

Article

2011 Census: Qualifications and labour market participation in England and Wales

We look at how people's highest level of qualification relates to their economic activity. The main focus of the analysis is on residents in England and Wales aged 25 to 64. We examine employment, economic inactivity and unemployment and analysis of employment rates across local authorities. Results show that fewer than half of those with no qualifications were in employment compared with 8 in 10 of those with at least one qualification.



Contact:
Tristan Browne
census.analysis.inbox@ons.gsi.
gov.uk

Release date:
18 June 2014

Next release:
To be announced

Table of contents

1. [Key points](#)
2. [Introduction](#)
3. [Employment](#)
4. [Economic inactivity and unemployment](#)
5. [Local authority analysis](#)
6. [Young people \(age 16 to 24\)](#)
7. [Background notes](#)

1. Key points

Focusing on usual residents aged 25 to 64, in 2011:

- Fewer than half (48.5%) of those with no qualifications were in employment compared with 8 in 10 (80.7%) of those with at least one qualification.
- While there was only a small difference in employment rates between the two highest levels of qualification, 2+ A Levels or equivalent (83.5%) and degree level or above (85.3%), those with a degree level or above qualification were more likely to work in occupations with higher earnings.
- The unemployment rate for both men (12.9%) and women (10.8%) with no qualifications was more than double the rate for those with at least one qualification (5.2% for men, 4.3% for women).
- The range of employment rates across local authorities was widest for those with no qualifications (37.2 percentage points) and narrowed as the qualification level increased, with the narrowest range for those with a degree level or above (11.3 percentage points).
- All five local authorities with the highest employment rates for those with no qualifications were rural areas, with the highest rate in Eden at 67.2%, whereas all five with the lowest employment rates for those with no qualifications were urban areas, with four of these being in Inner London and the lowest being Tower Hamlets at 30.0%.

2. Introduction

The 2011 Census collected a range of information from people who were usual residents¹ in England and Wales, including data on their qualifications² and their economic activity³. A previous [census analysis on qualifications](#) provided an overview of the general qualification levels in England and Wales and at lower levels of geography. This report looks at how people's highest level of qualification relates to their economic activity⁴.

Employment rates⁵ and work pattern by qualification level for usual residents aged 25 to 64 in England and Wales are covered in the Employment section. This is followed by a section on economic inactivity, reasons for inactivity and unemployment, and then by an analysis of employment rates across local authorities. In the final section, employment rates by highest level of qualification among young people (aged 16 to 24) are explored.

The main focus of the analysis is on usual residents aged 25 to 64. This is because it is difficult to draw conclusions from those aged 16 to 24 as many are still in the education system or in training, and will not yet have achieved their highest level of qualification. However, for those aged 25 to 64, most will have completed their education or training and as a result will have achieved their highest level of qualification. For this age group, it is therefore more appropriate to analyse differences in labour market participation against their highest level of qualification.

This can be seen in Table 1, which shows how the 16 to 24 age group had lower employment rates, higher unemployment rates⁶ and higher rates of economic inactivity⁷ than those aged 25 to 64 across the highest level of qualification categories.

Table 1: Economic activity by highest level of qualification by age, England and Wales, 2011

Population: All usual residents aged 16 to 64

					Percentages
No qualifications	Other qualifications	1-4 GCSEs	5+ GCSEs	Apprenticeship	

	All categories: Highest level of qualification		or equivalent	or equivalent		2+ A Degree Levels or equivalent	level or above	
Employment rates¹								
16–64	71.0	45.3	69.4	67.4	70.2	81.2	73.4	84.2
16–24	50.7	24.1	47.1	43.5	49.7	83.6	52.9	73.2
25–64	75.5	48.5	72.3	73.8	78.3	80.7	83.5	85.3
Unemployment rates²								
16–64	7.6	14.8	8.0	10.9	9.2	5.0	6.9	3.7
16–24	19.1	40.5	18.4	28.5	20.2	9.1	14.4	9.1
25–64	5.6	12.0	7.0	7.3	5.9	4.2	4.3	3.2
Economic inactivity rates³								
16–64	23.2	46.8	24.5	24.4	22.7	14.6	21.2	12.5
16–24	37.3	59.5	42.3	39.1	37.7	8.0	38.2	19.6
25–64	20.0	44.9	22.3	20.4	16.8	15.7	12.8	11.9

Source: 2011 Census - Office for National Statistics

Notes:

1. The employment rate is the proportion of those in employment out of all usual residents, both economically active and economically inactive.
2. The unemployment rate is the proportion of those unemployed out of all usual residents who are economically active (the unemployment rate does not include those who are economically inactive in the calculation)
3. The economic inactivity rate is the proportion of those economically inactive out of all usual residents, both economically active and economically inactive.

The overall employment rate for usual residents aged 16 to 64 was 71.0%, which is lower than the rate for those aged 25 to 64 (75.5%), due to the low rate among those aged 16 to 24 (50.7%). Similarly, the unemployment rate for usual residents aged 16 to 64 was 7.6%, made higher than the rate for those aged 25 to 64 (5.6%), due to a high rate among those aged 16 to 24 (19.1%). The same pattern occurs also for economic inactivity rates across the highest level of qualification categories. For these reasons, the 25 to 64 age group is more appropriate for comparisons than the younger age group when looking at the effect of different levels of qualifications in the labour market.

Notes for introduction section:

1. For the purposes of the 2011 Census, a usual resident of the UK is anyone who, on census day, was in the UK and had stayed or intended to stay in the UK for a period of 12 months or more, or had a permanent UK address and was outside the UK and intended to be outside the UK for less than 12 months.

2. The responses from the 2011 Census question on qualifications were grouped into those with no qualifications, and six other categories of qualifications, including a new category on apprenticeship qualifications, which was included in the census questionnaire as a separate category for the first time in 2011. This analysis will focus on each individual's highest level of qualification within the following categories:
 - a. 'No qualifications': No academic or professional qualifications.
 - b. '1-4 GCSEs or equivalent': Level 1 qualifications.
 - c. '5+ GCSEs or equivalent': Level 2 qualifications.
 - d. 'Apprenticeship': Apprenticeship.
 - e. '2+ A-levels or equivalent': Level 3 qualifications.
 - f. 'Degree level or above': Level 4 qualifications and above.
 - g. 'Other qualifications': Vocational/Work-related Qualifications, Foreign Qualifications/ Qualifications gained outside the UK (NI) (Not stated/ level unknown).

Further information on highest level of qualification categories is provided in the Background notes section of this report.

3. Economic activity describes a person's main activity the week before the 2011 Census. People can be divided into two main economic activity categories; 'economically active' and 'economically inactive':
 - a. 'Economically active' covers those who were in full- or part-time employment and those not in employment but actively seeking and available for work (unemployed).
 - b. 'Economically inactive' covers those who were not in employment or actively seeking and available for work, due to being retired, looking after home or family, long-term sick or disabled, students or other reasons.
4. The level of respondents reporting no qualifications is likely to be higher in the census relative to the Labour Force Survey. See note 6 in Background notes for more information and other official sources on qualification levels.
5. The employment rate is the proportion of those in employment out of all usual residents, both economically active and economically inactive.
6. The unemployment rate is the proportion of those unemployed out of all usual residents who are economically active (the unemployment rate does not include those who are economically inactive in the calculation).
7. The economic inactivity rate is the proportion of those economically inactive out of all usual residents, both economically active and economically inactive.

