 |
| South West Wales | $+2,469$ | +0.4 |
| South East Wales | $+24,552$ | +1.8 |
| All Wales | $+68,012$ | +2.4 |

3.10 At the UA level, percentage changes lie between a fall of $5.6 \%$ (Merthyr Tydfil) and a rise of 19.5\% (Ceredigion):

- the largest proportionate falls are found in Merthyr Tydfil ( $-5.6 \%$ ), the Isle of Anglesey (-3.4\%), Blaenau Gwent (-3.0\%) and Neath Port Talbot (-2.7\%);
- the largest proportionate rises are seen in Ceredigion (+19.5\%), Cardiff (+6.9\%), Monmouthshire (+6.2\%), Powys (+6.2\%), Flintshire (+5.1\%), Denbighshire (+4.9\%) and Wrexham (+4.3\%).
3.11 Population change is therefore more turbulent than Wales's net increase of 2.4\% (just over 68,000 people) suggests. Growing UAs have increased by a total of 80,500 , offset by a fall of 12,500 in declining UAs.


## Regional population trends (1991-2001)

3.12 Chart 1 below compares population trends at regional level, expressed as an index (1991=100), based on ONS Mid-Year Estimates. Whilst there have been only modest increases in North, South West and South East Wales, the percentage growth in Mid Wales's total population has been large.

3.13 Again, it must be remembered that the regional figures in Chart 1 above are the net result of different changes at the UA level. (For example, although North Wales is the second-fastest growing region, within North Wales, the Isle of Anglesey's total population has actually fallen.)

## What are the likely causes of these population changes?

3.14 Sometimes, the chief underlying economic and demographic reasons are selfevident. For example, affluent areas, which offer better employment prospects, easily attract new residents, whereas declining areas, such as the valleys and former industrialised areas, tend to lose population, owing to out-migration and an age bias towards older people, leading to lower birth rates and higher mortality.
3.15 At other times, however, the reasons are less easy to explain and some population changes have moved in the opposite direction to that which might have been expected. For example, rural areas might be expected to decline, given the problems affecting livestock farming (and, certainly, the Isle of Anglesey has lost many residents, -3.4\%). Surprisingly, though, Mid Wales's population has increased; indeed, Mid Wales (+10.8\%) has grown more than any other Welsh region (Powys, $+6.2 \%$ and Ceredigion, $+19.5 \%$ ). These are truly surprising increases (which, speculatively, might be partly accounted for by inward migration by older people at or near retirement).
3.16 What evidence is there to explain such population changes?
3.17 The ONS (reporting the Mid-2002 Population Estimates ${ }^{2}$ ) remarks:
'The growth in the population of the UK [over the period 1981-2002] is mainly due to natural change (more births than deaths). Natural change accounted for nearly three-quarters of the total population change between 1981 and 2002. The main reason for the remaining quarter is net civilian migration. But there are other contributory factors, such as changes to the non-civilian population.'
3.18 Thus, expert opinion attributes most population change at the national (UK) level to natural change, with a minor contribution from net civilian migration. However, whilst this is true at the national level, at regional and sub-regional levels, civilian migration accounts for a much greater proportion of net change. Specifically, in Wales ${ }^{3}$, almost all population change between 1991 and 2001 is attributable to 'Other change' (mainly net civilian migration). In fact, only $2 \%$ of the estimated increase in Wales's total population between mid-1991 to mid-2001 is due to 'natural change', whereas the other $98 \%$ is due to 'Other change'4.
3.19 According to Table 3.1 in 'Key population and vital statistics' (relating to changes 1991-2001) expressed as numbers of individuals:

- Increases due to 'natural change' are highest in Cardiff ( $+9,800$ ), Caerphilly $(+3,300)$ and Newport $(+3,000)$. On the other hand, decreases due to 'natural change' are highest in Conwy $(-5,300)$ and Carmarthenshire $(-4,900)$.
- Increases due to 'Other change' are highest in Ceredigion ( $+10,900$ ), Carmarthenshire $(+8,900)$ and Powys $(+8,400)$. Decreases due to 'Other change' are highest in Swansea $(-5,000)$, Caerphilly $(-4,400)$, Merthyr Tydfil (3,800 ) and Rhondda, Cynon, Taff $(-3,600)$.
3.20 We next look at such information as is available on migration. A little later, we examine 'vital statistics' (births and deaths) and age profiles.

[^1]
## Net civilian migration (internal migration)

3.21 Reliable data on internal civilian migration are difficult to obtain. The ONS intended to publish migration data in October 2003, derived from the 2001 Census. However, it has recently reported that publication has been delayed due to technical problems and is unable to anticipate a revised publication schedule.
3.22 What data on migration are available, are based on the mid-year estimates of 2001 and 2002. These are unlikely to be a good guide to future trends.

## Vital statistics

3.23 'Natural change' in total population is simply 'births less deaths', whose absolute numbers are largely the result of population sizes and age profiles (discussed later). During 2001, there were 30,616 live births and 32,993 deaths in Wales. However, a simple discussion of the numbers of each does not reveal a great deal about population conditions and dynamics. Demographic statisticians therefore usually compare total fertility rates and standardised mortality ratios. The total fertility rate (TFR) allows populations with different age distributions to be compared. Similarly, the standardised mortality ratio (SMR) also removes the effects of differing population structures.
3.24 The following discussion is based on information from Table 4.2 (Live births, stillbirths, total births, deaths, infant and perinatal mortality during 2001; and conceptions during 2000), which is contained in 'Key population and vital statistics' (Series VS no. 28, PPI no. 24).
3.25 Compared with an all-Wales TFR of 1.66 (in 2001):

- The highest fertility rates were in Pembrokeshire (1.93), (1.86), Bridgend (1.84), Powys (1.82), Caerphilly (1.81) and Newport (1.81).
- The lowest fertility rates were in Ceredigion (1.34), Cardiff (1.46) and Rhonda, Cynon, Taff (1.64).
- Compared with an all-Wales SMR of 103 (in 2001):
- The highest mortality rates were in Blaenau Gwent (120), Merthyr Tydfil (117), Caerphilly (113) and Neath Port Talbot (111).
- The lowest mortality rates were in Ceredigion (83), Powys (94), Gwynedd (95) and Monmouth (96).
3.26 There is no clear correlation between total population change and birth and death rates. Taking Mid Wales as a case in point, the low death rates (SMR) found in Ceredigion and Powys could contribute to a rise in population, yet whilst Powys also has a high fertility rate (TFR), in contrast Ceredigion has a low one.
3.27 Former mining and industrial areas tend to have above-average death rates (e.g. Blaenau Gwent, Merthyr Tydfil and Neath Port Talbot).
3.28 Recent ONS data ${ }^{5}$ also show that Neath Port Talbot, Rhondda, Cynon, Taff, Merthyr Tydfil, Caerphilly and Blaenau Gwent have the lowest life expectancy at birth in Wales for both males and females. Indeed, women in Merthyr Tydfil have the third lowest female life expectancy of all England and Wales.


## Summary of population change

3.29 By now, it will be readily appreciated that population change, at the UA and regional levels, is far from straightforward. The key points from our analysis so far are:

- Wales's total population is increasing slowly;
- the gradual rise over the last decade has been due more to 'other change' (mainly net inward civilian migration) than to 'natural change' (births less deaths);
- although the national population is fairly stable, local populations are more 'turbulent';
- regional population growth over the last decade has been proportionately highest in Mid Wales (mainly due to net inward migration);
- North Wales and South East Wales have also grown, although much less strongly and South West Wales has remained stable;
- former industrialised areas are tending to lose population, whereas Cardiff, Monmouthshire and the north eastern UAs are gaining;
- rural UAs present a very mixed picture, some falling and some rising strongly.


## Population forecasts

3.30 What do these population trends mean for the future?
3.31 Future population trends are based on the Government Actuary's Department 2001-based Interim Population Projections for Wales (6.12.02; Statistical Bulletin 106/2002). These forecasts are based on the mid-2001 population estimates, reflecting the initial summary results of the 2001 Census of Population. ${ }^{6}$.
3.32 Statistical Bulletin 106/2002 summarises the historical perspective in Wales, between 1981 and 2001:

- 'The total population increased by $3 \%$ and is now projected to increase a further $3 \%$ over the next twenty years'.
- 'The percentage of children under 16 decreased by $6 \%$, whilst the percentage of people over retirement age increased by 11\%.'

[^2]- 'More men of working age than women; however the number of women in this age group increased by more than 50,000 . Over the next 20 years the number of women is projected to increase a further 97,000 due mainly to the change in the retirement age from 60 in 2010 to 65 in 2020. As early as 2015 however it is projected that there will be more women than men of working age'.
- 'Far more women of retirement age than men, although the number of men in this age group increased by almost 40,000. Over the next 20 years the number of men of retirement age is projected to increase by almost 83,000 (over 5\%) but there will still be more women [despite a fall in their number].'
3.33 The key message for Wales, comparing the most recent forecasts with previous (pre-2001 Census) forecasts is that,
'... although population levels are lower than previously estimated and projected, the broad picture of the future structure of the population in Wales has not changed.
... The age distribution of the population continues to differ from that for the UK with a higher proportion of people over retirement age.'
3.34 Looking ahead, the main results of the current forecasts are:
- 'The latest projections still indicate a gradual shift in the age profile of the population with:
(i) fewer of school age, by up to 61,000 (10 per cent) to almost 525,000 in 2014 and 2015 and only a very gradual increase thereafter;
(ii) more of retirement age, up 64,000 (11 per cent) to nearly 650,000 in 2021 (and continuing to rise thereafter) - moderated by the gradual increase in the retirement age of women to 65 between 2010 and 2020;
(iii) more of working age, a modest increase of about 80,000 (5 per cent) over twenty years to around 1,815,000 with the main part of the increase reflecting the rise in the retirement age of women from 2010;
(iv) an increase in the number of the very elderly (85+), up from 58,000 to 83,000 (over 40\%) by 2021'.
- 'By 2021, less than $18 \%$ of the population is projected to be of school age and nearly $22 \%$ of retirement age, compared to $20 \%$ each now.'
3.35 Chart 2 below (source: Statistical Bulletin 106/2002, Government Actuary's Department/ONS) illustrates the key population trends to 2021, by age.



