



Levels of Highest Qualification held by Working Age Adults, 2016

20 April 2017
SFR 41/2017

Overall, qualification levels in Wales increased in 2016, continuing the general increase seen over time.

About this release

This Statistical Release presents key statistics on the highest qualification held by adults of working age in Wales, according to their age at the start of the academic year.

The statistics provided are taken from the Annual Population Survey (APS) for the year ending 31 December 2016. Qualifications have been grouped into National Qualification Framework (NQF) levels.

This release contains data for one of the 46 national well-being indicators.

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Key Results

Estimated per cent of working age adults in Wales with:

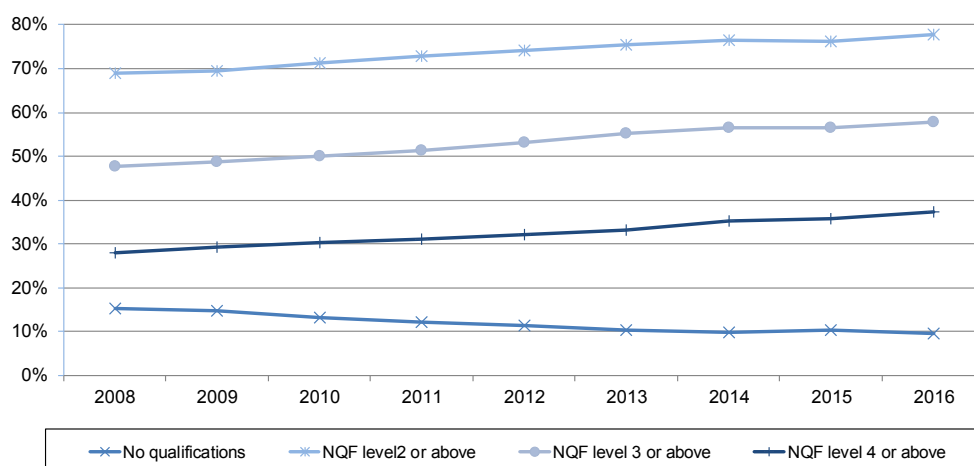
	2015	2016
No Qualifications	10%	9%
NQF Level 2 or above ¹	76%	78%
NQF Level 3 or above ²	57%	58%
NQF Level 4 or above ³	36%	37%

[1] 5 GCSEs A*-C or equivalent qualifications

[2] 2 A-levels or equivalent qualifications

[3] Higher Education or equivalent level qualifications

Chart 1. Level of highest qualification held by adults of working age, 2008 to 2016



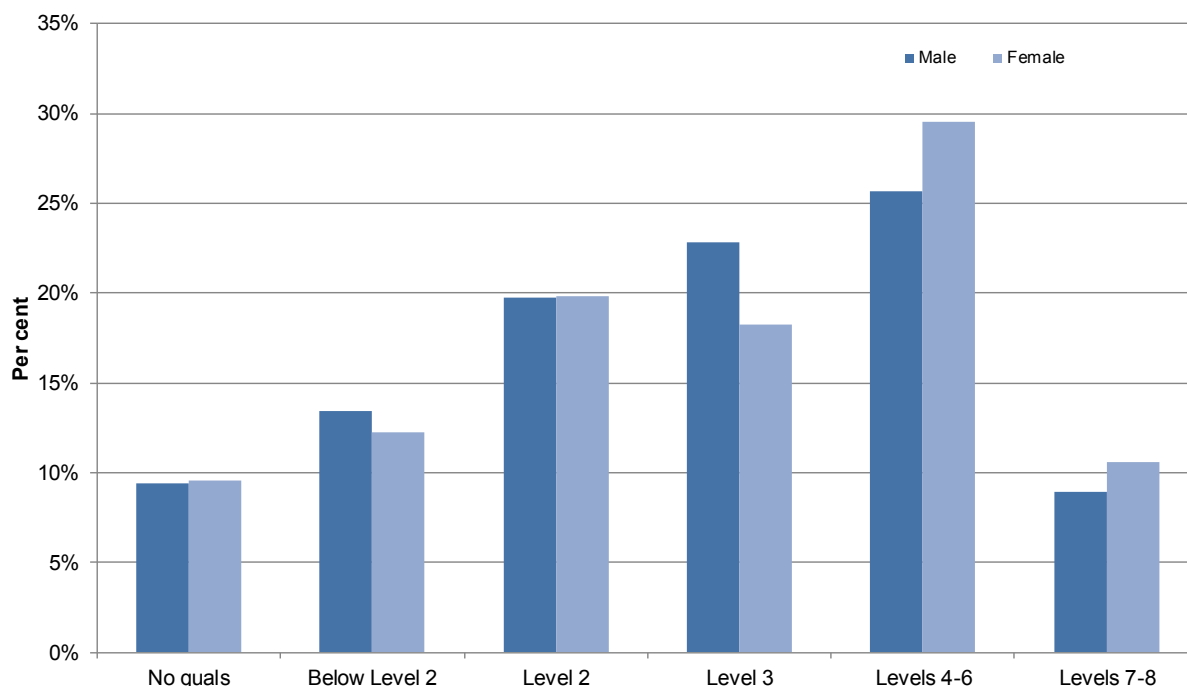
As with the previous release, working age adults refers to males and females aged 18 to 64 (rather than 18-59/64 used in the past.)