3. Employment

Examining the employment rates¹ for each highest level of qualification category shows which qualifications lead to a higher likelihood of being in employment. Then, looking at the types of occupation among different categories gives an indication of potential earnings associated with each type of qualification.

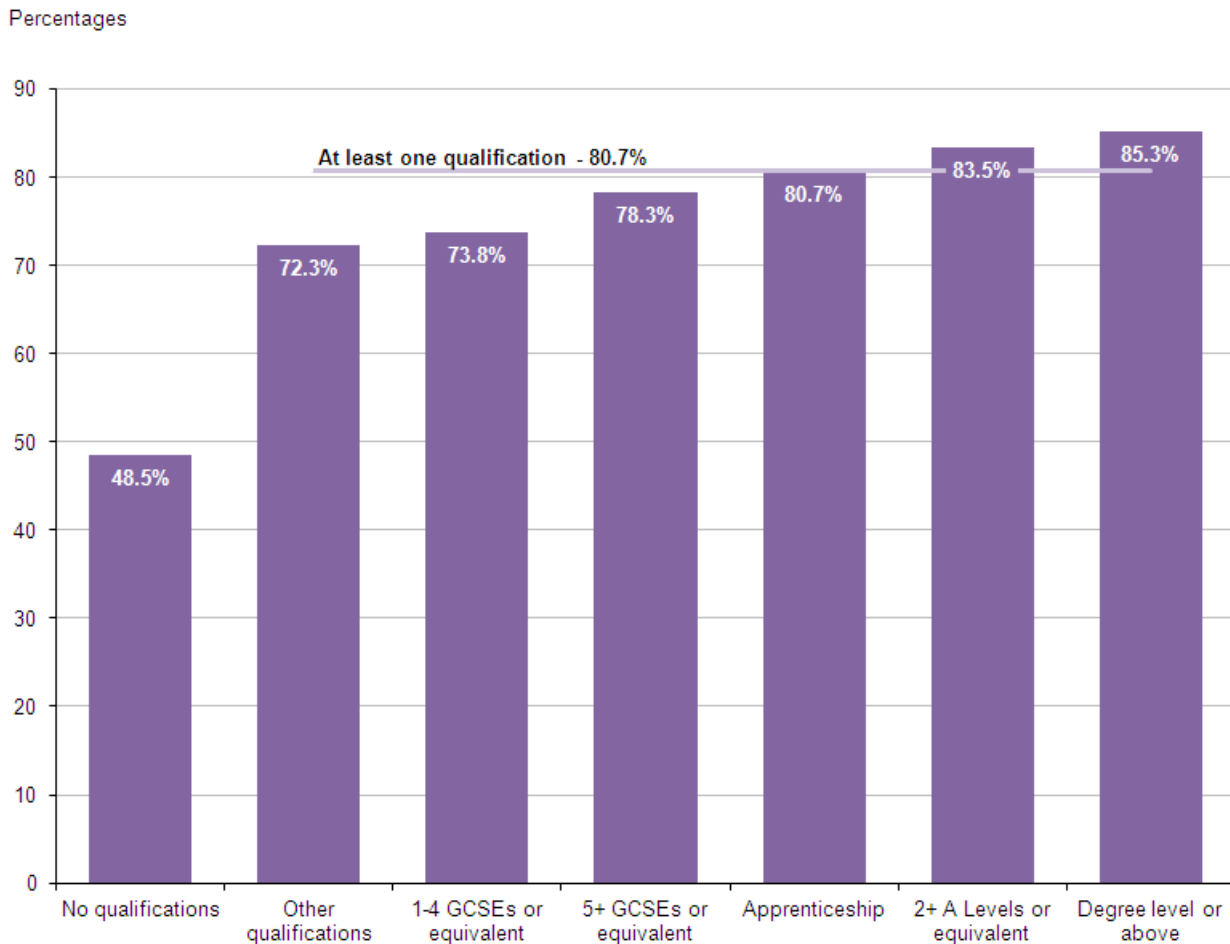
Higher levels of qualification correspond to higher employment rates

Three quarters (75.5%) of those aged 25 to 64 in England and Wales were in employment at the time of the census. However, as shown in Figure 1, for those with no qualifications only 48.5% were in employment. This was much lower than any of the other qualification categories, with the next lowest rate being 'other' qualifications

at 72.3% employment. For all categories with at least one qualification, the employment rate increased as the level of qualification increased, with the highest employment rate being for those with degree level or above qualifications at 85.3%.

Figure 1: Employment rates by highest level of qualification, England and Wales, 2011

Population: All usual residents aged 25 to 64



Source: Census - Office for National Statistics

Small difference between degree level or above and A Level employment rates

There was a small difference in employment rates between the two highest levels of qualification: A Levels (83.5%) and degree level or above (85.3%). This suggests that having a qualification of degree level or above had little impact on the likelihood of being employed compared with having A Levels. However, the types of occupation, and therefore the potential earnings, varied between these qualification levels.

People with a degree level or above worked in higher paid occupations

The most common occupations² among those with a degree level or above were 'professional' (43.3%) and 'technical' (18.2%) where, according to the [2011 Annual Survey of Hours and Earnings](#), median gross weekly earnings were £685.90 for 'professional' and £570.40 for 'technical'.

On the other hand, the most common occupations among those with 2+ A Levels or equivalent were 'caring and leisure' (16.8%) and 'skilled trades' (16.4%), with median gross weekly earnings of £333.80 and £463.10 respectively. Earning potential may therefore increase with a degree level or above qualification compared with having 2+ A levels or equivalent, even though the likelihood of finding employment may not change much.

For those with apprenticeships, also with a relatively high employment rate of 80.7%, almost half worked in 'skilled trades', with median gross weekly earnings of £463.10. By contrast, those with no qualifications mainly worked in 'elementary' (28.0%) and 'machine operatives' (18.1%) occupations, which had median gross weekly earnings of £328.90 and £427.00 respectively.

Employment rates by sex and age

Overall, 21.2% of women aged 25 to 34 were economically inactive³, with the most common reason among these being looking after home or family (60.3%). This compares with 8.9% of men aged 25 to 34 who were economically inactive, with the most common reason among these being a student (31.5%), or long-term sickness or disability (31.3%).

For those aged 50 to 64, 37.4% of women were economically inactive, with 59.0% of these who were retired. This compares with 23.5% of men who were economically inactive, with 51.5% of these retired. This is partly because, until relatively recent [changes to the state pension age](#), the state pension age for women was 60, while for men it was 65.

Table 2a: Employment rates by highest level of qualification by age, England and Wales, 2011

Population: All men aged 25 to 64

Age	Percentages							
	No qualifications	At least one qualification	Other qualifications	1-4 GCSEs or equivalent	5+ GCSEs or equivalent	Apprenticeship	2+ A Levels or equivalent	Degree level or above
25–64	57.7	85.1	81.0	80.9	83.7	82.5	86.5	88.1
25–34	56.0	86.9	83.2	78.0	84.6	89.4	89.3	90.5
35–49	61.5	89.7	84.4	84.8	87.2	91.6	90.6	93.6
50–64	55.8	77.4	75.2	76.1	76.9	76.6	78.1	78.5

Source: 2011 Census - Office for National Statistics

Table 2b: Employment rates by highest level of qualification by age, England and Wales, 2011

Population: All women aged 25 to 64

Age	Percentages							
	No qualifications	At least one qualification	Other qualifications	1-4 GCSEs or equivalent	5+ GCSEs or equivalent	Apprenticeship	2+ A Levels or equivalent	Degree level or above
25–64	39.7	76.3	61.7	67.6	74.2	68.1	80.4	82.5
25–34	30.5	77.9	61.9	57.0	71.6	77.1	81.0	87.0
	43.8	81.0	65.4	73.9	80.2	78.9	84.1	86.2

35– 49								
50– 64	39.8	68.2	58.1	64.4	67.9	57.4	73.4	71.5

Source: 2011 Census - Office for National Statistics

As was found for the overall employment rates by highest level of qualification, having at least one qualification led to considerably higher employment rates than having no qualifications for all age and sex groups.