## Age structure

3.36 The population age structure is an important issue for learning and skills policy. Experience, common sense and virtually all available research shows that young people are by far the most likely to study, train and learn. (Other well-known influences include past educational achievements, employment status and employment sector, occupation and employers' unit size and policies, together with personal characteristics, such as ambition, motivation and home circumstances.)
3.37 As noted, Wales has a higher proportion of people over retirement age ${ }^{7}$ than the UK as a whole ( $21.7 \%$, compared with 19.5\%). In contrast, there are proportionately fewer working age people (60.5\%, compared with 62.5\%).
3.38 Also noted (in paragraph 3.34), the numbers of people of retirement age will rise sharply (by around 11\%) and working age people will also increase (by around 5\%, mainly due to the rise in the statutory retirement age). However, the numbers of children aged $0-15$ will fall (by around $10 \%$ ).
3.39 Clearly, these forecasts imply a significant change in the population age structure. Wales's mean age is expected to rise from 40.0 in 2001, to 41.6 by 2011 (and to continue rising to 43.2, by 2026). Wales's median age is forecast to rise from 39.4 (2001) to 42.2 by 2001 (and to continue rising to 43.0 by 2026).

[^3]
## Current broad age structure

3.40 The following analysis is based on 2001 Census data (thus, the data are not directly comparable with population forecasts or mid-year estimates elsewhere in this report). For simplicity, 'children' means age $0-15$, 'working age' means 16-65 (men and women alike - we have included women aged 60-64 from this group) and 'retirement age' denotes 65+.
3.41 Currently, $20.2 \%$ of Wales's total population are children, $62.4 \%$ are of working age and $17.4 \%$ are over retirement age, using our simplified definition of 'retirement age', which will tend to understate the true proportion. (N.B. The retirement age figure used for the purpose of this simplified comparative analysis is lower than the true figure of $19.5 \%$, given earlier in paragraph 3.37.) (Chart 3 below, comparing the regions with these broad, simplified national averages.)

3.42 Chart 3 shows that proportionately, compared with the Welsh averages:

- South East Wales has more children;
- South East Wales also has more people of working age;
- North Wales, South West Wales and especially Mid Wales have more people over retirement age.

People of working age
3.43 Consideration is now given to the age distribution of people of working age across Wales, using 2001 Census data. The aim is to consider the relationship between Wales's total working age population and the allocation of ELWa's budget and priorities. (In paragraph 2.5, we noted that around 60\% of ELWa's expenditure is directed towards learners in schools and FE colleges, implying a heavy focus on people aged approximately 16-19. A further $17 \%$ of expenditure is devoted to work-based learning for young people and adults, implying an age range of around 20-44.)

3.44 At once, it can be seen that the majority ( $60 \%$ ) of ELWa funding is devoted to around $5 \%$ of Wales's total population (aged 16-19). Another $17 \%$ is spent on around $32 \%$ of the total population (aged 20-44). It is not suggested that the current funding allocation is inappropriate, since there is clearly an overriding need to furnish young people with skills and knowledge to begin their working lives. Furthermore, the need for public funding of education and training arguably diminishes once people become established in their chosen careers. However, this simple 'expenditure-age' comparison raises a question over the ability to exert a significant learning influence amongst the majority of Wales's working population. The implication is that policies to address workplace training need to be targeted towards specific clients (e.g. unemployed people who need new skills), or specific sectors (e.g. rural industries), or specific types of employers (e.g. transitional help for those establishing systematic training arrangements). Alternatively, some support for workplace adult training might be directed via FE colleges and providers themselves, to improve quality or help them to increase their employer 'penetration'.
3.45 Looking in more detail at people of working age, there are only small regional differences in the percentages of people in particular age groups. However, the regional figures conceal much larger variations between particular UAs. It is these UA-level variations (especially in the age ranges 16-17, 18-19, 20-24, and 25-29) that may have policy implications for local needs and priorities. (For example, areas with substantially more 16-17 and 18-19 year olds will tend to need more career guidance, Modern Apprenticeships and FE opportunities. On the other hand, areas with unusually high proportions of middle aged and older people may have a higher demand for non-vocational adult and continuing education, and so on.)
3.46 Turning to the UAs, those that have above average percentages of their current population in various age bands are now summarised. Of course, these are not watertight compartments and the 'above average' age bands in various UAs may gradually change, as cohorts progress into older age bands. Tentatively, some possible policy implications of such above-average proportions are suggested.

| Age group | Proportionately above average in ... | Possible implications (for a greater emphasis on) ... |
| :---: | :---: | :---: |
| 16-17 | Isle of Anglesey Wrexham <br> Neath Port Talbot <br> Blaenau Gwent <br> Merthyr Tydfil <br> Newport <br> Torfaen <br> Vale of Glamorgan | Careers guidance, 'Skillbuild', Foundation Modern Apprenticeships, Modern Apprenticeships, FE, provider development |
| 18-19 | Gwynedd Ceredigion Swansea Cardiff | 'Skillbuild', Foundation Modern Apprenticeships, Modern Apprenticeships, FE, provider development, progression to HE, Sector Skills Councils liaison |
| 20-24 | Gwynedd Wrexham Ceredigion Swansea Cardiff | 'Skillbuild', Foundation Modern Apprenticeships, Modern Apprenticeships, FE, provider development, progression to HE, Sector Skills Councils liaison, Modern Skills Diploma (MSD), provider development, sector skills councils liaison |
| 25-29 | Wrexham Bridgend Caerphilly Cardiff | Adult guidance, employer-based strategies, Sector Skills Councils liaison, enterprise development, Work Based Learning (WBL), Modern Skills Diploma (MSD) |
| 30-44 | Wrexham <br> Neath Port Talbot <br> Blaenau Gwent <br> Bridgend <br> Caerphilly <br> Cardiff <br> Merthyr Tydfil <br> Monmouthshire <br> Newport | Employer-based strategies, career and skill development, 'life-long learning', Sector Skills Councils liaison, enterprise development, Work Based Learning (WBL), Modern Skills Diploma (MSD) |
| 45-49 | Isle of Anglesey Powys <br> Monmouthshire <br> Rhondda, Cynon, Taff | Adult guidance, re-training opportunities, Adult \& Continuing Education, Work Based Learning (WBL), Modern Skills Diploma (MSD) |
| 60-64 | Conway <br> Flintshire <br> Pembrokeshire | Adult Continuing Education (ACE) |
| 65+ | Conway <br> Denbighshire <br> Flintshire <br> Powys <br> Carmarthenshire <br> Rhondda, Cynon, Taff | Adult Continuing Education (ACE) |

3.47 Of course, percentage comparisons only suggest a need for possible local differences of policy emphasis, whereas the absolute levels of demand for particular programmes obviously depend on the numbers of people. Planning for future provision needs a more detailed analysis of current population data and population forecasts than is feasible in this 'Insight' paper.

## Population age forecasts

3.48 Chart 2 showed that the total population of school age children is forecast to fall (by roughly $10 \%$ ) and that of people of working age is forecast to rise (by around $5 \%)$, over the next 20 years.
3.49 Chart 5 below shows the Government Actuary's population age percentage forecasts (all Wales, 2001-2026). The rising percentage of 15-29 year olds, the most frequent learners, up to about 2012 implies increasing demand for vocational education and training, followed by a fall from 2013-2026. The falling percentage of $30-44$ year olds to about 2017 could imply a tightening market for (and therefore skill shortages of) people who are likely to have established skills.


Source: Government Actuary's Department forecasts

## Single year population age forecasts

3.50 Young people aged 16-19 make up just over 5\% of Wales's total population. Chart 6 below shows that the total number of 16-19 year olds in Wales (currently about 156,000 persons) is expected to rise by around $4 \%$ over the next $4-5$ years (20032007), then to fall back to its present level by 2011. Thereafter, the number will continue to fall, by around $13 \%$ until 2020, recovering by about $1 \%$ to finish at around $88 \%$ of its present level by 2026 (about 138,000 persons).


