

SONS and DAUGHTERS

Education by generation

In England, Wales and Northern Ireland, 16-17 year olds are more likely to obtain good GCSEs and equivalent qualifications if they live in an area where a high proportion of their parents' generation (people generally aged 40-54) are well qualified. Since children's achievement is so strongly related to that of their parents' generation, geographical inequalities in educational attainment across the country are maintained over time. However, this is not the case in Scotland, where there is much less geographical variability in the proportion of young people who have qualifications.

Education and qualifications

Young people who achieve good qualifications at school are the most likely to get a place at university, to get a good degree, and later, to do well in the employment and housing markets. Understanding the circumstances which lead to success in examinations at school is therefore very important. The 2001 Census was the first to ask everyone below the age of 75 to describe all of their qualifications. Before 2001, Censuses only asked whether a person had a university degree or equivalent and, in earlier Censuses, at what age they had left school. It is because qualifications have become more important to life chances in the UK that a more detailed Census question is now justified. The Census tells us about a range of qualifications: academic, vocational and professional.

The young people who have the best opportunities for gaining qualifications are those who grow up in and around the most well-educated families. Recent research shows that one of the best predictors of a child's chances of going to university is the proportion of adults in the child's neighbourhood who have a university degree¹.



Life in Britain

The latest Census reveals that within the UK people live in very different worlds. For some, resources and amenities abound; for others life is characterised by deprivation and difficulties, especially when their need for support is great.

The 2001 Census marked the bi-centenary of census taking in the UK. It is the most comprehensive social record of life in this country now available. Since 1801 successive governments have asked the population to assist in the taking of a Census.

This report is one of a series of 10 showing key patterns and inequalities in life in the UK revealed by the 2001 Census. These reports focus on geographical inequalities, highlighting where services and opportunities appear not to be available or accessible to those people and places that need them most.

The 2001 Census allows us to compare the proportions of young people (16-17 year olds) who have standard qualifications in an area with the proportion of people old enough to be their parents' generation (40-54 year olds) who have high level qualifications. The intent here is not to compare the educational attainment of 40-54 year olds with that of their actual children; this is not possible with Census data². However, it is interesting to investigate how close the geographical connection is between these two measures for different groups of people.

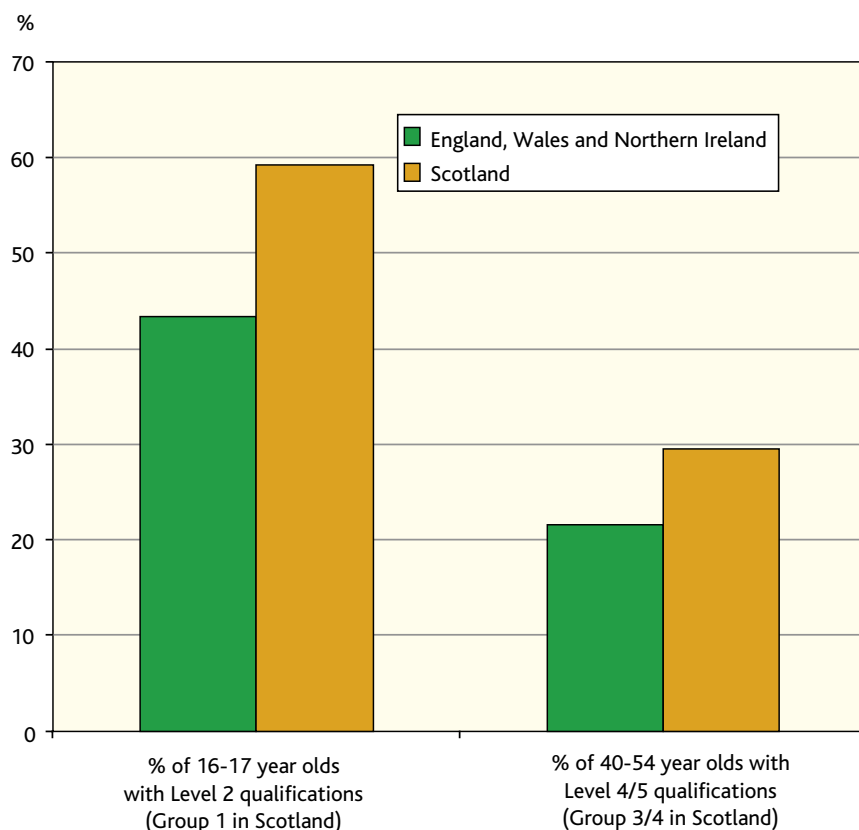
Qualifications, particularly those obtained at school, differ in Scotland from the rest of the UK. This report focuses on the examinations children do around the age of 16. In England, Wales and Northern Ireland this means 'Level 2' qualifications (largely GCSEs)³. In Scotland this means 'Group 1' qualifications (largely Standard Grades)⁴. Since the Census was conducted in April 2001, any 16 year olds sitting examinations in the summer of that year

