

Factsheet: Digital apprentices in the UK

Introduction

This fact sheet provides an overview of digital apprenticeship participation across the UK using workforce estimates from the ONS Labour Force Survey together with apprenticeship statistics provided by the Skills Funding Agency/BIS (England), Skills Development Scotland, The Welsh Government and DELNI Northern Ireland.

This paper uses the term 'digital' to refer to the digital / tech workforce and apprenticeships as defined in the notes.

Key findings

- Just under one in ten (9%) of digital specialists in the UK have completed or are in the process of undertaking a digital apprenticeship (111,000 people).
- In 2014/15 there were approximately 30,000 individuals on digital apprenticeship programmes across the UK - 3.1% of the overall total (962,000 people).
- In the year 2014/2015 there were 17,200 recorded starts on digital apprenticeship programmes – 3.1% of the total number of starts in the UK.
- The number of digital apprenticeship starts increased by 21% over the past year compared with 10% growth in the overall number of apprenticeship starts across the UK.
- By nation/region the South West and the South East of England accounted for the largest share of digital apprenticeship starts in 2014/15 and the South West of England exhibited the highest incidence of digital apprenticeship starts at 5.3% of all starts within the region.
- Digital apprenticeships starts tend to be at a higher level than those in other disciplines and in 2014/15, just over seven in ten digital starts across the UK (71%) were at level 3 or above compared with slightly over four in ten (42%) apprenticeship starts as a whole.
- Almost three quarters (74%) of all digital apprenticeships starters in the UK during 2014/15 were aged 24 or below, compared with 59% of apprenticeship starters as a whole.
- Just 20% of those starting digital apprenticeships in 2013/14 (2014/15 data unavailable) were female compared with more than one half (52%) of those starting apprenticeship programmes as a whole.
- There were 8,800 NVQ achievements recorded amongst those on digital apprenticeship programmes in 2013/14 (2014/15 data currently unavailable) accounting for 2.9% of all NVQ achievements made by apprentices in the UK at that time (299,200).

About the Tech Partnership

The Tech Partnership is a growing network of employers, collaborating to create the skills for the digital economy.

It acts for the good of the sector by inspiring young people about technology, accelerating the flow of talented people of all backgrounds into technology careers, and helping companies to develop the technology skills they need for the future.

For further information please visit www.thetechpartnership.com

1. Overall take up of apprenticeships by UK digital specialists

According to the latest estimates from the ONS Labour Force Survey, just under one in ten (9%) digital specialists had completed/ were undertaking an apprenticeship in 2015 – a slightly lower proportion than amongst the workforce as a whole (11%).

The likelihood that digital specialists had completed/were undertaking an apprenticeship was much lower amongst digital specialists working in 'managerial' (Tech Managers/Directors) and 'professional' roles (6% and 7% respectively) while more than one quarter (28%) of digital engineers had completed or were participating in an apprenticeship programme during the year.

Table 1: Digital specialists and apprenticeships, 2015

	In employment	Undertaking/completed apprenticeship	
		n	%
Digital Managers/Directors	291,000	20,000	7%
Digital Professionals (excluding managers)	728,000	45,000	6%
Digital Technicians	178,000	19,000	10%
Digital Engineers	98,000	27,000	28%
Digital specialists	1,296,000	111,000	9%
All workers	31,091,000	2,995,000	11%

Source: Analysis of data from the ONS Labour Force Survey undertaken by the Tech Partnership