Source: Government Actuary's Department forecasts
3.51 In the short to medium term (over the next five-ten years), therefore, the total number of $16-19$ year olds will rise and fall within a margin of $\pm 4 \%$. However, analysing this predicted total number by its constituent single years (Table 3 below, 2003-2011) suggests that the numbers in each single-year age group, which are presently fairly equal at roughly 39,000 , will diverge. This is because the number of 16 year olds will begin to fall in 2009 (and will continue to fall until 2018), whilst the numbers of 18 and 19 year olds will continue to rise (until around 2010). Thereafter, the fall in 16 year olds will 'work through' the population and the numbers of 18 and 19 year olds will also fall.
Table 3 Population forecasts for 16-19 year olds

| Age | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | 39,245 | 39,886 | 39,721 | 39,409 | 40,195 | 40,072 | 38,691 | 37,894 | 36,819 |
| 17 | 38,940 | 39,384 | 40,025 | 39,860 | 39,548 | 40,334 | 40,211 | 38,831 | 38,034 |
| 18 | 39,559 | 39,547 | 39,991 | 40,632 | 40,468 | 40,156 | 40,942 | 40,819 | 39,440 |
| 19 | 38,137 | 40,244 | 40,232 | 40,676 | 41,317 | 41,153 | 40,841 | 41,627 | 41,505 |
| All aged 16- <br> 19 | $\mathbf{1 5 5 , 8 8 1}$ | $\mathbf{1 5 9 , 0 6 1}$ | 159,969 | $\mathbf{1 6 0 , 5 7 7}$ | $\mathbf{1 6 1 , 5 2 8}$ | $\mathbf{1 6 1 , 7 1 5}$ | $\mathbf{1 6 0 , 6 8 5}$ | $\mathbf{1 5 9 , 1 7 1}$ | $\mathbf{1 5 5 , 7 9 8}$ |
| Source: Government Actuary’s Department (2003) |  |  |  |  |  |  |  |  |  |

3.52 Thus, the period around 2008-2011 will be something of a turning point in the numbers of young people of prime learning age. Planners and providers of education and training for young people, who will have been planning for and accommodating a slowly rising population of young people, will begin to see their numbers level out and begin to fall. In 20 years time, by 2023, on the basis of current forecasts, there will be around $12 \%$ fewer young people than at present. However, on a 'peak-to-trough' view, the fall will be around 16\% (almost 26,500 fewer 16-19 year olds, from a peak of 161,715 in 2008, to a trough of 135,262 in 2021).

## 4. Gender

## Introduction

4.1 Although the population divides between males and females in roughly equal proportions, the education, training and working preferences of men and women differ considerably.
4.2 The purpose of this Section is to consider the population data on males and females, so far as this may be relevant to vocational learning policy.
4.3 Unless otherwise stated, the data are taken from the 1991 Census and based on people aged 16-74. (Thus, they are incompatible with other sources, especially those based only on people of working age, 16-59/64.)

## Male: female ratios

4.4 Women (51.6\% of Wales's total population) outnumber men (48.4\%), both nationally and in every UA. This is mainly because, in older age groups, there are significantly more females than males (due to women's longevity).
4.5 Women's longevity partly explains why the UAs with the highest percentages of women also tend to have higher than average median ages (e.g. Conwy 52.4\% females, median age 43). However, there are exceptions, such as Cardiff (52.3\% females, median age 34).
4.6 The five UAs in which $52.0 \%$ or more of the total population is female comprise Conwy (52.4\%), Cardiff (52.3\%), Denbighshire (52.1\%), Gwynedd (52.0\%) and Newport (52.0\%).

## Employment issues

4.7 Many labour market gender differences are already widely-known:

- more men are economically active (although female participation rates have been rising for many years and are moving closer to the male average);
- there are also gender differences amongst both active and inactive groups;
- amongst economically active females, the majority of part-time workers are women (although nevertheless, more working women have full-time than parttime jobs);
- amongst economically active people, there are still significant differences in the occupations chosen by men and women (partly reflecting women's preference or need for part-time working, which is more easily found in certain occupations);
- there are also significant differences in the sectors in which men and women tend to work (again, partly reflecting the occupations and working patterns preferred by women), e.g. teaching, retailing, administration, health.


## Economic status (aged 16-74)

4.8 Across Wales, $61.0 \%$ of all residents aged 16-74 are economically active (hence $39.0 \%$ are inactive, including 14.8\% who are retired).
4.9 There are some regional differences. Economic activity is highest in North Wales and lowest in South West Wales. (Further consideration of economic activity and inactivity is contained in a separate 'Learning Insight'.)

| Percentages | Economically <br> active |
| :--- | :---: |
| North Wales | 63.2 |
| Mid Wales | 62.7 |
| South West Wales | 58.3 |
| South East Wales | 60.9 |
| All Wales | 61.0 |

## Male and female economic status

4.10 Significantly more males (67.7\%) than females (54.5\%) are economically active. Men are much more likely to be employed and self-employed, whereas women are more likely to be retired or 'caring' ('looking after home or family').
4.11 Between regions, both male and female male economic activity are highest in North Wales and lowest in South West Wales:

| Economic activity <br> (percentages) | Males | Females |
| :--- | :---: | :---: |
| North Wales | 70.2 | 56.5 |
| Mid Wales | 69.3 | 56.1 |
| South West Wales | 64.9 | 52.0 |
| South East Wales | 67.6 | 54.5 |
| All Wales | 67.7 | 54.5 |

4.12 Whilst these differences reflect regional age and gender structures to some extent, it is more likely that the main influential factor upon female economic activity is the availability of suitable employment (e.g. part-time jobs, in occupations favoured by women).
4.13 A crucial contributory reason for the continuing rise in female economic participation over the last 10-15 years is structural employment change. Traditional 'male' jobs in primary and heavy manufacturing industries have been lost, whereas many service sectors have grown strongly. These have tended to create 'female' jobs (i.e. the sectors, occupations, working patterns and skills needed are those that women have traditionally favoured).
4.14 There are, of course, many other reasons for women's economic success (e.g. women's rising educational achievements and their changing expectations and ambitions). Thus, the rise in female employment (and the gradual fall in male employment, especially amongst older men), visible across the UK, contains the following messages for vocational education and training policy:

- the process of structural employment change tends to work in favour of women, but to the possible detriment of some men;
- despite the fall in traditional jobs, there remains a need to continue to train for 'replacement demand' (replacing existing skilled workers, who permanently leave their former industry and occupation);
- there is an obvious need, in certain areas, to ensure that retraining programmes are available for those displaced by industrial change;
- there may be a need to help 'returners' (almost invariably women) to update their skills or gain new ones - this is, of course, a widely recognised policy issue.


## Working patterns

4.15 There are substantial and widely recognised differences between male and female working patterns. To summarise, as percentages of working people age 16-74 ...

| Percentages | Males | Females |
| :--- | :---: | :---: |
| Full-time | 90.6 | 56.2 |
| Part-time | 9.4 | 43.8 |

4.16 Local differences (especially in relation to male part-time employment) appear to reflect both structural and demographic influences (e.g. part-time jobs in tourism and leisure, pockets of student labour, contrasting with centres of manufacturing). Thus:

- male part-time employment is highest ( $10 \%$, or more) in Ceredigion, Conway, Gwynedd, Cardiff, Pembrokeshire, Swansea, Denbighshire and Carmarthenshire;
- conversely, it is lowest (less than 8\%) in Neath Port Talbot, Bridgend, Torfaen, Flintshire, Rhondda Cynon, Taff, Merthyr Tydfil, Caerphilly and Blaenau Gwent.


## Industry sector

4.17 Having already remarked upon the different sectors typical of male and female employment, consideration is now given to the Welsh data.
4.18 Naturally, the sectors in which people work, whether male or female, reflect local industrial structures. Wales has very distinctive and well-known industry patterns. It comes as no surprise, therefore, to find that North Wales and South East Wales have proportionately more manufacturing employment than average, and that Mid Wales has proportionately four times more agricultural and forestry employment, compared with the Welsh average.
4.19 Nevertheless, within these constraints, the sectors in which men and women tend to work continue to be strongly 'gendered'. (Table 4.) Much higher proportions of men work in manufacturing and construction, whereas many more women work in education and health.

Table 4 Sector of employment, by sex (percentages)

| Percentages | Agric \& Fish | Mining | Manuf | Utils | Constr | Distrib \& repair | Hotels \& cater | Transp | Finan | Busine ss activ | Public admin | Educ | Health | Other service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 3.6 | 0.6 | 24.6 | 1.4 | 12.1 | 14.9 | 3.8 | 7.6 | 2.4 | 8.8 | 6.6 | 4.6 | 4.8 | 4.3 |
| Female | 1.3 | 0.1 | 9.0 | 0.6 | 1.2 | 17.9 | 7.1 | 3.1 | 4.3 | 8.1 | 7.1 | 12.3 | 22.5 | 5.5 |
| Total | 2.5 | 0.3 | 17.3 | 1.0 | 7.1 | 16.3 | 5.4 | 5.5 | 3.3 | 8.5 | 6.8 | 8.1 | 13.0 | 4.8 |

Base: All aged 16-74 in employment or self-employment (males 636,450; females 549,804).
Source 2001 Census of Population

## Occupation

4.20 Occupations, too, are strongly 'gendered'. (Table 5.) Thus, more men are managers, skilled tradesmen and plant and process operators, whereas many more women are administrators and secretaries, personal service workers, sales and customer service staff.

Table 5 Occupation of employment, by sex (percentages)

| Percentages | Manage <br> rs | Professi <br> onals | Assoc <br>  <br> tech |  <br> secret | Skilled <br> trades | Pers. <br> service |  <br> cust <br> serv |  <br> process <br> ops | Element <br> ary |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 14.6 | 11.0 | 12.2 | 4.9 | 22.3 | 2.3 | 3.9 | 15.6 | 13.3 |
| Female | 9.5 | 9.8 | 13.5 | 20.5 | 3.2 | 13.4 | 12.8 | 3.9 | 13.4 |
| Total | $\mathbf{1 2 . 2}$ | $\mathbf{1 0 . 4}$ | $\mathbf{1 2 . 8}$ | $\mathbf{1 2 . 2}$ | $\mathbf{1 3 . 4}$ | $\mathbf{7 . 4}$ | $\mathbf{8 . 0}$ | $\mathbf{1 0 . 2}$ | $\mathbf{1 3 . 3}$ |

Base: All aged 16-74 in employment or self-employment (males 636,450; females 549,804). Source 2001 Census of Population

## 5. Ethnic origin

## Introduction

5.1 Wales has a small ethnic minority population, in comparison with England ${ }^{8}$ (overall, only $2.1 \%$ are non-white, compared with $9.1 \%$ ). [Source: 2001 Census of Population.]
5.2 Consequently, it might be assumed that ethnic issues would scarcely appear on the planning radar. However, as found throughout the UK, many ethnic communities are concentrated in particular places, therefore it is important to review the distribution and character of Wales's ethnic minority population.
5.3 Demographic ethnic origin data, at regional and UA level, are too broad for the subtleties of policy issues to emerge. Where appropriate, therefore, data is analysed at ward level.