Smaller sex differences for higher levels of qualification

Although men aged 25 to 64 had a higher employment rate (80.8%) overall than women in this age range (70.4%), this difference was less marked at higher levels of qualifications. For example, employment rates were similar for men and women with a degree level or above when comparing each corresponding age category between the sexes (for example men aged 25 to 34 with this level of qualification had 90.5% employment compared with women aged 25 to 34 who had 87.0% employment).

However, the difference between the sexes among those with no qualifications was striking, with 57.7% employment among men and 39.7% employment among women. The difference was most marked at age 25 to 34, where 56.0% of men with no qualifications were employed, compared with 30.5% of women. Much of these differences can be explained by inactivity rates. The proportion of men aged 25 to 34 with no qualifications who were economically inactive was 27.5% with the most common reason among these being long-term sickness or disability (52.0%). This compares with 59.8% of women with the most common reason for economic inactivity being looking after home or family (59.9%).

Work pattern

The work pattern, specifically the full-time and part-time distributions, of those in employment varied across the qualification categories and age groups.

Whether someone in employment works full-time or part-time can depend on a number of factors that are influenced by age, including whether they have other commitments such as raising a family or are caring for a relative, or whether they are working part-time to fund educational commitments. Overall, older age groups tend to have higher proportions of the workforce working part-time than younger age groups. This is shown from the fact that, of all usual residents in employment, 21.4% aged 25 to 34, 26.6% aged 35 to 49 and 29.6% aged 50 to 64 worked part-time.

For this reason, Table 3 below breaks down the work patterns for the highest level of qualification categories by age.

Table 3: The proportions of full-time and part-time employment by highest level of qualification by age, England and Wales, 2011

Population: All usual residents in employment aged 25 to 64

	Percentages							
	No qualifications	At least one qualification	Other qualifications	1-4 GCSEs or equivalent	5+ GCSEs or equivalent	Apprenticeship	2+ A Levels or equivalent	Degree level or above
25– 64								
Full-time	63.8	75.0	73.1	68.7	69.1	86.1	74.7	79.3

Part-time 25–34	36.2	25.0	26.9	31.3	30.9	13.9	25.3	20.7
Full-time	63.8	79.4	75.4	71.4	73.2	86.4	77.0	84.4
Part-time 35–49	36.2	20.6	24.6	28.6	26.8	13.6	23.0	15.6
Full-time	64.5	74.2	72.7	69.0	68.6	87.7	73.1	78.7
Part-time 50–64	35.5	25.8	27.3	31.0	31.4	12.3	26.9	21.3
Full-time	63.3	72.0	71.4	66.3	66.0	84.9	74.5	73.8
Part-time	36.7	28.0	28.6	33.7	34.0	15.1	25.5	26.2

Source: 2011 Census - Office for National Statistics

Those with no qualifications had the highest proportions working part-time in all age groups compared with the rest of the qualification categories. It is possible that some of these may have been working to gain qualifications. However, this could also indicate that having no qualifications leads to a higher likelihood of under-employment compared with other categories of highest level of qualification. A previous ONS publication in November 2012 using the Labour Force Survey indicated that [1 in every 10 workers wanted to work more hours](#).

Older age groups with a degree level or above more likely to work part-time

Those with a degree level or above qualification showed the largest difference in proportions working part-time between age 25 to 34 (15.6%) and age 50 to 64 (26.2%). Those with a degree level or above were most likely to work in 'managerial', 'professional' and 'technical' occupations and, due to a combination of factors such as higher earnings or a higher precedence of flexible working hours, it may be easier to switch to part-time hours as age increases with these types of occupation.

Notes for employment

1. The employment rate is the proportion of those in employment out of all usual residents, both economically active and economically inactive.
2. The occupation categories were classified for the 2011 Census according to the 2010 Standard Occupations Classification (SOC 2010). For more information please visit the [ONS Standard Occupations Classification \(SOC 2010\) Hierarchy](#) webpage on the ONS website.
3. [Labour Market Participation in England and Wales](#), published by ONS, focused on the labour market characteristics of the usually resident population in England and Wales such as employment, unemployment and economic inactivity using 2011 Census data.

4. Economic inactivity and unemployment

The economically inactive population covers those who are neither working nor actively seeking and available for work. The reasons for inactivity include retirement, looking after home or family, long-term sickness or disability, study and 'other' reasons¹.

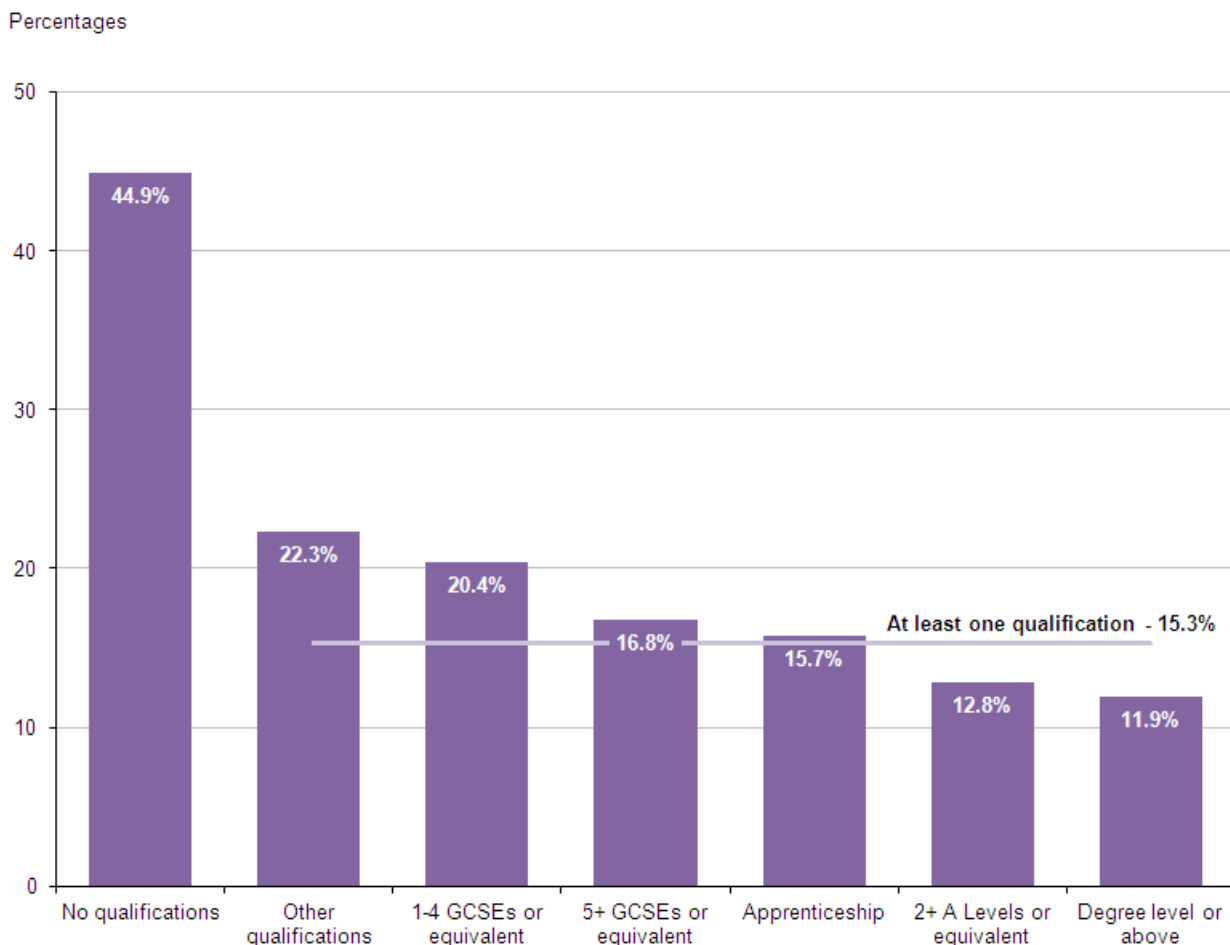
There were 29.6 million people aged 25 to 64 in 2011. Of this number, a fifth (20.0%; 5.9 million) were economically inactive. Of the remaining (economically active) 23.7 million people, 1.3 million were unemployed, corresponding to an unemployment rate² of 5.6%.