2. Digital apprenticeships 'in learning'

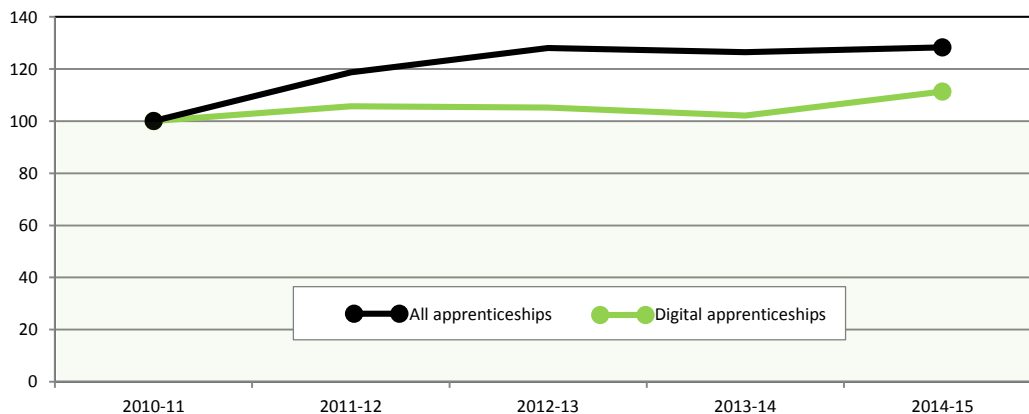
Estimates for the total number of individuals in learning/participating in digital apprenticeship programmes can be obtained by combining data provided by the four constituent nations of the UK. It should be noted however that classifications and data collection/reporting methodologies differ across the UK (and across the time period shown) and as such, the figures presented should be considered (at present) as best estimates as opposed to exact totals (see end notes).

Notwithstanding the caveats cited above, it is estimated that in 2014/15 there were approximately 30,000 individuals on digital apprenticeship programmes in the UK i.e. 3.1% of all those on apprenticeship programmes during that period (962,000 people).

Digital apprentices were primarily based in England (92% or 27,200 apprentices) followed by Wales (5%/1,500 apprentices), Scotland (3%/900 apprentices) and lastly, Northern Ireland where less than 1% of all digital apprentices (100 learners) were situated. Northern Ireland was also noted for the relatively low proportion of apprentices in digital, as opposed to other apprenticeship programmes (1.6% compared with 2.5% in Scotland, 3.1% in England and 3.2% in Wales).

The number of people participating in digital apprenticeship programmes has increased considerably in recent years and between 2013/14 and 2014/15 alone an increase of 9% was observed – this compared with a rise in the overall number of individuals participating on apprenticeships learning programmes across the UK of just 1%.

Figure 1: Apprenticeship participation (indexed), 2009/10-2014/15

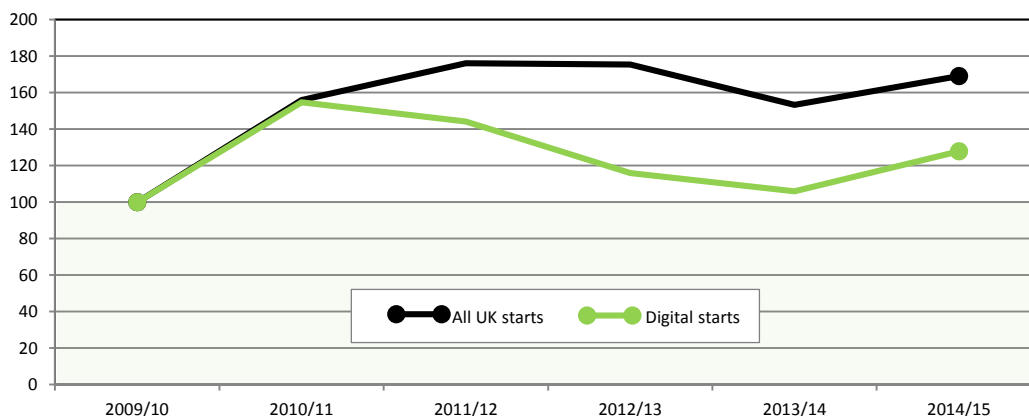


Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

3. Digital apprenticeship starts

Growth in the number of individuals on digital/other apprenticeships has been fuelled by an increase in the number of apprenticeship starts over the past five years and in 2014/15 alone there were 17,200 recorded digital apprenticeship starts across the UK – 3.1% of all starts during the year (550,000).