## People who are Welsh

5.4 Overall, $14.4 \%$ of all residents describe themselves as, 'Welsh' (417,820 individuals). (These individuals are included in the broader category of 'White British' people.)
5.5 There are some differences in people's perceptions of their Welsh identity at regional level (highest in South West Wales and Mid Wales):

| Percentages | Welsh |
| :--- | :---: |
| North Wales | 13.3 |
| Mid Wales | 16.0 |
| South West Wales | 17.4 |
| South East Wales | 13.3 |
| All Wales | 14.4 |

5.6 However, there are much greater differences at UA level:

- those with the highest proportions are Gwynedd (26.8\%), Carmarthenshire (23.4\%) and Ceredigion (21.8\%);
- those with the lowest percentages comprise Flintshire (5.8\%), Monmouthshire (6.9\%) and Newport (9.0\%).
5.7 At ward level, the 'top five' wards with the highest proportions of people describing themselves as Welsh are all found in Gwynedd:

[^4]| Ward | Unitary Authority | Region | Percent <br> 'Welsh' |
| :--- | :---: | :---: | :---: |
| Llanuwchllyn | Gwynedd | Mid Wales | 47.1 |
| Bethel | Gwynedd | North | 41.3 |
| Llanaelhaearn | Gwynedd | North | 39.9 |
| Penygroes | Gwynedd | North | 39.8 |
| Llanystumdwy | Gwynedd | North | 39.5 |

5.8 The 'bottom five' with the lowest proportions of people describing themselves as Welsh are also found in North Wales, in Flintshire:

| Ward | Unitary Authority | Region | Percent <br> 'Welsh' |
| :--- | :---: | :---: | :---: |
| Sealand | Flintshire | North | 1.9 |
| Broughton South | Flintshire | North | 1.4 |
| Broughton North <br> East | Flintshire | North | 1.1 |
| Saltney Mold <br> Junction | Flintshire | North | 1.0 |
| Saltney Stonebridge | Flintshire | North | 0.8 |

5.9 Thus, not only do these differences suggest that people's perceptions of their Welsh identity vary widely throughout the country, but also they imply the both strongest and weakest Welsh identities co-exist within the same region. Moreover, although North Wales has the lowest overall regional percentage of people considering themselves 'Welsh', it also contains areas of very strong national identity.

## Ethnic origin

## National distribution

5.10 Overall, only $2.1 \%$ of all Wales's residents are non-white (about 61,580 individuals), including people of mixed race. Regionally, Wales's ethnic minority population is concentrated in South East Wales:

| Percentages | Non-white |
| :--- | :---: |
| North Wales | 1.0 |
| Mid Wales | 1.1 |
| South West Wales | 1.4 |
| South East Wales | 3.1 |
| All Wales | 2.1 |

5.11 At UA level, Cardiff has by far the largest proportion of non-white people (8.4\%). In contrast, nine of Wales's twenty-two UAs have 1.0\% or fewer of their population from ethnic minorities. To summarise, in rank order:

Table 6 Percentages of total population who are non-white, by UA (ranked)

| More than Welsh average (2.1\%) | Non-white percentage | Fewer than Welsh average (2.1\%) | Non-white percentage |
| :---: | :---: | :---: | :---: |
| Cardiff | 8.4 | Ceredigion | 1.4 |
| Newport | 4.8 | Bridgend | 1.4 |
| Vale of Glamorgan | 2.2 | Gwynedd | 1.2 |
| Swansea | 2.2 | Denbighshire | 1.2 |
|  |  | Rhondda, Cynon, Taff | 1.2 |
|  |  | Monmouthshire | 1.1 |
|  |  | Wrexham | 1.1 |
|  |  | Neath Port Talbot | 1.1 |
|  |  | Conway | 1.1 |
|  |  | Merthyr Tydfil | 1.0 |
|  |  | Carmarthenshire | 0.9 |
|  |  | Torfaen | 0.9 |
|  |  | Pembrokeshire | 0.9 |
|  |  | Caerphilly | 0.9 |
|  |  | Powys | 0.9 |
|  |  | Blaenau Gwent | 0.8 |
|  |  | Flintshire | 0.8 |
|  |  | Isle of Anglesey | 0.7 |
| Base: All residents (2,903, | ). Source 2 | Census of Population |  |

5.12 It is only at ward level that ethnic differences become strikingly apparent. Of the 'top ten' wards with the highest percentages of non-white residents, seven are in Cardiff (Butetown, Riverside, Grangetown, Plasnewydd, Adamstown, Cathay and Gabalfa). The other three are in Newport (Pillgwenlly, Victoria and Stow Hill).
5.13 To summarise the 'top five' non-white wards:

| Ward | Unitary Authority | Region | Percent <br> Non-white |
| :--- | :--- | :---: | :---: |
| Butetown | Cardiff | SE | 32.4 |
| Pillgwenlly | Newport | SE | 24.9 |
| Riverside | Cardiff | SE | 23.3 |
| Grangetown | Cardiff | SE | 22.9 |
| Victoria | Cardiff | SE | 20.3 |

5.14 In contrast 22 of Wales's 881 wards have no non-white residents whatsoever ( 6 Powys, 3 each in Gwynedd and the Isle of Anglesey, 2 each in Pembrokeshire, Carmarthenshire and Flintshire, 1 each in Monmouthshire, Torfaen, Neath Port Talbot, and Conwy).
5.15 Thus, the data show that ethnic minority residents in Wales are heavily concentrated in a small number of areas in South East Wales. (For example, 75\% of Wales's non-white residents are found within only $20 \%$ of its wards. More specifically, $27 \%$ of Wales's entire non-white residents live in only 10 wards - all of which are in Cardiff and Newport.) Whether this implies fairly recently-arrived communities, who have not yet dispersed in the natural process of career and family movements, or whether non-white residents' cultural and social preferences are to remain within small areas, it is impossible to say. Certainly, with such localised concentrations, researching and addressing non-white residents' possible needs should be a manageable task.

## Ethnic groups

5.16 The numbers and proportions of non-white people are small in comparison with Wales's total population. The following analysis is therefore based on the number of people who describe themselves as non-white ( 61,580 individuals, including those of mixed race).
5.17 The largest discrete, ethnic minority groups are Pakistanis (13.5\%), Indians (13.4\%) and Chinese (10.2\%). To summarise ...

|  | Number | Percent of all <br> non-white |
| :--- | :---: | :---: |
| Mixed - White \& Black <br> Caribbean | 5,996 | 9.7 |
| Mixed - White \& Black African | 2,413 | 3.9 |
| Mixed - White \& Asian | 5,001 | 8.1 |
| Mixed - Other | 4,251 | 6.9 |
| Asian - Indian | 8,261 | 13.4 |
| Asian - Pakistani | 8,287 | 13.5 |
| Asian - Bangladeshi | 5,436 | 8.8 |
| Asian - Other | 3,464 | 5.6 |
| Black - Caribbean | 2,597 | 4.2 |
| Black - African | 3,727 | 6.1 |
| Black - Other | 745 | 1.2 |
| Chinese | 6,267 | 10.2 |
| Other ethnic group | 5,135 | 8.3 |
| Total Wales (non-white) | 61,580 | 100.0 |

5.18 In aggregate, $41.3 \%$ of all non-white people in Wales are Asian, 11.5\% are Black, $28.6 \%$ are of Mixed Race and (the remaining 18.5\% are Chinese and 'Others').
5.19 For comparative purposes, the total percentages for England \& Wales (including Wales's data) are $8.7 \%$ non-white. Of these, $50.3 \%$ are Asian, 25.2\% are Black and $14.6 \%$ are of Mixed Race (the remaining 9.9\% are Chinese and 'Others').
5.20 Wales's high proportion of Mixed Race people ( $28.6 \%$ of non-whites, compared with the England \& Wales average of 14.6\%) suggests some long-established minority communities, with relatively high degrees of inter-marriage and therefore integration (e.g. Cardiff's Tiger Bay).

How do white and non-white people differ demographically?
5.21 Comparing key demographic characteristics of white and non-white people in Wales (from 2001 Census data) reveals a number of differences, which may have policy implications. Briefly:

- non-white people are younger (i.e. have a younger age profile), perhaps leading to a greater interest in education and training;
- the gender balance amongst non-white people is almost equal (because the higher percentage of white females is largely due to the older age profile of white people);
- non-white people are less likely to be economically active (37.3\%, compared with $43.7 \%$ of whites), even though white people are much more likely to be retired ( $10.7 \%$ of whites compared with $3.7 \%$ of non-whites);
- non-white people are significantly more likely to be students (10.6\%, compared with $3.5 \%$ );
- non-white people are significantly more likely to have higher level qualifications (20.5\% have Level 4 and above, compared with $12.3 \%$ of white people);
- because of their better qualifications, non-white people are more likely to work in professional occupations ( $6.5 \%$, compared with $4.2 \%$ of whites);
- non-white people are less likely to work in skilled trades (3.8\%, compared with $5.5 \%$ of whites);
- non-white people are in better health ( $74.3 \%$ 'in good health', compared with $64.9 \%$ of whites), undoubtedly reflecting their younger age profile;
- non-white people are more likely than whites to work in health \& social work, but less likely to work in manufacturing.