Over 4 in 10 of those with no qualifications were economically inactive

Of the highest level of qualification categories, people with no qualifications were most likely to be economically inactive, over 4 in 10 (44.9%) in 2011. For the remaining categories, economic inactivity rates³ were lower for higher levels of qualification (Figure 2). This is the reverse to what was found for the employment rates.

Figure 2: Economic inactivity rates by highest level of qualification, England and Wales, 2011

Population: All usual residents aged 25 to 64



Source: Census - Office for National Statistics

Reasons for inactivity

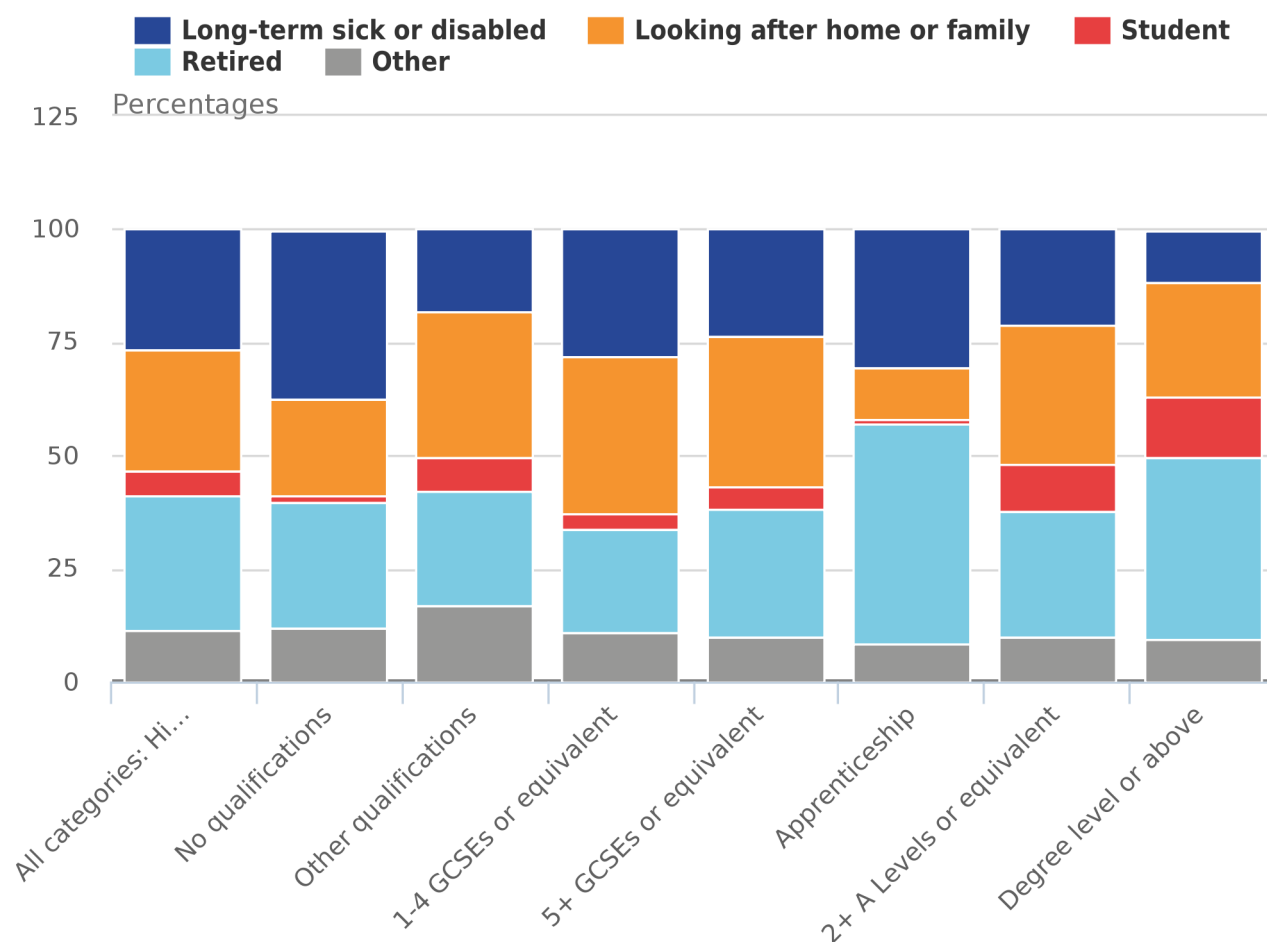
Figure 3 presents the reasons for inactivity among the qualifications categories. Of those aged 25 to 64 who were economically inactive with an apprenticeship, 48.5% were retired. This could reflect the high proportion of economically inactive people with an apprenticeship that were aged 50 to 64 (81.2%).

On the other hand, 37.6% of those who were economically inactive with no qualifications were long-term sick or disabled (Figure 3). This relatively high percentage could be partly explained by the possibility that some of those within this category may find it harder to gain qualifications for reasons related to their sickness or disability.

The Reference table included as part of this release, [Reasons for inactivity \(66.5 Kb Excel sheet\)](#), further breaks down reasons for inactivity among the highest level of qualifications categories by sex and age.

Figure 3: Reasons for economic inactivity by highest level of qualification, England and Wales, 2011

Population: All usual residents economically inactive aged 25 to 64



Source: Census - Office for National Statistics

Unemployment

A previous report using Labour Force Survey (LFS) data, [Graduates in Labour Market 2013](#), showed that graduates and non-graduates who recently completed their studies had consistently higher unemployment rates than older age groups, regardless of the level of qualifications attained. These people will have been looking for work for a relatively short period of time and will therefore have less experience in the labour market and be less likely to have begun a particular career path.

Tables 4a and 4b present the unemployment rates by age and sex from the 2011 Census.

High unemployment rates for those with no qualifications

Having no qualifications more than doubled the likelihood of unemployment for both men and women. Men aged 25 to 64 with no qualifications had an unemployment rate of 12.9%, whereas men with at least one qualification had 5.2% unemployment. Similarly, women with no qualifications had 10.8% aged 25 to 64 who were unemployed, whereas women with at least one qualification had 4.3% unemployment.