Figure 2: Apprenticeship starts (indexed), 2009/10-2014/15



Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

By comparison with previous years, the number of digital starts in 2014/15 was up 21% (3,000 people) on the 2013/14 and 28% on the level in 2009/10 five years earlier. This compares with

Factsheet: Digital apprentices in the UK

increases of 10% and 69% respectively for apprenticeship starts as a whole. As illustrated in the previous chart, the substantial difference in longer term growth rate is down to changes over the 2010/11 – 2012/13 period during which digital apprenticeship starts fell considerably (down 25%) even as significant increases were recorded in the overall number of apprenticeship starts across the UK (i.e. rising by 12% over the period).

4. Digital apprenticeship starts by nation/region

As with apprenticeships as a whole, the vast majority of digital apprenticeship starts each year occur in England which accounted for just over nine in every ten starts during 2014/15 whether digital focused or otherwise (91% in each case).

Across England, the South West and the South East were associated with the largest proportion of digital starts (16% and 15% respectively of the UK total) followed by the North West (12%), then London (11%) and the West Midlands (10% - all other regions accounting for less than 10% in each case).

The number of digital (and total) apprenticeship starts was higher in each of the English regions during 2014/15 than in any of the devolved nations and Northern Ireland in particular was the area associated with the lowest number/proportion of apprenticeship starts within the UK - both with regards digital focused apprenticeships and apprenticeships as a whole.

Table 2: Digital apprenticeship starts by nation/region, 2014/15

	All starts		Digital starts		
	n	%	n	%	area %
UK	550,000	100%	17,200	100%	3.1%
England	499,900	91%	15,700	91%	3.1%
Wales	19,300	4%	800	5%	4.0%
Scotland	25,200	5%	700	4%	2.9%
Northern Ireland	5,500	1%	100	0%	1.3%
North East	35,200	6%	900	5%	2.6%
North West	79,300	14%	2,000	12%	2.6%
Yorkshire and The Humber	62,600	11%	1,200	7%	1.9%
East Midlands	48,100	9%	1,200	7%	2.5%
West Midlands	61,200	11%	1,700	10%	2.8%
East of England	45,800	8%	1,200	7%	2.6%
London	45,600	8%	1,900	11%	4.3%
South East	65,000	12%	2,600	15%	4.0%
South West	51,500	9%	2,800	16%	5.3%

Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

As illustrated in the previous table, the proportion of area starts that were digital focused was also much lower in Northern Ireland (1.3%) compared with other UK nations/regions - particularly

Factsheet: Digital apprentices in the UK

London (4.3%), Wales/the South East (4.0% in each case) and the South West of England in particular (5.3%).

In fact, digital representation amongst apprenticeship starts in Northern Ireland has been below the UK average for four of the past five years and was seen to decline significantly in 2013/14 in particular following changes in the administration of the apprenticeship system when restrictions were imposed upon the number of over 25's that could apply.

The proportion of area starts that were digital focused has also fallen in many other parts of the UK during the past five years however and within the Yorkshire and Humber region in particular a decline of 4.8 percentage points was recorded between 2008/9 and 2014/15.

Table 3: Digital apprenticeship starts as a proportion of the area total

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
UK	4.1%	4.1%	3.4%	2.7%	2.9%	3.1%
England	4.5%	4.3%	3.6%	2.8%	3.0%	3.1%
Wales	3.6%	4.4%	2.2%	3.1%	2.3%	4.0%
Scotland	1.0%	1.2%	1.3%	1.8%	2.1%	2.9%
Northern Ireland	1.0%	2.4%	2.4%	3.1%	1.3%	1.3%
North East	2.8%	2.9%	2.7%	2.7%	2.4%	2.6%
North West	2.1%	2.6%	2.5%	2.3%	2.4%	2.6%
Yorkshire and The Humber	6.7%	5.1%	4.6%	2.9%	2.0%	1.9%
East Midlands	1.6%	2.4%	2.1%	1.7%	1.9%	2.5%
West Midlands	4.1%	4.3%	3.6%	2.8%	2.6%	2.8%
East of England	5.0%	5.6%	3.9%	2.4%	2.3%	2.6%
London	6.5%	6.2%	4.1%	2.7%	3.9%	4.3%
South East	5.1%	4.1%	3.9%	3.7%	4.2%	4.0%
South West	6.6%	6.3%	5.0%	3.6%	5.0%	5.3%