## Country of birth

5.22 Finally, 2001 Census data on country of birth is briefly considered. Naturally, the majority ( $75.4 \%$ ) of residents were born in Wales and most of the remainder were born in England (20.3\%).
5.23 Regional differences are broadly consistent with the earlier data on migration. Thus, South East Wales and South West Wales have the highest proportions of Welsh-born residents, whilst North Wales and especially Mid Wales have significantly fewer. Differences at the UA level are much as might be expected. (Around $90 \%$ or more of residents of Blaenau Gwent, Merthyr Tydfil, Rhondda, Cynon, Taff, Caerphilly and Neath Port Talbot are Welsh-born. In contrast, around 40\% or more of residents of Flintshire, Conwy and Powys are English-born.)
5.24 To summarise, by region ...

Table 7 Country of birth, by region (percentages)

| Percentage born in | Wales | England | Scotland | Northern <br> Ireland | Republic of <br> Ireland | Other EU | Elsewhere |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North Wales | 61.5 | 34.4 | 1.0 | 0.3 | 0.5 | 0.8 | 1.4 |
| Mid Wales | 56.7 | 39.1 | 1.0 | 0.3 | 0.4 | 0.9 | 1.7 |
| South West <br> Wales | 80.7 | 15.4 | 0.8 | 0.2 | 0.4 | 0.8 | 1.6 |
| South East <br> Wales | 82.2 | 13.2 | 0.8 | 0.3 | 0.4 | 0.8 | 2.4 |
| All Wales | 75.4 | 20.3 | 0.8 | 0.3 | 0.4 | 0.8 | 1.9 |
| Base: All residents (2,903,085). Source 2001 Census of Population |  |  |  |  |  |  |  |

## Conclusions on ethnic origin demography

5.25 Ethnic minorities in Wales (like many such communities) do not conform to many of the common stereotypes. There are proportionately few such individuals and they are predominantly found in a small number of areas (although there are small numbers scattered throughout Wales, possibly suggesting medical and nursing staff working in the NHS).
5.26 Non-white people tend to be younger than the white majority and, consequently, have associated characteristics (e.g. better health, better qualifications, higher educational participation). Thus, it would be highly misleading and inappropriate to assume that 'ethnic minority' is almost synonymous with 'disadvantage'.
5.27 The data also show that non-white people are as varied in their circumstances as white people. 'Non-white people' includes highly qualified people (e.g. medical and surgical NHS consultants), as well as people in low-level jobs or unemployment. Thus, 'ethnic minorities' include established professionals, as well as recent arrivals from rural communities in less developed countries, who are likely to have limited language and literacy skills.

## 6. Social indicators

## Introduction

6.1 As this report is mainly concerned with demographic data relevant to learning and skill issues, we are less interested in what might be termed 'social' indicators. This is not to say that matters such as housing tenure, marital and family status (e.g. lone parenthood, when linked to worklessness) have no bearing on people's interest and need to learn. However, social issues would require much deeper analysis than is possible in this 'Insight' and a superficial treatment may be misleading. Furthermore, some of these social issues are linked to economic inactivity, which is addressed by a separate 'Learning Insight'.
6.2 Accordingly, we confine our data to a limited number of social indicators.

## Social class

6.3 The ONS classification of social class (NS-SeC) is derived from the 'household reference person's' economic status and occupation (of people aged 16-74). For the purpose of this report, therefore, there is little to be gained by a detailed consideration of Census social class data, which cannot be seen by separately examining economic status and occupation.
6.4 The main points visible from a regional comparison of social class from the 2001 Census include matters likely to be familiar already. Briefly, compared with national (Welsh) averages:

- Monmouthshire has the highest proportion of 'large employers and higher managerial occupations', probably reflecting affluent inward commuters to Cardiff;
- Cardiff, Monmouthshire and The Vale of Glamorgan have the highest proportions of 'higher professional occupations';
- predominantly rural areas (Ceredigion, Pembrokeshire, Gwynedd and Conwy) have the highest percentages of 'small employers and own account workers';
- Flintshire, Blaenau Gwent, Wrexham and Bridgend have the highest proportions of 'lower supervisory and technical occupations';
- more people in South East Wales (Blaenau Gwent, Rhondda, Cynon, Taff and Torfaen) are 'semi-routine occupations', although there are also more than average in Wrexham, Flintshire and Neath Port Talbot;
- South East Wales also has substantially more 'routine occupations' than average, especially Blaenau Gwent, although there are also more in Neath Port Talbot;
- Merthyr Tydfil has the highest percentage of 'people who have never worked', and there are also more than average in Blaenau Gwent, Newport, Rhondda, Cynon, Taff, Cardiff and Neath Port Talbot;
- there are the highest percentages of 'long-term unemployed people' in the Isle of Anglesey, Gwynedd and Blaenau Gwent;
- predictably, 'full-time students' are most prevalent in areas that have universities and large colleges, specifically Ceredigion, Cardiff and Swansea.
6.5 Thus, we can see that the main indicators of social class largely reflect the economic and industrial characters of the areas in which people live.


## Index of Deprivation

6.6 In the list of the 40 per cent most deprived electoral divisions in Wales, deprivation scores (based on the combined index of multiple deprivation) are:

- much higher than average in Merthyr Tydfil and Blaenau Gwent;
- higher than average in Neath Port Talbot, Caerphilly, and Rhondda, Cynon, Taff;
- a little higher than average in Bridgend and Anglesey;
- lower than average in Flintshire, Conwy, the Vale of Glamorgan, and Denbighshire;
- much lower than average in Powys and Monmouthshire.
6.7 Thus, deprivation indicators present a picture that is consistent with other measures described elsewhere in this report. Unsurprisingly, deprivation is more concentrated in the valleys, in an area stretching eastwards from Swansea through to Blaenau Gwent.
6.8 However, in addition to these widely recognised areas, the educational deprivation domain of the index also identifies weaknesses along the north-east coast, in North Wales region.
6.9 Mid Wales tends not to present as a region that has many problems with deprivation. However, this may be somewhat misleading, as the index of multiple deprivation is not very sensitive (in a statistical sense) to rural issues, being concerned with access to public services (e.g. shops, libraries, doctors, etc) rather than employment and incomes.


## Earnings

6.10 The Centre for Economic and Social Inclusion's 'Baseline data and intelligence national report' (November 2003) reveals that:

[^5]6.11 The report goes on to note that differences vary by occupational group (SOC major division; Table 8 below). The largest difference in earnings between the South West of England and Wales is for 'Other' occupations. This seems consistent with market forces; the larger proportion of the labour force in Wales working in such jobs, along with a declining number of jobs at this level, combine to depress earnings.
Table 8 Gross weekly pay ( $£$ ), by occupation 2002

|  | Wales | South West <br> of England | UK | Difference £ <br> (Wales - <br> SW <br> England) |
| :--- | :---: | :---: | :---: | :---: |
| Managers \& administrators | $\mathbf{5 7 0 . 3 5}$ | 574.56 | 640.70 | -4.21 |
| Professional occupations | $\mathbf{5 5 1 . 9 1}$ | 513.96 | 547.65 | +37.95 |
| Assoc. prof. \& tech occs. | $\mathbf{3 8 1 . 4 5}$ | 398.88 | 446.49 | -17.43 |
| Clerical \& secretarial occs. | $\mathbf{2 5 3 . 8 6}$ | 241.72 | 253.94 | +12.14 |
| Craft \& related occupations | $\mathbf{3 5 5 . 7 8}$ | 361.10 | 376.02 | -5.32 |
| Personal \& protective <br> services | $\mathbf{2 2 2 . 1}$ | 206.79 | 218.13 | +15.31 |
| Sales occupations | $\mathbf{1 9 2 . 2 9}$ | 196.27 | 206.98 | -3.98 |
| Plant \& machine operators | $\mathbf{3 2 9 . 4 1}$ | 332.60 | 326.87 | -3.19 |
| Other elementary <br> occupations | $\mathbf{1 8 7 . 4 4}$ | 209.38 | 199.50 | -21.94 |
| Average | $\mathbf{3 3 5 . 3 7}$ | $\mathbf{3 4 3 . 1 9}$ | $\mathbf{3 6 8 . 9 1}$ | $\mathbf{- 7 . 8 2}$ |
| Soce |  |  |  |  |

Source: New Earnings Survey, reported in The Centre for Economic and Social Inclusion's 'Baseline data and intelligence - national report' (November 2003, Table 61, p125).

## Health

6.12 It hardly needs saying that there is a direct correlation between health and age, and that former mining and heavily industrialised areas tend to have worse health than rural areas.
6.13 Poor health obviously presents a barrier to learning and can prevent people applying their existing skills. Moreover, people in poor health are far less interested in education or training, being less likely to be economically active and therefore having lower prospects for any financial 'pay back'. (However, it is acknowledged that a minority of people in poor health may see learning as a way to overcome or mitigate their condition, or may be interested in learning for its social, therapeutic or intellectual value.)
6.14 2001 Census data are based on people in households (i.e. not including communal establishments), comprising 2,859,489 individuals (all ages) in Wales. The two issues explored by the Census are 'general health' and 'limiting long-term illness'.
6.15 Table 9 below summarises the data, based on people aged 16-retirement age (59/64) only.