would not have these qualifications counted here. For the 40-54 age group, the qualification groupings are more straightforward⁵.

Despite the important national differences, it is still possible to assess the relationship between educational attainment of young people and that of their parents' generation within each country of the UK, and to then compare those relationships. This report therefore asks:

To what extent do areas with a high proportion of young people with qualifications tend also to have a high proportion of their parents' generation with good qualifications?

Figure 1: Percentages of 16-17 year olds and 40-54 year olds with qualifications as described in the text



Findings

In England, Wales and Northern Ireland in 2001, a total of 591,000 16-17 year olds had gained Level 2 qualifications and 2.3 million people aged 40-54 had Level 4/5 qualifications (equivalent to university degrees). In Scotland, 75,000 16-17 year olds had Group 1 qualifications and 315,000 40-54 year olds had Group 3/4 qualifications (again equivalent to university degrees). Figure 1 shows the proportions of people within each of these age groups with these qualifications.

Just under one half of 16 and 17 year olds (just over one half in Scotland) have standard qualifications whereas just under a quarter of 40-54 year olds (just over a quarter in Scotland) have high level qualifications. The higher proportion of people with qualifications in Scotland is partly due to the way qualifications are grouped by the Census there. This graph does not necessarily mean that people in Scotland are generally better qualified than elsewhere in the UK (although there is a great deal of evidence that the education system in Scotland is very good).

Comparing areas

Figure 2 illustrates the relationship between the younger and older people's qualifications for each of the 142 counties, unitary and former metropolitan authorities across the UK (the same areas used for each report in this series). This graph shows that in England, Wales and Northern Ireland, areas in which higher proportions of 40-54 year olds have good qualifications tend to also have more 16-17 year olds gaining qualifications. Areas with fewer well-qualified 40-54 year olds tend to have fewer qualified young people. However, as Figure 1 suggests, it is apparent that circumstances are different in Scotland to those in the rest of the UK.

The proportion of each age group with the specified qualifications is higher in most Scottish areas. As before, this may be explained by the different qualifications and their groupings in the Census tables. However, the relationship between the proportion of young people with qualifications and people in their parents' generation with good qualifications is also different in Scotland

100 years ago

In 1901, the education sector was in a state of rapid change. Secondary education was generally not provided by the state although some local school boards, which ran elementary schools, had started providing secondary education. That was stopped by a court ruling that said public funds could only be used for elementary education for 5-15 year olds. However, this changed in 1902 when the government set up local education authorities (LEAs) and funded secondary schools – although pupils still had to pay fees and only a wealthy minority could take up the opportunity. Secondary education only became universally available in 1944, but was selective. The school leaving age was raised to 16 in 1972.

For more information see the National Archives (www.nationalarchives.gov.uk).

and this is not because of the ways in which the Census groups qualifications. In Scotland a relationship between qualifications among 16 and 17 year olds and those among their parents' generation is different: there is a much smaller amount of variation in the proportion of young people with qualifications among the Scottish areas than among areas in the rest of the UK (this may be evidence of the high quality of the Scottish education system, or suggests that there is more variation within these areas of Scotland rather than between them). The percentage of 16-17 year olds with standard qualifications ranges only between 56% and 62% in Scotland. In the rest of the UK, the proportion of 16-17 year olds with standard qualifications ranges between 31% and 58%. Thus the educational profile of the younger generation in Scotland is very different, and not related to that of the older generation as it is in England and Wales. Note that, in general, both children and their parents' generation have lower qualifications in Northern Ireland than almost anywhere else in the UK.