Those with higher qualifications less likely to be looking for work

For men and women, having a degree level or above qualification corresponded to the lowest unemployment rates (except for women aged 50 to 64 where having an apprenticeship led to slightly lower unemployment rates, however this constitutes a very small population⁴). By contrast, those with no qualifications had the highest unemployment rates, as is expected from the analysis of employment rates at the beginning of this section.

Table 4a: Unemployment rates by highest level of qualification by age, England and Wales, 2011

Population: All men aged 25 to 64

Age	Percentages							
	No qualifications	At least one qualification	Other qualifications	1-4 GCSEs or equivalent	5+ GCSEs or equivalent	Apprenticeship	2+ A Levels or equivalent	Degree level or above
25–64	12.9	5.2	6.8	7.9	6.8	4.3	4.8	3.5
25–34	22.8	6.6	7.7	12.9	8.9	6.3	5.3	3.9
35–49	13.7	4.6	6.9	6.5	6.0	3.4	4.2	3.0
50–64	8.7	4.7	5.6	5.8	5.8	4.4	4.9	3.8

Source: 2011 Census - Office for National Statistics

Table 4b: Unemployment rates by highest level of qualification by age, England and Wales, 2011

Population: All women aged 25 to 64

Age	Percentages							
	No qualifications	At least one qualification	Other qualifications	1-4 GCSEs or equivalent	5+ GCSEs or equivalent	Apprenticeship	2+ A Levels or equivalent	Degree level or above
25–64	10.8	4.3	7.4	6.6	5.1	3.7	3.7	3.0
25–34	24.1	5.6	9.4	13.1	8.1	6.3	4.6	3.4
35–49	15.1	4.3	8.5	6.3	4.8	3.8	3.5	2.9
50–64	5.2	3.0	4.2	3.8	3.2	2.4	2.7	2.4

Source: 2011 Census - Office for National Statistics

While unemployment decreased with age for most qualification categories, having some form of qualification reduced the likelihood of being unemployed, with unemployment rates generally lower for higher levels of qualifications. This is the reverse of what was seen for the employment rates.

This suggests that those with some form of qualification tend to have less difficulty finding work than those with no qualifications and that, on the whole, the higher the level of qualification the easier it is to attain some form of employment.

Notes for economic inactivity and unemployment

1. One example of 'other' reasons could be someone who had been made a job offer but not yet started their employment in the week before census.
2. The unemployment rate is the proportion of those unemployed out of all usual residents who are economically active (the unemployment rate does not include those who are economically inactive in the calculation).
3. The economic inactivity rate is the proportion of those economically inactive out of all usual residents, both economically active and economically inactive.
4. 830 were unemployed out of 58,000 women aged 50 to 64 who had an apprenticeship.

5. Local authority analysis

This section examines the employment rates¹ for those aged 25 to 64 by their highest level of qualification across local authorities² in England and Wales; this information is also visualised on an [interactive map](#). West Oxfordshire (84.5%) had the highest employment rate overall at 84.5% and Middlesbrough had the lowest at 64.7%.

Comparing employment rates sequentially for those with no qualifications, GCSE, A Level and then degree level or above qualifications, the rates were consecutively higher for the majority of local authorities in England and Wales. However, in 83 out of 346 local authorities², having 2+ A Levels or equivalent was associated with higher employment rates than having a degree level or above. The majority of these 83 local authorities were rural areas and a previous census analysis, [Rural-Urban Analysis 2011](#), has shown that residents of rural areas have an older age profile than residents of urban areas.

This could indicate that many of those with a degree level or above qualification choose to retire to rural areas, as higher proportions of the population in retirement would mean lower proportions in employment. In line with this, the 83 local authorities mentioned above had a median proportion of retired people aged 25 to 64 of 7.8% whereas the remaining local authorities had a median proportion retired of 6.1%. Another possible reason is that rural areas have fewer jobs that require degree level or above qualifications.

Looking across local authorities, the ranges of employment rates within each qualification category were narrower for higher levels of qualification. For instance, the lowest employment rate found across local authorities for those with no qualifications was 30.0% and the highest was 67.2%, a range of 37.2 percentage points. In contrast, the lowest employment rate found across local authorities for those with a degree level or above was 78.2% and the highest was 89.6%, a range of 11.3 percentage points.

Table 5 picks out the local authorities with the highest employment rates for each highest level of qualification category.

Table 5: Local authorities with the highest employment rates by highest level of qualification, England and Wales, 2011

Population: All usual residents aged 25 to 64

Highest level of qualification	Local authority	Percentages
		Employment rate
All categories: Highest level of qualification	West Oxfordshire (South East)	82.3
No qualifications	Eden (North West)	67.2
Other qualifications	South Holland (East Midlands)	84.8
1-4 GCSEs or equivalent	Eden (North West)	84.1
5+ GCSEs or equivalent	Eden (North West)	85.4
Apprenticeship	West Oxfordshire (South East)	88.9
2+ A Levels or equivalent	Blaby (East Midlands)	88.6
Degree level or above	Rushmoor (South East)	89.6

Source: 2011 Census - Office for National Statistics

The local authorities with the highest employment rates across the qualifications categories were mainly rural areas (Table 5), and those with the lowest rates were mainly urban areas (Table 6), except for degree level or above qualifications where North Norfolk had the lowest employment rate at 78.2%. The [Rural-Urban Analysis 2011](#), showed that usual residents living in rural areas were more likely to be in employment compared with those living in urban areas.

Eden in Cumbria in the North West of England had the highest employment rates for people with lower levels of qualifications: no qualifications, 1-4 GCSEs or equivalent and 5+ GCSEs or equivalent. The reasons why may be to do with the age profile in Eden. Employment rates are related to age such that those in older age groups (50 to 64) are more likely to be employed than younger age groups (25 to 34). Eden had an older age profile ³ with 43.2% aged 50 to 64 (out of all those aged 25 to 64), compared with the England and Wales figure of 34.3% aged 50 to 64. Additionally, a [previous analysis on qualifications](#) showed that there was a higher proportion of people aged 50 to 64 with no qualifications compared with other age groups. These factors could help explain the high employment rates in these categories in Eden.

Looking across the remaining qualification categories, compared with other local authorities, Eden had high employment rates for those with 'other' qualifications (84.4%) and those with 2+ A Levels or equivalent (87.9%). However, notably, Eden had a relatively low employment rate for those with a degree level or above (83.5%). Although this figure is still high compared with other qualification categories, it ranks 285th of the 346 local authorities². This could be due to people with this qualification choosing to retire to this rural area, as discussed above. Overall, the employment rate for all people aged 25 to 64 in Eden was 82.3%.

In terms of the distribution of qualifications among the aged 25 to 64 population, Eden had a lower percentage of those with no qualifications (13.8%) than the England and Wales figure (16.0%). However, for 1-4 GCSEs or equivalent (16.2%) and 5+ GCSEs or equivalent (17.3%), Eden had higher proportions than the figures for England and Wales (14.6% and 15.0% respectively).

Table 6 picks out the local authorities with the lowest employment rates for each highest level of qualification category.