Table 9 General health and limiting long-term illness, by age (percentages)

|  | $16-29$ | $30-49$ | $50-\mathrm{RA}$ | All 16-RA |
| :--- | :---: | :---: | :---: | :---: |
| General health |  |  |  |  |
| Good health | 81.0 | 69.7 | 50.2 | $\mathbf{6 7 . 4}$ |
| Fairly good health | 15.2 | 21.5 | 28.8 | $\mathbf{2 1 . 7}$ |
| Not good health | 3.8 | 9.4 | 21.0 | $\mathbf{1 0 . 9}$ |
| Limiting long-term illness |  |  |  |  |
| Has a limiting I-t illness | 7.6 | 15.4 | 34.8 | $\mathbf{1 8 . 4}$ |
| Does not have limiting I.t.i. | 92.4 | 84.6 | 65.2 | $\mathbf{8 1 . 6}$ |
| Base | 482,594 | 790,450 | 460,363 | $1,733,407$ |
| Residents aged 16-retirement (59-64). Source 2001 Census of Population |  |  |  |  |

6.16 Looking ahead, the population age structure forecast (briefly discussed in paragraphs 3.48 and 3.49 ) suggests the total percentage of people aged $45-59$ will rise gradually until about 2017 (but then will fall), which implies a corresponding gradual increase in the proportion of people with health problems. (The post-2017 fall in 45-59 year olds will not be matched be a fall in health problems, because the 45-59 age group fall will feed through to increases in older age groups.)
6.17 The forecast sharp rise in the proportion of people over retirement age may increase demand for Adult and Continuing Education (ACE). However, the actual effect of these population changes on demand for ACE is highly uncertain, depending on factors other than age alone (e.g. health, interest in learning, disposable incomes, easy access to suitable ACE programmes etc).

## Welsh language

6.18 Earlier, in Section 5, examining the proportions who consider themselves 'Welsh', showed wide variations across the Country. Overall, $14.4 \%$ consider themselves 'Welsh', but at ward-level, the figure varies from $0.8 \%$ to $47.1 \%$.
6.19 Notwithstanding the historical and cultural importance of the Welsh language, many employers attach fairly low economic importance to an ability to speak Welsh. Where language skills other than English are required (e.g. tourism, exporting or importing), employers often need people who can speak the main European languages.
6.20 Admittedly, in Welsh-speaking areas (such as Gwynedd), Welsh may be more important say, in retailing, public services and other service businesses. However, residents there are more likely to speak Welsh anyway, partly because of Welsh language education in schools. Therefore appropriate skills are likely to be available.
6.21 Overall, $28.2 \%$ of all residents of Wales aged 3 and over have some ability in Welsh. However, as might be expected from our earlier study of Welsh nationality, there are considerable differences between UAs. Knowledge of Welsh (understanding, speaking or writing, in any combination) is:

- highest in Gwynedd (76.1\%), the Isle of Anglesey (70.4\%), Carmarthenshire (63.6\%) and Ceredigion (61.2\%);
- lowest in Monmouthshire (12.9\%), Blaenau Gwent (13.3\%), Newport (13.4\%) and Torfaen (14.5\%).


## 7. Access to jobs and learning

## Introduction

7.1 The employment and learning issues arising from Wales's geography and varied population densities are widely recognised.
7.2 In this Section, qualifications, school leaver destinations and 2001 Census data on population densities and transport and travel are summarised.

## Qualifications of the working age population

7.3 Overall, people in Wales are less well qualified than the national (GB) average (Table 10 below). Fewer hold qualifications at NVQ2 and above (49.3\% compared with 52.4) and significantly more have no qualifications (21.4\% compared with 16.4\%).

Table 10 Highest NVQ equivalent level of working age population (percentages)

|  |  <br> above | NVQ3 | NVQ2 | NVQ1 | Other <br> quals. | No <br> quals. | 'Below <br> NVQ2' <br> Subtotal | Trade <br> apprent. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wales | $\mathbf{2 0 . 7}$ | $\mathbf{1 2 . 7}$ | $\mathbf{1 5 . 9}$ | $\mathbf{1 4 . 5}$ | $\mathbf{7 . 7}$ | $\mathbf{2 1 . 4}$ | $\mathbf{4 3 . 6}$ | $\mathbf{7 . 0}$ |
| GB | 23.7 | 13.9 | 14.8 | 15.1 | 8.9 | 16.4 | 40.4 | 7.3 |

Source: Local Area LFS (cited in Table 45, p90 of Baseline data and intelligence, 'Inclusion', November 2003
7.4 People who are qualified below NVQ2 equivalent level (i.e. NVQ1, 'Other qualifications' and 'No qualifications', in aggregate) are of particular interest. Thus, Wales's national average of $43.6 \%$ suggests this task might justify a higher priority than in England and Scotland.
7.5 There are only minor variations between regions. South East Wales region has the highest percentage of its working age population qualified below NVQ2 equivalent level, whilst Mid Wales has the lowest proportion.

| Qualified below <br> NVQ2 equiv. level | Percent |
| :--- | ---: |
| North Wales | 42.5 |
| Mid Wales | 40.4 |
| South West Wales | 43.0 |
| South East Wales | 44.9 |
| All Wales | 43.6 |

7.6 Although there are only small regional differences, variations become much more pronounced at the UA level (Table 11 below). As might be expected, given the patterns evident in relation to many other demographic, economic, social and employment indicators, people living in the former industrial and mining areas are least well qualified (i.e. have the highest percentages of residents who are qualified below NVQ2 equivalent level).

Table 11 Percentage of working age population whose qualifications are below NVQ2 equivalent level, by UA (ranked)

| Worse qualified than <br> Welsh average <br> (i.e. more people qualified <br> below NVQ2 than 43.6\%) | Percentage | Better qualified than <br> Welsh average <br> (i.e. fewer people <br> qualified below NVQ2 <br> than 43.6\%) | Percentage |
| :--- | :--- | :--- | :---: |
| Blaenau Gwent | 57.1 | Flintshire | 43.5 |
| Caerphilly | 54.3 | Powys | 43.2 |
| Torfaen | 52.7 | Pembrokeshire | 41.8 |
| Merthyr Tydfil | 51.5 | Denbighshire | 41.5 |
| Neath Port Talbot | 51.2 | Conwy | 41.3 |
| Wrexham | 47.4 | Isle of Anglesey | 40.5 |
| Rhondda, Cynon, Taff | 47.3 | Gwynedd | 40.3 |
| Bridgend | 46.2 | Monmouthshire | 38.5 |
| Newport | 46.2 | Swansea | 37.1 |
| Carmarthenshire | 44.3 | Cardiff | 36.7 |
|  |  |  |  |
|  | Vale of Glamorgan | 35.1 |  |
| Source Local Area LFS 2001 |  |  |  |

7.7 Qualifications are heavily influenced by age (young people are, of course, better qualified) and interest in improving qualifications declines as people grow older (not least because gaining formal qualifications is much less likely to advance older people's career prospects). Thus, strategies to improve qualifications should be targeted at people, say, aged 16-30, especially those who are completely unqualified.

## School leaver destinations

7.8 Destination data are published by Careers Wales, whose area boundaries do not correspond with ELWa regions. Destination data are not available by Unitary Authority. The following summary therefore presents data for Wales as a whole (Table 12) and for Careers Wales's own areas (Table 13).
7.9 Overwhelmingly, in Wales as throughout the UK, young people (especially girls) choose to remain in full-time education at age 16. Staying on rates since the early 1990s have risen annually, although the most recent data (2002) suggest a slight reversal in this trend.
7.10 In aggregate, about four-fifths of all 16-year olds in Wales remain in education or training on leaving school ( $82 \%$ in 2002). However, the majority ( $73 \%$ ) of these are in full-time education - only $9 \%$ are in work-based training schemes (comprising just over $6 \%$ non-employed status and $2 \%$ employed status). Although some of those remaining in full-time education will undoubtedly be pursuing vocational qualifications, young people's preference for academic qualifications (often with a view to entering HE) is clear. The very low percentage of 16 year olds who enter employed-status work-based training schemes demonstrates Welsh employers' limited provision of Modern Apprenticeships. (Table 12 below.)

Table 12 Destinations of school leavers at the end of compulsory education (percentages, 2002)

|  | Males | Females | All |
| :--- | ---: | ---: | ---: |
| Continuing in FT education | 68.9 | 78.0 | $\mathbf{7 3 . 3}$ |
| Work-based training - non-employed | 7.6 | 5.2 | $\mathbf{6 . 4}$ |
| Work-based training - employed | 3.5 | 1.1 | $\mathbf{2 . 3}$ |
| Subtotal: all in education or training | $\mathbf{8 0 . 0}$ | $\mathbf{8 4 . 3}$ | $\mathbf{8 2 . 0}$ |
| Employed - other | 7.5 | 4.9 | $\mathbf{6 . 2}$ |
| Known not to be in education, training or <br> employ't | 7.1 | 5.8 | $\mathbf{6 . 5}$ |
| No response to survey | 3.9 | 3.2 | $\mathbf{3 . 6}$ |
| Left area | 1.6 | 1.7 | $\mathbf{1 . 6}$ |
| Total number in cohort | 18,631 | 17,814 | 36,445 |
| Source: Careers Wales |  |  |  |

7.11 Young people who remain in education or training, and even those who enter employment directly, are demonstrating their commitment to developing qualifications, skills and experience. However, there is a minority of 16 year olds ( $6.5 \%$ overall) who appear at risk of failing even at this early stage in their lives those who are known not to be in any form of education, training or employment (especially boys). This minority would appear to be in particular need of support and may be considered a priority.
7.12 Across Careers Wales's areas, Powys (86.3\%) and West Wales (84.6\%) have the highest proportions of 16 year olds remaining in education or training, on finishing compulsory education. North East Wales (79.6\%) and Gwent (79.3\%) have the lowest percentages. The remaining areas (North West, Cardiff \& Vale, and Mid Glamorgan) are all close to the national average, at around 82.0\%.