Level of Highest Qualification held, by characteristic

Gender

- Similar proportions of males and females hold no qualifications, whilst females are more likely to hold qualifications at or above level 4.

Chart 2 Level of highest qualification held by adults of working age, by gender, 2016



Age

- The proportion of adults with no qualifications increases with age. 6 per cent of 18-24 year olds were reported as having no qualifications compared with 19 per cent of 60-64 year olds.

Disability

- Persons with a disability (on basis of Equality Act 2010 legal definition) are more likely to hold no qualifications than non-disabled persons, and less likely to hold qualifications at or above levels 2, 3 and 4.

Ethnicity

- Persons from an ethnic minority are more likely to hold Higher education level qualifications than those from a white ethnic origin, but also more likely to have no qualifications.

Welsh language

- Higher qualification levels are reported amongst Welsh speakers than their non-Welsh speaking counterparts.

Area

- In general, qualification levels were highest in Cardiff, Monmouthshire, and Vale of Glamorgan and lowest in Blaenau Gwent and Merthyr Tydfil.
- In general, qualification levels in Wales were lower than in England, Scotland and the UK as a whole, but higher than in Northern Ireland and some English regions.

Employment status

- 23 per cent of those who are either ILO unemployed or economically inactive reported having no qualifications. This compares to 6 per cent for those in employment. (Excluding those who are in full-time education).

Occupation

- Persons employed in professional occupations are more likely to be qualified to at least level 2 than those in other jobs. 98 per cent of persons in professional occupations are qualified at this level.

**Table 1: Level of highest qualification held by adults of working age in Wales, 2016
(a)**

	Percentage of adults of working age qualified at each NQF level						
	No qualifications	Below Level 2	Level 2	Level 2+	Level 3	Levels 4-6	Level 4+
By gender							
Persons	9	13	20	78	21	28	37
Males	9	13	20	77	23	26	35
Females	10	12	20	78	18	30	40
By age							
18-24	6	12	22	82	37	21	23
25-34	7	12	19	82	20	32	43
35-49	8	13	19	79	17	30	43
50-59	12	14	21	74	16	26	37
60-64	19	12	19	68	17	24	32
By ethnic origin (b)							
White	10	13	20	77	19	28	38
Ethnic minority	13	12	14	75	13	28	48
By disability status (c)							
Disabled	20	17	20	63	17	20	26
Not disabled	7	12	20	82	21	30	41
By Welsh language ability							
Welsh speaker	5	8	19	86	23	31	45
Non Welsh speaker	11	14	20	75	20	26	35
By economic activity and main job (d)							
In employment	6	12	20	82	20	31	43
of which:							
Managers, Directors & senior officials	4	8	16	88	17	40	55
Professional occupations	0	2	4	98	6	53	88
Associate professional & technical	2	6	15	92	18	47	59
Administrative & secretarial	2	12	28	86	19	33	39
Skilled Trades occupations	8	16	24	77	35	16	18
Caring, Leisure & other service occupations	4	10	26	86	34	22	25
Sales and Customer Service occupations	7	19	30	74	20	20	25
Process, plant & machine operatives	14	26	31	60	19	9	10
Elementary occupations	18	25	27	57	16	12	13
ILO unemployed or economically inactive	23	17	21	60	16	18	24