Table 6: Local authorities with the lowest employment rates by highest level of qualification, England and Wales, 2011

Population: All usual residents aged 25 to 64

Highest level of qualification	Local authority	Percentages
		Employment rate
All categories: Highest level of qualification	Middlesbrough (North East)	64.7
No qualifications	Tower Hamlets (London)	30
Other qualifications	Birmingham (West Midlands)	60.8
1-4 GCSEs or equivalent	Tower Hamlets (London)	55.4
5+ GCSEs or equivalent	Kensington and Chelsea (London)	63.8
Apprenticeship	Hackney (London)	66
2+ A Levels or equivalent	Kensington and Chelsea (London)	70.7
Degree level or above	North Norfolk (East)	78.2

Source: 2011 Census - Office for National Statistics

The lowest employment rates among those with no qualifications and 1-4 GCSEs or equivalent were found in Tower Hamlets at 30.0% and 55.4% respectively (Table 6). Looking across the remaining qualification categories, compared with other local authorities, Tower Hamlets had relatively low employment rates in all categories except those with a degree level or above. For those with a degree level or above in Tower Hamlets, almost 9 in 10 (87.5%) were in employment. This, when compared with the employment rate for no qualifications in Tower Hamlets of 30.0%, was the largest difference between employment rates of different qualification categories in any local authority in England and Wales.

In terms of the distribution of qualifications among the population aged 25 to 64, almost half (47.6%) of those in Tower Hamlets had a degree level or above qualification, markedly higher than the figure for England and Wales of around a third (33.3%). Therefore, overall, Tower Hamlets has a very unusual mix of employment rates and qualifications compared to other areas. It has a high share of graduates among its residents and they enjoy above average employment rates relative to graduates in other areas of England and Wales; but for Tower Hamlets residents without a degree, and particularly for those with no qualifications or 1-4 GCSE's or equivalent, employment rates are very low relative to other areas.

High employment rates in rural areas for those with no qualifications

Table 7 presents the top and bottom five local authorities for employment rates for those with no qualifications aged 25 to 64. All five local authorities with the highest employment rates were rural areas, and all five with the lowest rates were urban areas, with four of these being in London, and these four all in Inner London rather than Outer London.

It is also worth noting that all Inner London local authorities are ranked in the bottom quintile of all local authorities in England and Wales in terms of employment rates for those aged 25 to 64 with no qualifications.

One possible reason for this is that, at the time of the census, 52.9% of workers who lived in London worked in 'managerial', 'professional' or 'technical' occupations, higher than in any other English region or Wales. Having no qualifications could be a particular barrier to entering into these types of occupations as, across England and Wales, only 2.9% those in these occupation types had no qualifications.

Table 7: Employment rates among those with no qualifications, highest and lowest five local authorities in England and Wales, 2011

Population: All usual residents aged 25 to 64 with no qualifications

		Percentages
Rank	Local authority	Employment rate
Highest 5		
1	Eden (North West)	67.2
2	West Oxfordshire (South East)	66.8
3	Richmondshire (Yorkshire and The Humber)	64.1
4	South Northamptonshire (East Midlands)	63.9
5	South Oxfordshire (South East)	63.8
Lowest 5		
346	Tower Hamlets (London)	30
345	Hackney (London)	35
344	Islington (London)	35.4
343	Camden (London)	35.8
342	Liverpool (North West)	36

Source: 2011 Census - Office for National Statistics

Age may also be a key factor in these findings³ as all five local authorities with the lowest employment rates had higher proportions aged 25 to 34 than all five local authorities with the highest employment rates. As seen in the Employment section of this analysis (Employment rates by sex and age), those with no qualifications aged 25 to 34 had relatively low employment rates compared with the older age groups.

High employment rates for those with a degree level or above qualification in all local authorities in England and Wales

Table 8 indicates the top and bottom five local authorities for employment rates for those with degree level or above qualifications aged 25 to 64. Only four of the 346 local authorities had employment rates below 80.0%, but these rates were all still above the England and Wales overall employment rate of 75.5%, suggesting this level of qualification leads to high employment rates regardless of place of residence.

The location of the local authorities with the highest and lowest employment rates for those with degree level or above qualifications were relatively spread out across England and Wales.

Table 8: Employment rates among those with a degree level or above, highest and lowest five local authorities in England and Wales, 2011

Population: All usual residents aged 25 to 64 with a degree level or above

		Percentages
Rank	Local authority	Employment rate
Highest 5		
1	Rushmoor (South East)	89.6
2	Wandsworth (London)	89
3	Lambeth (London)	88.7
4	Swindon (South West)	88.5

5	East Cambridgeshire (East)	88.5
Lowest 5		
346	North Norfolk (East)	78.2
345	West Somerset (South West)	78.9
344	Newham (London)	79
343	Ceredigion (Wales)	79.7
342	Torridge (South West)	80.2

Source: 2011 Census - Office for National Statistics

Of the five local authorities with the lowest employment rates for those with a degree level or above qualification, four were rural areas. In these areas, a higher proportion of those 25 to 64 were retired compared to the figures for England and Wales, with more retired people meaning fewer people in employment. This could indicate that these areas are local authorities where many of those with a degree level or above choose to retire.

In Newham, the remaining local authority of the five with the lowest employment rates for those with a degree level or above, the relatively low rate (79.0%) is in line with the low overall employment rate in the area (66.0%). In terms of the proportion of the population in Newham with a degree level or above qualification (34.4%) this was marginally higher than the figure for England and Wales (33.3%).

Notes for local authority analysis

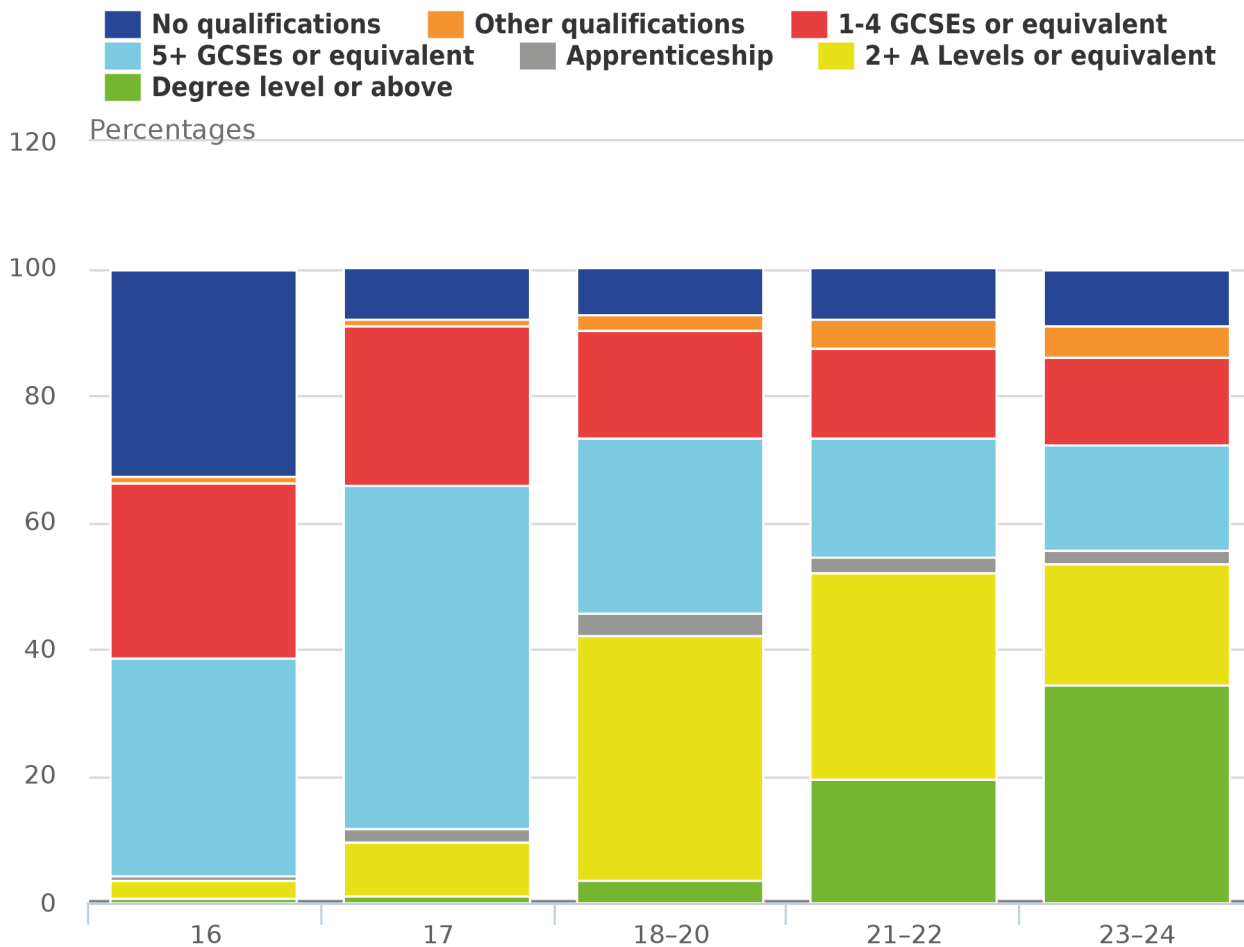
1. The employment rate is the proportion of those in employment out of all usual residents, both economically active and economically inactive.
2. Analysis in this section of the report refers to 346 local authorities as City of London has been merged with Westminster and Isles of Scilly has been merged with Cornwall due to small population counts.
3. Age profiles by local authority and English regions and Wales can be viewed and compared on these [2011 Census Interactive Population Pyramids](#).