Table 13 Destinations of school leavers at the end of compulsory education (percentages, 2002)

| Careers Wales Area ... | North East | North <br> West | Powys | West |  <br> Vale | Gwent <br> Mid <br> Glamorga <br> n | All Wales |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Continuing in FT <br> education | 71.0 | 75.9 | 80.9 | 75.6 | 74.3 | 69.3 | 71.8 | $\mathbf{7 3 . 3}$ |
| Work-based trg. - non- <br> emp. | 4.2 | 3.6 | 3.8 | 7.0 | 5.6 | 7.7 | 8.4 | $\mathbf{6 . 4}$ |
| Work-based training - <br> emp. | 4.4 | 2.9 | 1.6 | 2.0 | 2.1 | 2.3 | 1.7 | $\mathbf{2 . 3}$ |
| Subtotal: all in educ. or <br> trg. | $\mathbf{7 9 . 6}$ | $\mathbf{8 2 . 4}$ | $\mathbf{8 6 . 3}$ | $\mathbf{8 4 . 6}$ | $\mathbf{8 2 . 0}$ | $\mathbf{7 9 . 3}$ | $\mathbf{8 1 . 9}$ | $\mathbf{8 2 . 0}$ |
| Employed - other | 8.7 | 3.8 | 7.6 | 4.9 | 5.8 | 7.6 | 6.7 | $\mathbf{6 . 2}$ |
| Not in educ, trg. or <br> employ't | 6.9 | 4.7 | 3.7 | 5.4 | 7.8 | 8.8 | 6.1 | $\mathbf{6 . 5}$ |
| No response to survey | 2.7 | 7.7 | 1.1 | 3.7 | 3.7 | 2.3 | 3.0 | $\mathbf{3 . 6}$ |
| Left area | 2.2 | 1.4 | 1.3 | 1.3 | 0.8 | 2.0 | 2.2 | $\mathbf{1 . 6}$ |
| Total number in cohort | 3,843 | 3,933 | 1,392 | 8,611 | 5,282 | 6,037 | 7,347 | 36,445 |
| Source: Careers Wales |  |  |  |  |  |  |  |  |

## Population densities

7.13 South East Wales has by far the highest population density, whereas Mid Wales has the lowest. To summarise, at the regional level:

|  | Total <br> population | Area <br> (hectares) | Population <br> density $^{*}$ |
| :--- | :---: | :---: | :---: |
| North Wales | 663,403 | 615,005 | 1.08 |
| Mid Wales | 201,295 | 697,535 | 0.29 |
| South West Wales | 644,742 | 479,998 | 1.34 |
| South East Wales | $1,393,645$ | 280,670 | 4.96 |
| Wales | $2,903,085$ | $2,073,208$ | 1.40 |

* Persons per hectare
7.14 Population densities diverge to a greater extent at UA level, as would be expected. To summarise, at the UA level (Table 14 below):

Table 14 Population densities (persons per hectare), by UA (ranked)

| More densely populated than Welsh average (1.40 persons per hectare)) | Density | Less densely populated than Welsh average (1.40 persons per hectare)) | Density |
| :---: | :---: | :---: | :---: |
| Cardiff | 21.98 | Denbighshire | 1.11 |
| Torfaen | 7.24 | Monmouthshire | 1.00 |
| Newport | 7.19 | Conway | 0.97 |
| Blaenau Gwent | 6.44 | Isle of Anglesey | 0.94 |
| Caerphilly | 6.11 | Carmarthenshire | 0.73 |
| Swansea | 5.91 | Pembrokeshire | 0.71 |
| Rhondda, Cynon, Taff | 5.47 | Gwynedd | 0.46 |
| Bridgend | 5.13 | Ceredigion | 0.42 |
| Merthyr Tydfil | 5.06 | Powys | 0.24 |
| Vale of Glamorgan | 3.61 |  |  |
| Flintshire | 3.39 |  |  |
| Neath Port Talbot | 3.05 |  |  |
| Wrexham | 2.55 |  |  |
| Base: All residents (2,903,085). Source 2001 Census of Population |  |  |  |

7.15 At face value, then, Cardiff residents should have the easiest access to jobs, education and training, whilst those in the largely rural UAs (especially Powys, Ceredigion, Gwynedd, Pembrokeshire and Carmarthenshire) might be expected to face particular difficulties.
7.16 Population densities are a fairly crude measure of accessibility. More realistically, access to jobs and learning depends on the availability of cars and public transport.
7.17 The 2001 Census includes data on access to cars or vans, and methods of travel to work.

## Access to cars or vans

7.18 Measures of access to cars or vans are based on households (1,209,048 across Wales). In total, there are over 1,328,621 cars or vans owned by, or available for use by, households. (This total is not exact, as the Census records a maximum of 10 cars in any one household.) Overall, $74.0 \%$ of all Welsh households have access to one or more cars or vans.
7.19 Data on car availability must be interpreted with care. In rural areas, poor (or nonexistent) public transport services mean that one or more cars are almost a necessity. Thus, high levels of car availability can reflect rural necessity, relative affluence, or a combination of the two.
7.20 Table 15 below summarises the percentages of households having access to one or more cars or vans, by UA.

Table 15 Household access to cars or vans (percentages with access to one or more cars or vans), by UA (ranked)

| More frequent household access to cars or vans than Welsh average (74.0\%) | Percentage with access to car or van | Less frequent household access to cars or vans than Welsh average (74.0\%) | Percentage with access to car or van |
| :---: | :---: | :---: | :---: |
| Powys | 82.6 | Torfaen | 72.8 |
| Monmouthshire | 82.5 | Swansea | 71.5 |
| Flintshire | 80.9 | Caerphilly | 70.8 |
| Ceredigion | 80.5 | Cardiff | 70.3 |
| Isle of Anglesey | 79.1 | Neath Port Talbot | 69.8 |
| Vale of Glamorgan | 78.5 | Newport | 69.5 |
| Pembrokeshire | 78.3 | Rhondda, Cynon, Taff | 68.4 |
| Carmarthenshire | 76.9 | Blaenau Gwent | 64.9 |
| Denbighshire | 76.3 | Merthyr Tydfil | 64.8 |
| Gwynedd | 76.1 |  |  |
| Conway | 75.8 |  |  |
| Wrexham | 75.3 |  |  |
| Bridgend | 74.4 |  |  |
| Base: All households (1,209,048). Source 2001 Census of Population |  |  |  |

7.21 Despite these high levels of car access, it follows that another $26.0 \%$ of all Welsh households do not have access to a car or van. The UAs in which households are least likely to have a car, suggesting people may have problems travelling to work or to learn, are also visible in Table 15 above, reading from the bottom of the righthand side. Thus, $35.2 \%$ of Merthyr Tydfil's residents do not have the use of a car or van (nor do $35.1 \%$ of Blaenau Gwent residents, and so on).

## Households with more than one car

7.22 Multiple car ownership is now quite frequent. Overall, $28.5 \%$ of all Welsh households have access to two or more cars or vans. As might be expected, multiple car ownership is highest in the UAs appearing near the top of Table 15's left-hand side (i.e. Monmouthshire 40.1\%, Flintshire 37.0\%, Powys 36.0\% and Ceredigion 33.8\%). It is lowest in Blaenau Gwent 19.7\%, Merthyr Tydfil 20.3\%, Neath Port Talbot 23.2\% and Rhondda, Cynon, Taff 23.5\%.

## Travel to work

7.23 Cars (as drivers) are easily the most frequent method of travel to work (61.2\% of all residents aged 16-74 in employment). In addition, a further $9.0 \%$ of working residents travel to work as a passenger in a car or van (total: 70.2\%). To summarise 'All Wales', in rank order:

| Method of travelling to work ... | Percent |
| :--- | :---: |
| Driving a car or van | 61.2 |
| On foot | 10.4 |
| Work mainly at or from home | 9.7 |
| Passenger in a car or van | 9.0 |
| Bus, minibus or coach | 5.3 |
| Bicycle | 1.4 |
| Train | 1.2 |
| Motorcycle, scooter or moped | 0.8 |
| Taxi | 0.5 |
| Light rail or tram | 0.1 |
| Other | 0.5 |
| Base |  |

Based on residents aged 16-74 in employment $(1,186,256)$. Source: 2001 Census (ONS)

## Car sharing

7.24 If we examine all travel to work by car or van (as drivers or passengers, in aggregate), people living in low car ownership UAs tend to car-share more than average (i.e. significantly higher percentages travel as passengers). Thus, aggregate travel to work by car, as a driver or passenger, is above-average in several of the districts that have low household access to cars. (Flintshire is highest, at 76.7\%, but this is followed by Torfaen 76.1\%, Bridgend 75.4\%, Blaenau Gwent $75.2 \%$, Neath Port Talbot $74.5 \%$ and, amongst others, Rhondda, Cynon, Taff 73.9\% and Merthyr Tydfil 71.9\%.)