Source: Annual Population Survey 2016

(a) Adult working age is defined as 18-64 for males and females

(b) Excludes persons in full-time education. Excluding unknowns

(c) On basis of Equality Act 2010 legal definition of disabled. Excluding unknowns

(d) Standard Occupation Classification (SOC) 2010.

Excludes persons in full-time education. Excluding unknowns.

Table 2: Level of highest qualification held by adults of working age in Wales, by local authority, 2016 (a)

	Percentage of adults of working age qualified at each NQF level						
	No qualifications	Below Level 2	Level 2	Level 2+	Level 3	Levels 4-6	Level 4+
Isle of Anglesey	8	12	20	80	22	27	38
Gwynedd	10	11	22	80	18	28	39
Conwy	7	12	21	81	22	30	39
Denbighshire	9	14	20	77	21	27	36
Flintshire	8	15	25	76	22	24	29
Wrexham	8	15	22	77	23	26	32
Powys	8	10	20	81	21	31	41
Ceredigion	5	8	17	87	31	26	39
Pembrokeshire	11	12	20	77	24	24	33
Carmarthenshire	10	12	22	78	19	29	37
Swansea	10	11	18	79	22	26	39
Neath Port Talbot	14	13	23	73	19	26	31
Bridgend	11	16	20	73	16	29	38
The Vale of Glamorgan	6	10	16	84	19	35	49
Cardiff	8	9	16	83	19	33	48
Rhondda Cynon Taf	10	16	21	74	19	27	35
Merthyr Tydfil	16	17	22	67	20	20	26
Caerphilly	11	17	19	72	22	24	32
Blaenau Gwent	16	19	23	65	19	20	23
Torfaen	9	14	22	78	23	26	33
Monmouthshire	7	10	18	83	20	31	45
Newport	12	15	19	73	21	25	33
Wales	9	13	20	78	21	28	37

Source: Annual Population Survey 2016

(a) Adult working age is defined as 18-64 for males and females.

Table 3: Level of highest qualification held by adults of working age in the United Kingdom, 2016 (a)

	Percentage of adults of working age qualified at each NQF level						
	No qualifications	Below Level 2	Level 2	Level 2+	Level 3	Levels 4-6	Level 4+
England	7	14	19	79	20	29	40
North East	9	13	22	78	22	25	34
North West	9	13	20	77	21	26	36
Yorkshire & Humberside	9	15	20	76	22	24	33
East Midlands	7	15	21	77	23	26	33
West Midlands	12	14	20	74	20	26	34
Eastern	7	16	20	77	20	27	37
London	6	11	13	83	15	36	55
South East	5	13	18	82	20	32	44
South West	5	13	19	82	23	30	40
Wales	9	13	20	78	21	28	37
Scotland	10	11	16	79	16	36	47
Northern Ireland	15	11	21	74	20	25	33
United Kingdom	8	13	18	79	20	29	40

Source: Annual Population Survey 2016

(a) Adult working age is defined as 18-64 for males and females.

Notes

Policy/operational context

This Statistical Release presents the annual snapshot of qualification levels of the working age population in Wales.

The statistics are used within the Welsh Government to monitor trends in qualification levels and specifically are included within the *Skills Performance measures* and the *Tackling Poverty Action Plan*. This release contains data for one of the 46 national well-being indicators – see Well-being of Future Generations Act (WFG) paragraph (page 11).

Background to the Labour Force Survey/Annual Population Survey

The data presented in this Release are based on the results of the Annual Population Survey for 2016. Data from the Annual Population Survey, a household survey carried out by the Office for National Statistics is available from 2004, and prior to this comparable data are available from the annual Local Labour Force Survey for Wales for 2001-2003.