Variation in the measures across the UK is illustrated in the maps in Figures 3 and 4. Areas with the lowest proportions of young people with qualifications are in the North of England and South Wales, Glasgow and Dundee. In terms of 40-54 year olds, the areas with most highly qualified people are London and the Home Counties, Edinburgh and central Scotland.

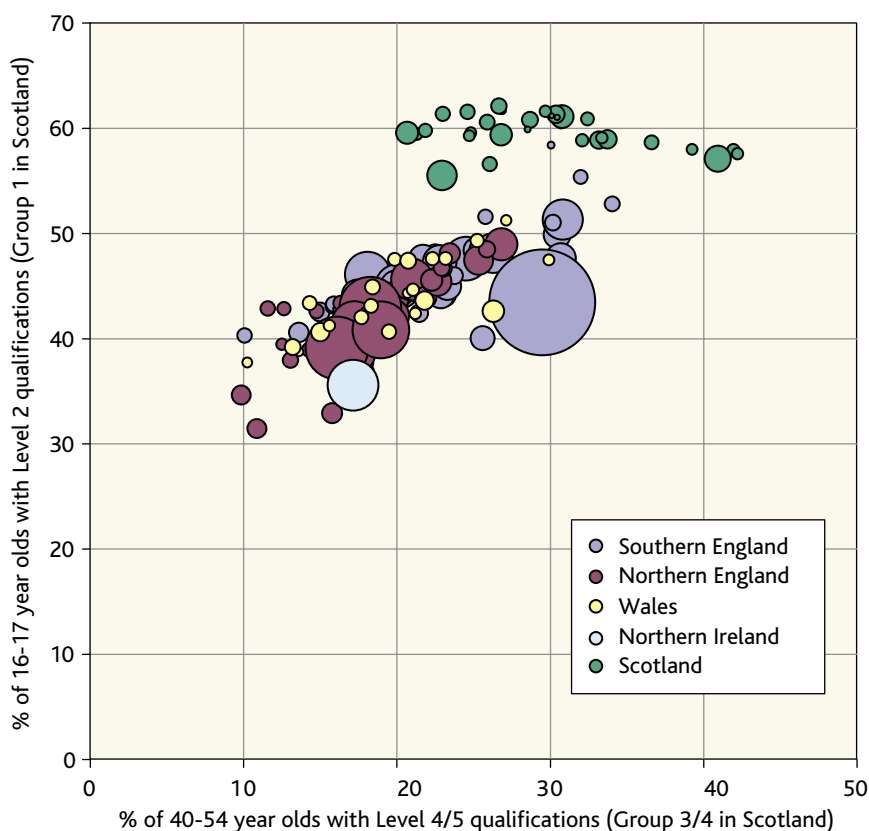
Since 2001

In England in 2000/01, 50% of all 15-year-olds obtained 5 or more GCSEs at grades A* to C. This proportion has been increasing since the late 1980s, and by the end of the 2002/03 academic year had risen to 52.9%⁶. By 2004, 43% of people aged under 30 had attended a university (but not necessarily gained a degree). Achievement of such historically high levels of qualifications, high average school leaving ages and such a high proportion of young people going on to university followed the introduction of near universal

comprehensive secondary education during the 1960s and 1970s. The government has set a target for 50% of people aged under 30 to participate in university education by 2010 and although progress is being made towards meeting the target, some children still left school with no qualifications in 2003/04 (6.5% of 15 year old boys and 4.2% of girls achieved no GCSE/GNVQ passes, slight increases from 2002/03)⁷.