Public transport
7.25 For the purposes of the Census, 'public transport' is defined as 'underground, metro, light rail or tram, train, bus, minibus or coach'. Overall, on this definition, $6.5 \%$ of all working residents (aged 16-74) travel to work by public transport.
7.26 Of course, travelling to work by public transport is most common in urban areas and areas in which car ownership is below average. To summarise (in rank order)...

| Travel to work by public transport ... | Percent |
| :--- | :---: |
| Cardiff | 13.0 |
| Newport | 11.3 |
| Merthyr Tydfil | 9.3 |
| The Vale of Glamorgan | 8.4 |
| Rhondda, Cynon, Taff | 8.2 |
| Caerphilly | 8.1 |
| Swansea | 7.8 |
| Neath Port Talbot | 5.9 |
| Wrexham | 5.9 |
| Bridgend | 5.3 |
| Torfaen | 5.2 |
| Conway | 5.0 |
| Gwynedd | 4.7 |
| Flintshire | 4.6 |
| Blaenau Gwent | 4.3 |
| Pembrokeshire | 3.5 |
| Denbighshire | 3.5 |
| Carmarthenshire | 3.3 |
| Ceredigion | 3.1 |
| Monmouthshire | 3.0 |
| Isle of Anglesey | 2.9 |
| Powys | 1.6 |
| All Wales (average) | 6.5 |
| Based on residents aged 16-74 in employment |  |
| (1,186,256). Source: 2001 Census (ONS) |  |
|  |  |

## Working from home

7.27 Understandably, UAs in which self-employment is highest (Powys, Ceredigion, Pembrokeshire, Gwynedd, Conway, Monmouthshire and Carmarthenshire) also have high percentages who 'work from home': Thus, to summarise the highest percentages ...

| Work mainly from home ... | Percent |
| :--- | :---: |
| Powys | 20.1 |
| Ceredigion | 19.5 |
| Pembrokeshire | 16.4 |
| Gwynedd | 14.9 |
| Carmarthenshire | 14.4 |
| Monmouthshire | 12.9 |
| Conway | 12.8 |
| All Wales (average) | 9.7 |
| Based on residents aged 16-74 in employment <br> (1,186,256). Source: 2001 Census (ONS) |  |

## 8. Technical report: key points and implications

## Total population and age structure

| Key Points | Implications |
| :---: | :---: |
| Population distribution is very uneven (nearly half the population is concentrated in SE Wales, very little in Mid Wales). | Already recognised in learning and skills strategies (e.g. regional budget allocations). |
| $60 \%$ of ELWa's current budget is spent on $5 \%$ of working age population (aged 16-19). | As population ages, budgets may need gradual re-balancing, away from young people and more towards older workers. |
| Increasing population overall, but regional changes are very uneven. Remarkable increase in Mid Wales, whereas SW Wales stable. <br> UAs turbulent: <br> - valleys and steel areas losing population; <br> - NE and central areas, Cardiff and Monmouthshire growing; <br> - rural areas mixed - Anglesey declining but Ceredigion \& Powys growing strongly. | Apparent national population stability hides much more complex local picture, as some areas 'gain', whilst others 'lose'. <br> Patterns of 'gaining' and 'losing' consistent with well-known industrial trends. <br> Obvious continuing need for policies that address decline of primary and heavy manufacturing industries (e.g. guide, train and retain young people; stimulate investment and enterprise; guide and retrain displaced workers). <br> Rural population trends are inconsistent between areas, suggesting complex needs. <br> Declining farming communities may need help to adapt and diversify. |
| Table continues ... |  |


| Key Points | Implications |
| :---: | :---: |
| Nationally, most of Wales's population change is due to net (internal) migration - 'natural change' (births minus deaths) contributes very little. <br> But at UA level, causes of net change differ considerably (some rising due to natural change whilst others are falling; some are rising due to net migration, whilst others are falling). <br> Age data on net migration suggest Wales is losing a small proportion ( $<1 \%$ ) of its young people, but is gaining school age, middle aged and older people. | Differential migration is a clear response to industrial change. <br> Large influxes into Mid Wales likely to have both positive and negative effects (e.g. could bring new skills and new cash and could stimulate local businesses, but obvious risk of 'driving out' young local people). <br> Loss of young people (even if proportionately small) may deprive some areas of most energetic and able individuals. <br> Migration may change balance of local pools of experience and skills (e.g. more managerial, professional and technical, fewer skilled trades). Inward movers appear to be older people, which implies increasing demand for some services and hence skills (e.g. health, personal services). <br> Lower fertility and higher mortality in former industrial areas likely to accelerate decline and skew age profiles towards older people (even if life expectancy is lower). |
| Wales has an older age structure than the UK as a whole (fewer of working age, more of retirement age). And forecasts suggest the age profile will continue to age - there will be fewer school age, more working age and more retirement age. | 'Ageing' workforce implies need to ensure existing workforce skills remain up-to-date; re-training may be needed to help some older or displaced workers adapt to change. <br> High mortality in some areas (esp. valleys) implies possible need for partnership work with health trusts and voluntary bodies, to raise health promotion, health and care sector skills. |

## Gender

| Key Points | Implications |
| :---: | :---: |
| Gender differences conform to well known patterns: <br> - more males are economically active <br> - males tend to work full-time <br> - most part-time workers are female (even though 56\% of female workers are full-time) <br> - women tend to work in service sectors <br> - occupations remain strongly 'gendered' along traditional lines Industry structure trends (falling manufacturing and rising services) tend to favour females (i.e. jobs are often part-time, in service sectors). | Almost 30 years of equal opportunities legislation have not led to a significant change in traditional workplace gender preferences. <br> This implies strong underlying rationales (probably connected to family roles, cultural expectations, physical abilities and perhaps aptitudes). <br> Efforts to 'open up' careers and jobs equally to men and women are worthwhile for their own sake (widening choice for men and women), but seem likely to have only a small effect. <br> The loss of traditional 'male' jobs affects Wales (esp. SE Wales) more acutely than some other parts of the UK. Implications include: <br> - an obvious need to help displaced men <br> - a need to ensure sufficient traditional skills to satisfy 'replacement demand' <br> - possible transitional help for FE colleges to restructure and develop new provision. <br> Recent losses of 'new jobs' (e.g. in call centres) likely to affect women more than men. Advice, guidance and retraining may be needed in affected areas. |

## Ethnic origin

| Key Points | Implications |
| :--- | :--- |
| Perceptions of Welsh identity vary a <br> little between regions (13-17\%), but <br> are much more uneven between UAs <br> especially wards within regions. | No obvious implications for vocational <br> education and training. |
| North Wales has both the highest and <br> the lowest percentages of Welsh <br> identity at ward level. |  |
| Wales has very few ethnic minority <br> residents (2.1\% non-white), but these <br> are heavily concentrated in a small <br> number of areas, predominantly in <br> Cardiff and Newport. | Limited need for specific policies to <br> research and address ethnic minority <br> needs, although such as may be <br> required can be targeted on a small <br> number of very localised areas <br> (predominantly at ward level). |
| Table continues $\ldots$ |  |


| Key Points | Implications |
| :--- | :--- |
| High proportion of Mixed Race <br> (28.6\%, compared with $14.6 \%$ for all <br> England \& Wales). | Implies some long-established <br> minority communities, with relatively <br> high degrees of inter-marriage and <br> therefore integration. |
| Non-white people are younger (i.e. <br> have a younger age profile), therefore <br> have associated characteristics <br> (better qualifications, better health, <br> higher educational participation). | Non-whites likely to be more <br> interested in, or have greater need <br> for, education and training. |
|  | Need to ensure equality of access to <br> education and training (but evidence <br> does not suggest any significant |
| ethnic disadvantages). |  |

## Social indicators

| Key Points | Implications |
| :---: | :---: |
| Social class data (at UA level) consistent with current regional corporate plans. | No implications beyond those already recognised in present plans. |
| Health data consistent with age profiles and industrial structures (i.e. older people are in worse health, mortality worse in former mining and industrial areas) <br> 'Ageing' population implies possible deterioration in health. | Older and less-well people are much less interested in learning, implying lower demand in worst-affected areas. <br> Demand for vocational learning may gradually diminish, unless strong demand for labour encourages people to remain economically active despite health limitations. |
| Wide differences between UAs in Welsh language ability (28.8\% average, but ranges from $12.9 \%$ in Monmouthshire to $76.1 \%$ in Gwynedd). <br> (No evidence of unmet employer demands for better or wider Welsh language skills.) | Welsh language is taught in schools and Welsh Assembly Government has bilingual strategies - no obvious need to devise additional policies. |

## Access to jobs and learning

| Key Points | Implications |
| :--- | :--- |
| Population densities vary widely, but <br> are common knowledge. | Implications already noted in existing <br> plans. |
| Household access to cars and vans <br> varies along predictable lines - more <br> cars in affluent and rural areas. | Although there are more cars in rural <br> areas, travel costs and distances tend <br> to discourage or prevent learning <br> (esp. amongst lower income groups). <br> To reduce barriers in rural areas, <br> encourage distance learning and <br> examine other 'outreach' strategies <br> (e.g. premises sharing). |
| 70.2\% travel by car (driver or <br> passenger). | No implications for learning and skills <br> policies. |
| Car sharing highest mainly in areas <br> with less access to cars. |  |
| About one in ten work from home, but <br> obviously higher in rural areas, with <br> high self-employment. |  |


[^0]:    1 The Office for National Statistics was formed in April 1996 by merging the Central Statistical Office with the Office for Population, Censuses and Surveys.

[^1]:    ${ }^{2}$ ONS website reference, www.statistics.gov.uk/uk/cci/nugget.asp?id=6
    ${ }^{3}$ Key population and vital statistics, Series VS no. 28, PPI no 24, Table 3.1 Mid-year population estimates: components of population change mid-1981 to mid-2001.
    ${ }^{4}$ Ibid.

[^2]:    5 http://www.statistics.gov.uk/downloads/theme population/Life expect birth h-la E-W 00-02.xls
    $6 \quad$ The next set of population projections will be 2002-based and are scheduled to be published on 18 December 2003. The headline assumptions to be used for the 2002-based population projections are scheduled to be published on the Government Actuary's Department's website, www.gad.gov.uk, on 13 November 2003.

[^3]:    7 'Retirement age' is currently 60 (females) or 65 (males). Between 2010 and 2020, the state retirement age for women will rise, from 60 to 65 .

[^4]:    8 Different versions of the ethnic group question were asked in England and Wales (and in Scotland and Northern Ireland). However, the national comparison between England and Wales is valid.

[^5]:    'Wales has lower levels of earnings than does Great Britain as a whole. Average earnings in 2002 were $£ 335.37$ a week compared with $£ 343.19$ a week in the South West of England.'
    The South West of England has been chosen for these comparisons as it excludes the effects of high earnings in London and the South East, and bears comparison with Wales for industrial structure, self-employment and rurality. These earnings figures are for fulltime employees, and derive from the employer-based New Earnings Survey.'