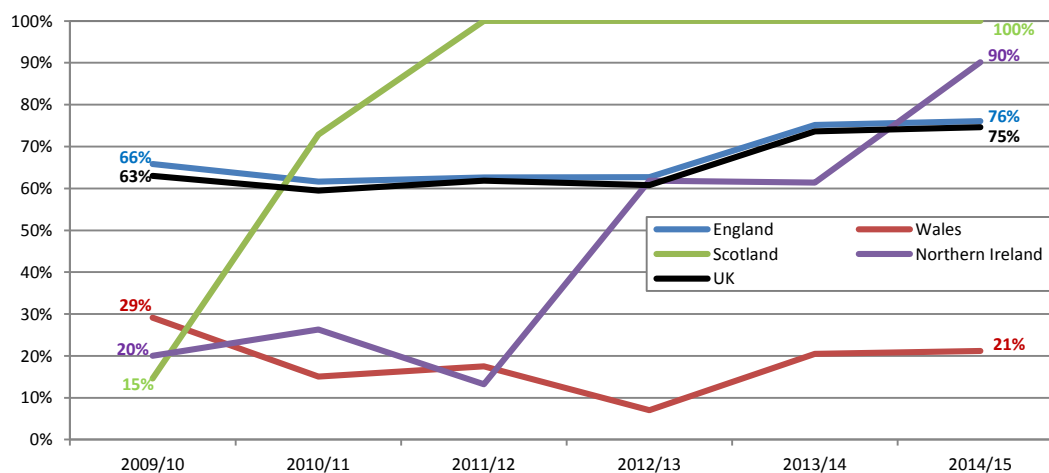
Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

5. Digital apprenticeship starts by framework/subject area

Three quarters (75%) of all digital apprenticeships starts in 2014/15 could be categorised as digital 'specialist' as opposed to 'IT user' apprenticeships (see notes) – up from less than two thirds (63%) in 2009/10. The proportion varied significantly by nation/region however – from 100% in Scotland in 2014/15 to just 21% in Wales (English regional data not currently available).

Factsheet: Digital apprentices in the UK

Figure 3: 'Digital specialist' apprenticeship starts as a proportion of all digital starts by nation



Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

6. Digital apprenticeship starts by level

Digital apprenticeships starts tend to be at a higher level than those in other disciplines and in 2014/15, just over seven in ten digital starts across the UK (71%) were at level 3 or above compared with slightly over four in ten (42%) apprenticeship starts as a whole.

In Northern Ireland the proportion of digital apprenticeship starts at level 3 or above was much lower than in other UK nations however (32%) and, in this case, was also below the overall incidence of level 3 starts recorded in Northern Ireland at this level (48%).

Table 4: Apprenticeship starts by level, 2014/15

	Digital starts			All starts		
	Level 2	Level 3+	Total	Level 2	Level 3+	Total
England	30%	70%	100%	60%	40%	100%
Scotland	1%	99%	100%	36%	64%	100%
Wales	39%	62%	100%	43%	57%	100%
Northern Ireland	68%	32%	100%	52%	48%	100%
UK	29%	71%	100%	58%	42%	100%

Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

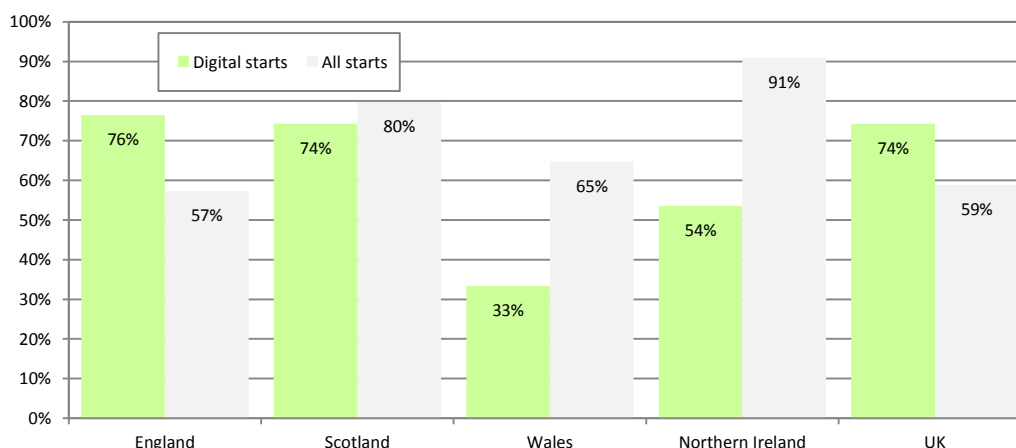
7. Digital apprenticeship starts by age

On average, it appears that individuals commencing digital apprenticeships are younger than those starting on other apprenticeship programmes and in 2014/15 just under three quarters of all digital apprenticeships starters (74%) were aged 24 or below (compared with 59% of apprenticeship starters as a whole).

The proportion of apprentices aged under 25 was even higher amongst digital specialist starters and was more than double that associated with IT user programmes (comparison figures of 86% and 41% respectively).

As illustrated in the figure below, the age distribution of digital versus other starts varied considerably by nation and within both Wales and Northern Ireland the proportion of digital starters aged under 25 was almost half the overall level recorded for those starting apprenticeships more generally.

Figure 4: Apprenticeship starts aged 24 and under, 2014/15



Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

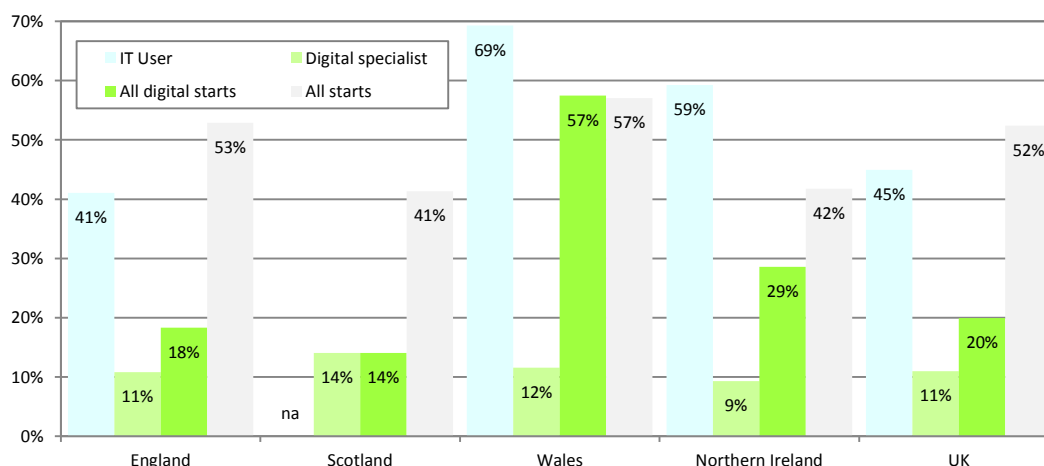
8. Digital apprenticeship starts by gender

Just 20% of those starting digital apprenticeships in 2013/14 were female (2014/15 data unavailable) compared with more than one half (52%) of those starting apprenticeship programmes as a whole. Again, the gender balance varied considerably by nation and while almost six in ten (57%) of those starting digital apprenticeships in Wales were women, less than one in three digital starters in Northern Ireland (29%) were female and less than one in five were female in England/Scotland.

The gender balance is however, heavily influenced by the type of digital apprenticeship pursued, with female representation more than four times higher for those starting IT user apprenticeships

than for those commencing digital specialist programmes (comparison figures of 45% and 11% respectively).

Figure 5: Apprenticeship starts by gender and specialism, 2013/14



Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

9. Digital apprenticeship achievements

There were 8,800 achievements recorded amongst those on digital apprenticeship programmes in 2013/14 (2014/15 data currently unavailable) accounting for 2.9% of all achievements made by apprentices in the UK at that time (299,200). As illustrated in the table below, there were marked differences in the level of representation for digital vs other achievements across the UK with digital achievements in Scotland in particular accounting for just 1.5% of the total – almost half the UK average.