Figure 2: The association between the percentage of 16-17 year olds with Level 2 qualifications (Group 1 in Scotland) and the percentage of 40-54 year olds with Level 4/5 qualifications (Group 3/4 in Scotland)

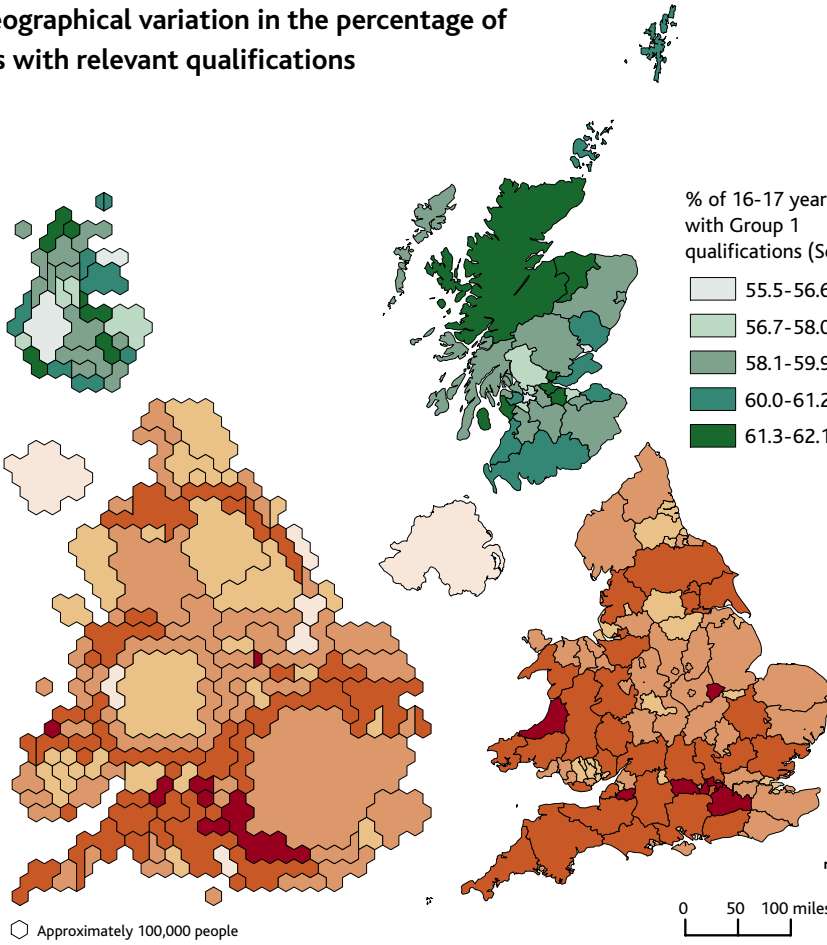


Note: Each circle is a county, unitary or former metropolitan authority, drawn with the area in proportion to the total population in 2001 (the largest circle represents London, with a population of just over 7 million). Areas in northern England are those that lie west or north of the counties of Gloucestershire, Warwickshire, Leicestershire and Lincolnshire (the Severn-Humber divide).

Figure 3: The geographical variation in the percentage of 16-17 year olds with relevant qualifications

% of 16-17 year olds with Level 2 qualifications (England, Wales, Northern Ireland)