6. Young people (age 16 to 24)

Figure 4 shows how the distribution of qualifications changes as young people move through different stages of the education system.

Figure 4: Highest level of qualification by age, England and Wales, 2011

Population: All usual residents aged 16 to 24



Source: Census - Office for National Statistics

Notes:

1. The census took place on 27 March 2011, towards the second half of the academic year, meaning that those captured may not yet have completed their academic year.

Lower proportions of no qualifications for young people who have completed secondary education

The proportion of those with no qualifications drops from 32.7% for 16 year olds, many of whom would not have completed their secondary education at the time census took place (27 March 2011), to 8.0% for 17 year olds, the majority of whom would have completed GCSEs or equivalent qualifications. This shift is mainly balanced with a rise of those with 5+ GCSEs or equivalent as their highest level of qualification from 34.1% for 16 year olds to 54.2% for 17 year olds.

When combining the GCSE categories, almost 8 in 10 (78.9%) people aged 17 had a GCSE qualification (either 1-4 or 5+ GCSEs) or equivalent. Above this age, as people have had more time to attain further qualifications such as A Levels and apprenticeships, the proportion with GCSEs as their highest level of qualification is lower.

Employment rates by qualifications among young people

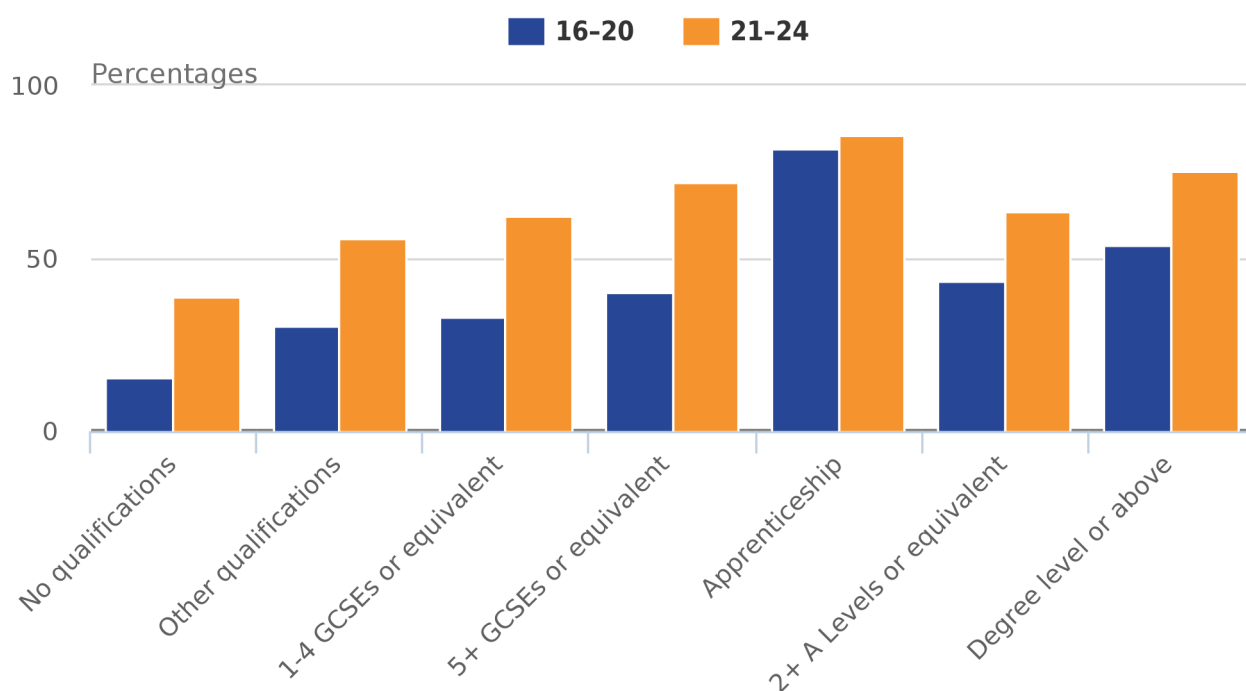
Compared with those aged 25 to 64, the employment rate¹ for usual residents aged 16 to 24 was low with around half (50.7%; 3.4 million) of 6.7 million in employment. Nearly 4 in 10 (37.3%; 2.5 million) were economically inactive, with the main reason given among these being a student (82.4% of those economically inactive; 2.0 million).

The remaining 795,000 (11.9%) were unemployed with an unemployment rate² of 19.1%. However, it is important to take into account that a high proportion of young people were in full-time education, and that the majority of people in full-time education are economically inactive. Therefore, more young people in full-time education means fewer young people in the labour market (those employed and unemployed) and this can impact the unemployment rate, which shows the proportion of young people who are unemployed in relation to those economically active. High unemployment rates among young people are discussed further in other analyses³.

Within the 16 to 24 age band, those aged 21 to 24 had a considerably higher employment rate (66.2%) than those aged 16 to 20 (37.8%), reflecting the larger proportions of those in education aged 16 to 20. An employment rate rise with age occurred for all levels of qualification achieved, as would be expected as people leave the education system at various stages and begin to look for employment, as seen in Figure 5 below.

Figure 5: Employment rates by highest level of qualification by age, England and Wales, 2011

Population: All usual residents aged 16 to 24



Source: Census - Office for National Statistics

High employment rates for young people with apprenticeships

Out of all highest level of qualification categories, those who had apprenticeships were most likely to be employed whether aged 16 to 20 or 21 to 24, with employment rates of 82.0% and 85.6% respectively, and a rate of 83.6% for the 16 to 24 age group as a whole.