Table 5: Apprenticeship achievements, 2013/14

	England	Scotland	Wales	Northern Ireland	UK
All apprenticeships (n)	255,800	20,600	17,700	5,100	299,200
Digital apprenticeships (n)	7,800	300	400	100	8,800
(%)	3.1%	1.5%	2.2%	2.0%	2.9%

Source: Analysis of data from DELNI, Skills Development Scotland, the Welsh Government and the SFA undertaken by the Tech Partnership

Factsheet: Digital apprentices in the UK

Considering the nature of achievements in more detail it appears that compared with apprentices as a whole, achievements for digital apprenticeship programmes were much more likely to have been at level 3 or above (comparison figures of 60% and 42% respectively for digital vs all apprenticeships) and in total digital apprentices accounted for 4.2% of apprenticeship achievements at this level.

Across the UK achievements at level 3/3+ amongst digital apprentices were most likely to have been recorded in Scotland (100%) followed by England (60%), Wales (43%) and then Northern Ireland (35%). This compares with figures of 61% (Scotland), 41% (England), 44% (Wales) and 37% (Northern Ireland) and when considering the proportion of all apprenticeship achievements at this level.

By framework type, level 3/3+ achievements were more common amongst those undertaking digital specialist programmes as opposed to IT user apprenticeships (78% versus 35%) while by gender, males from digital apprenticeship programmes were more likely to have registered an achievement at level 3/above than their female counterparts (i.e. 63% and 46% respectively of digital 'achievers' doing so at this level).

Notes on data presentation

1. Labour Force Survey estimates presented within this publication are four quarter averages rounded to the nearest 1,000.
2. The terms businesses/firms/companies have been used interchangeably throughout the report.
3. 'Digital / tech specialists' is the collective term given to occupations listed under the following ONS Standard Occupational Classification (SOC2010) codes:

Digital Directors

1136 - Information Technology and Telecommunications Directors

Digital Professionals

2133 - IT Specialist Managers

2134 - IT Project & Programme Managers

2135 - IT Business Analysts, Architects and Systems Designers

2136 - Programmers & Software Development professionals

2137 - Web Design & Development professionals

2139 - Information Technology & Telecommunications professionals n.e.c.

Digital Technicians

3131 - IT Operations Technicians

3132 - IT User Support Technicians

Digital Engineers

5242 - Telecommunications Engineers

5245 - IT Engineers.

Factsheet: Digital apprentices in the UK

4. Apprenticeship data provided by national statistics agencies presented within this publication are rounded to the nearest 100. Due to the differences in classifications, data capture and reporting across the UK, figures presented within this publication should be considered best estimates as opposed to exact counts (of starts, in training and achievements).

Further information concerning collection /presentation methodologies can be obtained from the respective providers/websites: England - [FE data library: apprenticeships](#), Wales – [Welsh Government](#), Scotland – [Skills Development Scotland](#), Northern Ireland – [DELNI](#).

5. Current digital apprenticeship frameworks:

	Level(s)
England	
Information Security	3, 4
IT Application Specialist	2, 3
IT, Software, Web & Telecoms Professionals	2, 3, 4
Northern Ireland	
IT and telecoms professional	2, 3
IT user	2, 3
Information security	3
Foundation Degree in Computing	5
Foundation Degree in Software Development	5
Foundation Degree in Software Engineering, Foundation Degree in Computing Infrastructure	5
BSc Hons Computing Systems	6
Scotland	
IT and Telecommunications	2, 3 SQF8
Information Security	3, SQF8
Wales	
Data Analytics	4
Information Security	3, 4
IT Users - non-statutory	2, 3
IT, Software, Web & Telecoms Professionals	2, 3, 4

(Future updates to this fact sheet will include the new apprenticeship standards, the first starts on which are occurring in 2016-17)

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