- 31.4-37.1
- 37.2-41.4
- 41.5-45.4
- 45.5-49.9
- 50.0-58.4

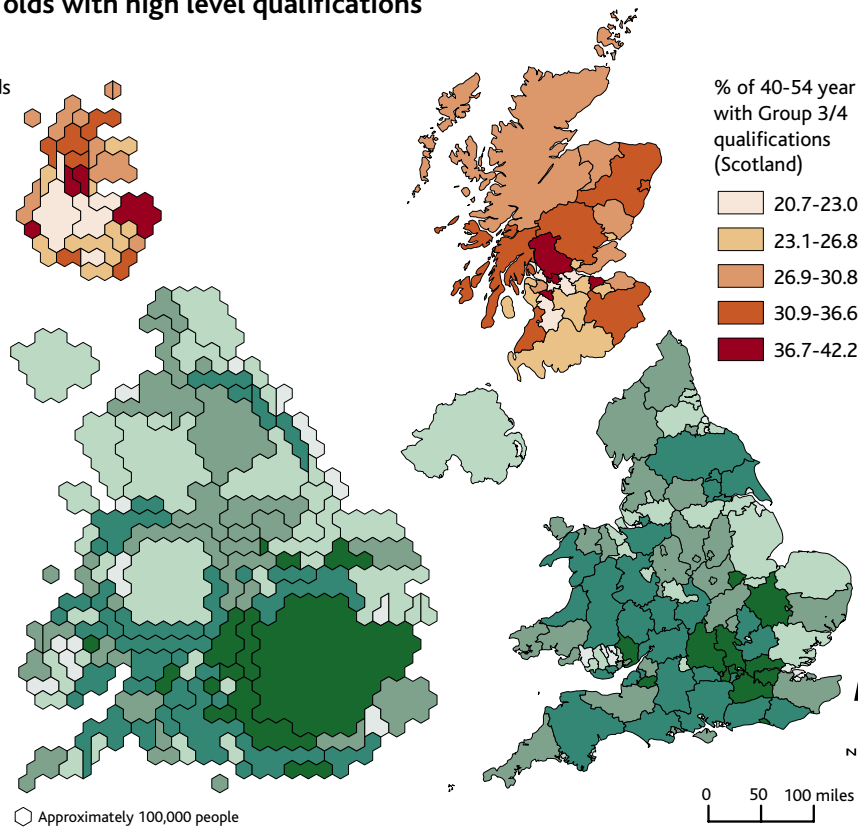


Note: Both maps in each figure represent the same places, shaded identically. The map on the left is a cartogram – each area is shown in proportion to the size of its population in 2001. The largest area is London, since it has the highest population of any of the places^{TR}. The map on the right shows the actual boundaries of the areas.

Figure 4: Variation across the country of the proportion of 40-54 year olds with high level qualifications

% of 40-54 year olds with Level 4/5 qualifications (England, Wales, Northern Ireland)

- 9.9-14.3
- 14.4-18.4
- 18.5-21.9
- 22.0-27.1
- 27.2-34.0



Discussion

The close association between the qualified proportions of 16-17 year olds and people in their parents' generation in the same areas means that the geographical disparities in educational attainment in England, Wales and Northern Ireland are unlikely to change in the near future. This is reinforced in the companion report to this, *Teachers* (Report no 3), by the finding that areas with the best qualified young people also have the greatest availability of teachers. People do move around over their lifetime, but the likelihood is that those who are well-educated will end up living in areas with other well-educated people, working in good jobs (see *Open all hours*, Report no 8). It is no coincidence that these areas tend also to be where the schools with better examinations results are located. These people often then go on to have children who also achieve. Without effective policies to address the situation, the geographical divide between better and less well-educated populations will almost certainly be maintained in the near future.

The social and geographic gap between those who achieve and those who do not might be narrowed by moving 'good jobs' away from London and the South East and increasing the provision of educational and vocational training support in the 'least well qualified' areas. Those parents educated to university level are better placed to give their children the best, to help them with their school work and to pay for help if they think it is needed. As parents with these advantages become more and more concentrated within the South of England, more and more poorer children elsewhere will attend schools in which few of their friends' parents are highly educated.

This report provides some evidence, however, that the Scottish education system may be more effective at enabling young people to achieve qualifications regardless of the kind of neighbourhood they come from. Variation in the proportion of 16-17 year olds with qualifications between areas in Scotland is very much smaller than that among areas across the rest of the UK. In Scotland, the difference between the best and worst areas in terms of the proportion of children getting good qualifications is just 10%. In the rest of the UK

that difference is so large that in the best areas children are 90% more likely to receive good qualifications than those in the worst areas. It is often claimed that there has long been a very different attitude towards 'education for all' in Scotland, compared to south of the border. Proportionally, far more children from the poorest parts of Glasgow go on to university than do children from the poorest parts of large English cities. Scotland demonstrates that a child's chances of having qualifications at age 16-17 do not have to be so strongly determined by where they live or by how well educated people in their parents' generation are.