This could be partly because apprenticeships are job-related schemes which may often lead to employment in the company where the individuals are trained, and that those choosing apprenticeships may be more inclined to enter to the job market sooner than those training for different qualifications.

For the remaining qualification categories, young people were markedly more likely to be in the labour market aged 21 to 24 than aged 16 to 20 as they have had more time to find work after completing their education.

Relatively high employment rates were observed for those young people with 2+ A Levels or equivalent or a degree level or above. However, these were lower at ages 16 to 20 and 21 to 24 than those for people with apprenticeships.

Notes for young people (age 16 to 24)

1. The employment rate is the proportion of those in employment out of all usual residents, both economically active and economically inactive.
2. The unemployment rate is the proportion of those unemployed out of all usual residents who are economically active (the unemployment rate does not include those who are economically inactive in the calculation).
3. [Young People in the Labour Market, 2014](#), published by ONS, compared economic activity and inactivity characteristics of young people aged 16 to 24 who are in full-time education to those who are not in full-time education using data from the Labour Force Survey (LFS). In February 2013, the Department for Business, Innovation and Skills (BIS) released a report, [Research into Training for Young Adults aged 19 to 24 who are Not in Education, Employment or Training \(NEET\)](#), analysing the impact of training for young people not in employment, education or training.

7. Background notes

1. Census data tables [DC6603EW](#) Occupation by economic activity by age and [DC5601EW](#) Highest level of qualification by economic activity by age were used in this analysis, which are available on the 2011 Census NOMIS website. Also used are the data tables Economic activity by highest level of qualification by sex by single year of age for the analysis on usual residents aged 16 to 24, Economic Activity by highest level of qualification by sex by age and Occupation by highest level of qualification by sex by age for the analysis on those aged 25 to 64, which are available in the 'Reference tables' section of this release.
2. The 2011 Census was administered through a self-completion questionnaire, asking respondents to select all qualifications they held, or their equivalents, from a list of options. Highest levels of qualifications were then derived for each individual using an established hierarchy of qualifications.

3. The 2011 Census published data on highest level of qualification using the following categories:
 - a. 'No qualifications': No academic or professional qualifications.
 - b. '1-4 GCSEs or equivalent' (Level 1 qualifications): 1-4 O Levels/CSE/GCSEs (any grades), Entry Level, Foundation Diploma, NVQ level 1, Foundation GNVQ, Basic/Essential Skills.
 - c. '5+ GCSEs or equivalent' (Level 2 qualifications): 5+ O Level (Passes)/CSEs (Grade 1)/GCSEs (Grades A*-C), School Certificate, 1 A Level/ 2-3 AS Levels/VCEs, Intermediate/Higher Diploma, Welsh Baccalaureate Intermediate Diploma, NVQ level 2, Intermediate GNVQ, City and Guilds Craft, BTEC First /General Diploma, RSA Diploma.
 - d. 'Apprenticeship': Apprenticeship.
 - e. '2+ A Levels or equivalent' (Level 3 qualifications): 2+ A Levels/VCEs, 4+ AS Levels, Higher School Certificate, Progression/Advanced Diploma, Welsh Baccalaureate Advanced Diploma, NVQ Level 3; Advanced GNVQ, City and Guilds Advanced Craft, ONC, OND, BTEC National, RSA Advanced Diploma.
 - f. 'Degree level or above' (Level 4 qualifications and above): Degree (for example BA, BSc), Higher Degree (for example MA, PhD, PGCE), NVQ Level 4-5, HNC, HND, RSA Higher Diploma, BTEC Higher level, Foundation degree (NI), Professional qualifications (for example teaching, nursing, accountancy).
 - g. 'Other qualifications': Vocational/Work-related Qualifications, Foreign Qualifications/ Qualifications gained outside the UK (NI) (Not stated/ level unknown).
4. Economic activity describes a person's main activity the week before the 2011 Census. People can be divided into two main economic activity categories; 'economically active' and 'economically inactive':
 - a. 'Economically active' covers those who were in full- or part-time employment and those not in employment but actively seeking and available for work (unemployed).
 - b. 'Economically inactive' covers those who were not in employment or actively seeking and available for work due to being retired, looking after home or family, long-term sick or disabled, students or other reasons.
5. The Department for Business Innovation and Skills (BIS) publish official qualification level [estimates for England](#) and the Welsh Government publish official qualification level [estimates for Wales](#).
6. There are other survey sources used for Official Statistics on qualifications in England and Wales, which include the Annual Population Survey (APS) and the Labour Force Survey (LFS), and analyses using these sources for example [Graduates in the Labour Market 2013](#). In addition, administrative sources are used to provide National Statistics on [achievements by young people](#) by the Department for Education. All surveys are known to have a degree of under-reporting of qualifications due to respondents being less likely to report low level of qualifications as they undervalue or don't recall them. However, the LFS reduces the extent of this through additional probing and support from the interviewer, whilst the census is based on a single self-reported question. Therefore, the level of respondents reporting no qualifications is likely to be higher in the census, relative to the LFS or administrative sources. A separate [article \(227.8 Kb Pdf\)](#) compares qualifications between the 2011 Census and these sources, as well as changes to the 2011 Census question on qualifications compared with the 2001 Census.
7. A new category on apprenticeship qualifications was included in the census questionnaire as a separate category for the first time in 2011. More recent data on apprenticeships for England is published by the [Department for Business Innovation and Skills \(BIS\)](#) and that for Wales is published by the [Welsh Government](#).
8. A person's place of usual residence is in most cases the address at which they stay the majority of the time. For many people this will be their permanent or family home. If a member of the services did not have a permanent or family address at which they were usually resident, they were recorded as usually resident at their base address.
9. All key terms used in this publication are explained in the [2011 Census glossary](#). Information on the [2011 Census geography products for England and Wales](#) is also available.

10. ONS is responsible for carrying out the census in England and Wales. Simultaneous but separate censuses took place in Scotland and Northern Ireland. These were run by the National Records of Scotland (NRS) and the Northern Ireland Statistics and Research Agency (NISRA) respectively.
11. ONS has ensured that the data collected meet users' needs via an extensive [2011 Census outputs consultation process](#) in order to ensure that the 2011 Census outputs are of increased use in the planning of housing, education, health and transport services in future years.
12. ONS developed the coverage assessment and adjustment methodology to address the problem of undercounting. The coverage assessment and adjustment methodology involved the use of standard statistical techniques, similar to those used by many other countries, for measuring the level of undercount in the census and providing an assessment of characteristics of individuals and households. ONS adjusted the 2011 Census counts to include estimates of people and households not counted.
13. All census population estimates were extensively quality assured using other national and local sources of information for comparison and review by a series of quality assurance panels. An extensive range of [quality assurance, evaluation and methodology papers](#) were published alongside the first release in July 2012, including a [Quality and Methodology Information \(QMI\) document](#).
14. The 2011 Census achieved its overall target response rate of 94% of the usually resident population of England and Wales, and over 80% in all local and unitary authorities. The population estimate for England and Wales of 56.1 million is estimated with 95% confidence to be accurate to within +/- 85,000 (0.15%).
15. Census day was 27 March 2011.
16. Further information on future releases is available online in the [2011 Census reporting and analysis prospectus](#).
17. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk

These National Statistics are produced to high professional standards and released according to the arrangements approved by the UK Statistics Authority.