From 2001, annual Local Labour Force Survey (LLFS) data collected in Wales were based on a significantly enhanced sample. This larger sample allowed for more detailed and more robust analysis, particularly for sub-Wales geographies.

Developments to the LLFS led to the Annual Population Survey (APS) which now provides annual datasets updated on a rolling quarterly basis from the Labour Force Survey. The data presented here are based on the year ending 31 December 2016.

The annual LLFS/APS datasets are derived from a sample of approximately 23,000 people of working age across Wales, with a minimum of around 800 people of working age in most local authorities in Wales.

Data in this release are presented for working age adults referring to males and females aged 18-64 according to their age at the start of the academic year. Between April 2010 and November 2018 the state pension age for women is gradually increasing from 60 to 65. Accordingly, from last year the series has been amended to a working age definition of 18-64 for both males and females, rather than its earlier definition of 18 to 64 for males and 18 to 59 for females.

Estimates on the new basis are only available from 2008 onwards and figures within this release are therefore not directly comparable with those on the basis of the previously used definition.

Headline figures on the previous working age definition (18 to 59/64) are:-

- An estimated 9 per cent of those aged 18 to 59/64 in Wales reported having no qualifications compared with 10 per cent in 2015.
- 78 per cent of those aged 18 to 59/64 in Wales held at least level 2 qualifications compared with 77 per cent in 2015.
- 59 per cent of those aged 18 to 59/64 in Wales were qualified to the level 3 threshold compared with 57 per cent in 2015.

- The proportion holding higher education level qualifications (NQF level 4 or above) was 38 per cent compared with 36 per cent in 2015.

Definitions

Ethnicity

For the analysis of qualifications by ethnicity, persons in full-time education have been excluded. This change has been made to remove the impact of international students who attend higher education in Wales and thus inflate the proportion with Level 3+ qualifications.

Disability

Analysis of qualifications by disability is based on the Equality Act 2010 legal definition, which is different to that used in past releases. Figures within this release are not comparable to those within releases (prior to 2015 data) which reported those reporting DDA current disability or work-limiting disability.

Qualifications used in the Labour Force Survey and their National Qualification Framework for England, Wales and Northern Ireland (NQF EWNI) levels¹

At Annex 1 is a list of the qualifications specifically included in the Labour Force Survey questionnaire and provides details of the NQF EWNI level to which they have been assigned for the purposes of statistical analysis.

Data have previously been presented as NVQ equivalencies. The NQF EWNI has nine levels; Entry Level followed by Level 1 to Level 8. In Wales the NQF EWNI forms part of the Credit and Qualifications Framework for Wales; a meta framework which also includes all Higher Level learning within the University Sector and Quality Assured Lifelong Learning.

Further information about the Credit and Qualifications Framework for Wales can be found [here](#).

¹ Please note the Scottish Credit and Qualifications Framework has different levels

Key quality information

1. Relevance

The statistics are used within the Welsh Government to monitor trends in qualification levels and specifically are included within the Skills Performance measures and the Tackling Poverty Action Plan.

Other key users of these statistics include:

- Ministers and the Members Research Service in the National Assembly for Wales
- Other government departments
- Students, academics and universities

2. Accuracy

As the data come from a survey, the results are sample-based estimates and are therefore subject to differing degrees of sampling variability, i.e. the true value for any measure lies in a differing range about the estimated value. This range or sampling variability increases as the detail in the data increases; for example local authority data are subject to higher variability than regional data.

Proxy response

If the respondent is not available at the time of interview, questions may be answered by proxy through another member of the household. For information on highest qualifications, around two-thirds (67 per cent) of responses have been derived from a respondent's own answers. 20 per cent were obtained from a spouse or partner whilst 13 per cent were obtained from another proxy.

Section 11 of the [LFS User Guide](#) Volume 1, 2011 presents findings from a follow up study to test the accuracy of results from proxy respondents:

The results for highest type of qualification held show nearly two thirds matching with significant net error from proxies understating qualifications. However there was wide variation in the standard of proxy response. This variation is both in terms of the relationship of the proxy to the subject (parents were much better than spouses or children) and also by the level and type of qualifications held. Reporting was much better for those subjects holding degrees (80 per cent matched) than for those holding lower or vocational qualifications (30 per cent matched).