Analysis of non-Census data has shown that outside of Scotland, children from areas where many parents are educated to degree level tend to do better at school than children living in other areas, irrespective of whether their own parents are educated to degree level¹. Thus it is not the case that geographical inequalities in educational achievement are replicated over time simply because able parents give birth to able children. Neither is it the case that the best educated parents perpetuate these inequalities by helping their children with their education, demanding more of them and so on, as that would not explain why all children in such areas tend to do better. Children learn better in environments where it is easier to learn. As geographical areas become more socially polarised, in particular as people with university degrees become ever more concentrated in the South East of England (see *Open all hours*, Report no 8) we should expect this concentration to be magnified in future inequalities in educational achievement across the country. In the future, educational inequalities might well involve what university a young person attends rather than whether they attend university, or whether they attain postgraduate qualifications. Finally, although the situation in Scotland appears to be quite different, we know that within the large areas that we are studying here, such as Edinburgh and Glasgow, widespread inequalities remain.

Notes

- ¹ Corver, M. (2005) *Young participation in higher education 1994-2001*, Bristol: HEFCE.
- ² The data tables released from the Census do not include information about individuals and their families. Therefore, with these data, it is not possible to ascertain the educational achievements of young people and their parents; only the achievements of people around the age of their parents' generation living in the same area can be compared. The assumption is made that the generation of the 16-17 year olds' parents will be largely encompassed by the age group 40-54. Additionally, it is acknowledged that 40-54 year olds in an area may not have children in the same area, in the age range 16-17, or at all.
- ³ The full listing of qualifications included in Level 2 in England, Wales and Northern Ireland is: 5+ O levels, 5+ CSEs (grade 1), 5+ GCSEs (grade A*-C), School Certificate (Senior Certificate/Advanced Senior Certificate in Northern Ireland), 1+ A levels/AS levels, NVQ Level 2, Intermediate GNVQ.
- ⁴ The qualifications included in Group 1 in Scotland are: 'O' Grade, Standard Grade, Intermediate 1, Intermediate 2, City and Guilds Craft, SVQ Level 1 or 2 or equivalent.
- ⁵ Levels 4 and 5 in England, Wales and Northern Ireland consist of first and higher degrees, professional qualifications, HNCs, HNDs and NVQ Level 4-5. In Scotland, the same qualifications are grouped into Groups 3 and 4, although Group 3 also includes the RSA Higher Diploma.
- ⁶ See Department for Education and Skills (www.dfes.gov.uk)^{TR}.
- ⁷ Dorling, D. (2005) *The human geography of the UK*, London: Sage Publications.
- ^{TR} Further information on this point is available in the accompanying technical report.



What do we know?

- ▶ Good qualifications at an early stage in life lead to an increased likelihood that a person will be able to obtain a good job and other opportunities.



What have we found?

- ▶ In England, Wales and Northern Ireland, 16-17 year olds are more likely to obtain good GCSEs and equivalent qualifications if they live in an area where a high proportion of people in their parents' generation (people aged 40-54) are well qualified. Since the children's achievement is so strongly related to that of their parents' generation, inequalities in educational attainment across the country are maintained over time.
- ▶ This is not the case in Scotland, where there is much less geographical variability in the proportion of young people who have qualifications.

Other reports in the series

The companion report to this, *Teachers*, looks at whether areas with higher proportions of young people with no or unknown qualifications also tend to have fewer teachers.

1. *Doctors and nurses*
2. *In sickness and in health*
3. *Teachers*
4. *Sons and daughters*
5. *Changing rooms*
6. *A place in the sun*
7. *The office*
8. *Open all hours*
9. *Top gear*
10. *Home front*

Contact details

The reports were prepared by Ben Wheeler, Mary Shaw, Richard Mitchell and Danny Dorling. The authors can be contacted via:
 Professor Danny Dorling • Department of Geography • University of Sheffield • Winter Street • Sheffield S10 2TN
 e-mail: danny.dorling@sheffield.ac.uk • www.sheffield.ac.uk/sasi

Text © University of Sheffield

Photographs © Mary Shaw

Design © The Policy Press

Project funder: Joseph Rowntree Foundation