Non-response

Information on highest qualification is derived from a number of questions in the survey. Overall, the highest qualification was unknown or unable to be derived for 1.7 per cent of respondents. These respondents have been excluded from the analysis in this release.

Allocation of qualifications with unknown levels

Whilst other questions in the survey are used to allocate qualifications to NQF levels as far as possible, for some categories the respondents are distributed into levels using proportions that have been fixed for many years. This is currently true for 'Other' qualifications, Trade Apprenticeships, Scottish CSYS qualifications and SCE Highers or equivalent. These qualifications account for 10.8 per cent of responses, mainly consisting of Trade Apprenticeships (4.5 per cent)

and 'Other' qualifications (6.3 per cent). 'Other' qualifications are apportioned across NQF levels Below Level 2, Level 2 and Level 3 in the ratio 55:35:10; Trade apprenticeships are apportioned across Level 2 and Level 3 in the ratio 50:50 and Scottish CSYS qualifications are apportioned across Level 2 and Level 3 in the ratio 33:67. This is a long standing calculation based on detailed analysis of qualifications from the General Household Survey. SCE Highers are apportioned across Level 2 and Level 3 in the ratio 37:63 based on data from previous years. GSS methodology work to review these ratios has not yet been completed.


Revisions

Since the previous publication, the Annual Population Survey data back to 2013 had been reweighted, and the time series in this release has been updated with these new data. The reweighted data has made a slight change to the time series in this release and underlying data provided on StatsWales.

3. Timeliness and punctuality

This Statistical Release is published annually in April and covers the preceding year ending 31 December.

4. Accessibility and clarity

This Statistical Release is pre-announced and then published on the Statistics & Research website of the Welsh Government. All underlying data for this release as well as other years are available on the  website.

5. Comparability and coherence

The figures may differ to those published from statistical publications by other government departments due to a slight difference in source and/or methodologies for deriving levels of qualifications. Also other tables may be based on all persons of working age (16-64) whilst this release is restricted to those aged 18-64 (*adults of working age*).

The Department for Education have developed an enhanced method of producing qualification estimates from the Labour Force Survey, including the use of administrative records to improve the quality of the attainment data recorded on the LFS and imputation of qualification levels for those with unknown qualifications. This work is currently on hold, but details can be found on the archive [Data Service website](#).

Data is also available from the Census of Population on highest qualification levels. The 2011 census indicated that one in four of the population of Wales aged 16 and over (26 per cent, 651,000) reported having no recognised qualifications and just under one in four of the population of Wales aged 16 and over (24 per cent, 614,000) reported having a qualification at level 4 (degree level) or above. The difference between the level of qualifications reported through the Census and the APS data in this release is in part explained by the wider age range of the Census data. That is both including 16/17 year olds who may not yet have completed their education, and the older age groups. Additional factors to consider are the APS asks more detailed questions about qualifications than the Census. In addition the APS is an interviewer-administered survey whereas the Census is self-completed. Therefore the interviewer can probe the respondent with further

questions to try to establish whether details have been recalled correctly. However, the APS is a sample survey whereas the Census is a more comprehensive count. Similar issues applied to the 2001 Census.

The biggest benefit of the Census data is to be able to analyse within local authority, down to community level, and in cross tabulations with small subgroups of the population not possible through the APS.

National Statistics status

The [United Kingdom Statistics Authority](#) has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the [Code of Practice for Official Statistics](#).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators ("national indicators") that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016 and this release includes one of the national indicators:

- (8) Percentage of adults with qualifications at the different levels of the National Qualifications Framework.

Information on indicators and associated technical information - [How do you measure a nation's progress? - National Indicators](#)

As a national indicator under the Act they must be referred to in the analyses of local well-being produced by public services boards when they are analysing the state of economic, social, environmental and cultural well-being in their areas.

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

Further details

The document is available at:

<http://gov.wales/statistics-and-research/levels-highest-qualification-held-working-age-adults/?lang=en>

Next update

April 2018 (provisional)

Period covered: Year ending 31 December 2017

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to post16ed.stats@wales.gsi.gov.uk.

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Annex 1: Qualifications used in the Labour Force Survey and their National Qualification Framework for England, Wales and Northern Ireland (NQF EWNI) levels

NQF Levels 7-8 (previously NVQ level 5 or equivalent)

Higher degree

NVQ level 5

Level 8 Diploma³

Level 8 Certificate³

Level 7 Diploma³

Level 7 Certificate³

Level 8 Award³

NQF Levels 4-6 (previously NVQ level 4 or equivalent)

First degree/Foundation degree

Other degree

NVQ level 4

Level 6 Diploma³

Level 6 Certificate³

Level 7 Award³

Diploma in higher education

Level 5 Diploma³

Level 5 Certificate³

Level 6 Award³

HNC, HND, BTEC higher etc.

Teaching (further, secondary and primary education, foundation stage¹ and level not stated)

Nursing etc.

RSA higher diploma

Other higher education qualification below degree level

Level 4 Diploma³

Level 4 Certificate³

NQF Level 3 (previously NVQ level 3 or equivalent)

Level 5 award³

NVQ level 3

Advanced/Progression (14-19) Diploma³

Level 3 Diploma³

Advanced Welsh Baccalaureate¹

International Baccalaureate¹

Scottish Baccalaureate⁴

¹ These qualifications were added to the list included on the LFS questionnaire in either 2004 or 2005. This slightly improved the estimates, as they may previously have been incorporated in "Other qualifications" or left out altogether by a respondent.

GNVQ/GSVQ Advanced
2+ A levels, 4+ AS levels or equivalent
RSA advanced diploma
OND, ONC, BTEC, SCOTVEC national etc.
City and Guilds advanced craft/Part 1
Scottish 6 Year Certificate/CSYS (67%)
3 or more SCE higher or equivalent
Access to HE qualifications¹
Trade apprenticeship (50%)
Other qualifications (10%)
Level 3 Certificate ³

NQF Level 2 (previously NVQ level 2 or equivalent)

Level 4 Award ³
NVQ level 2
Intermediate Welsh Baccalaureate¹
1 A level, or 2/3 AS levels, or equivalent
Trade apprenticeship (50%)
GNVQ/GSVQ intermediate
RSA diploma
City and Guilds craft/Part 2
BTEC, SCOTVEC first or general diploma
Higher (14-19) Diploma ³
Level 2 Diploma ³
5+ O levels, GCSE grade A*-C, CSE grade 1 or equivalent
Scottish 6 Year Certificate CSYS (33%)
1 or 2 SCE higher or equivalent
Other qualifications (35%)
Level 2 Certificate ³
Scottish National Level 5 ⁴
Level 3 Award ³

Below NQF Level 2 (previously NVQ level 1 or equivalent)

NVQ level 1
Foundation Welsh Baccalaureate²
GNVQ, GSVQ foundation level
Foundation (14-19) diploma ²
Level 1 Diploma ³
Scottish National Level 4⁴

² This qualification was added to the list included on the LFS questionnaire in 2008

³ This qualification was added to the list included on the LFS questionnaire in 2011

⁴ This qualification was added to the list included on the LFS questionnaire in 2015

Up to 4 O levels, GCSE grade A*-C, CSE grade 1 or equivalent
GCSE below grade C, CSE below grade 1
BTEC, SCOTVEC first or general certificate
SCOTVEC modules
RSA other
Scottish Nationals Level 3⁴
Scottish Nationals below Level 3⁴
City and Guilds foundation/part 1
Level 1 Certificate
Level 2 Award
YT, YTP certificate
Key skills qualification¹
Basic skills qualification¹
Entry level qualification¹
Entry level Diploma ³
Entry level Certificate ³
Level 1 Award ³
Entry level award
Other qualifications (55%)

The percentages in brackets denote that a qualification is split across levels when calculating the number of persons with that qualification. This is done for those qualifications where the LFS does not collect sufficient information to allow a more accurate breakdown of the qualification.