

Future Skills Needs: West

Fermanagh and Omagh

Mid Ulster



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Introduction and background

Introduction and background

Ulster University Economic Policy Centre (UUEPC) were commissioned by Invest Northern Ireland to report on the future skills needs of the West of NI.

The West area is defined by two Local Government Districts (LGDs); Mid Ulster and Fermanagh and Omagh. The empirical approach is based directly upon UUEPC's forecasting methodology employed in the Northern Ireland (NI) Skills Barometer.

The NI Skills Barometer was commissioned by the Department for the Economy (DfE) and involved the development of an economic model to forecast future skills needs and skills gaps by qualification level, subject area and sector. The project was originally commissioned in 2015 and is updated every 18 months.

The quantitative findings of the research have benefitted a wide range of stakeholders including; careers advisors, young people and parents; teachers and schools; business groups; DfE; and wider government.

This report provides contextual analysis which underpins skills forecasts, outputs from the assessment of future skills demand, a review of supply side indicators relating to West and overall skill balances.

Acronyms and skills classification

Acronyms

Acronym	Full title
UUEPC	Ulster University Economic Policy Centre
NI	Northern Ireland
NQF	National Qualifications Framework
SIC	Standard Industrial Classification
SOC	Standard Occupational Classification
DfE	Department For Economy
JACS	Joint Academic Coding System
SSA	Sector Subject Area
HE	Higher Education
FE	Further Education
LGD	Local Government District
MCS	Millennium Cohort Study
PfG	Programme for Government
FDI	Foreign Direct Investment
FSME	Free School Meal Entitlement
StS	Steps to Success
TfS	Training for Success
STEM	Science, technology, engineering and mathematics
DEA	District Electoral Area
SOA	Super Output Area

NQF scale

NQF level	Description
Level 8	PhD (or equivalent)
Level 7	Masters (or equivalent)
Level 6	Undergraduate degree (or equivalent)
Level 4-5	Foundation degree/HND/HNC (or equivalent)
Level 3	A-level (or equivalent)
Level 2	5 GCSEs A*-C (or equivalent)
Level 1	5 GCSEs D-G (or equivalent)
Level 0	No qualification

How is 'West' geographical area defined?



Workplace labour market structure

Introduction to workplace labour market structure

Workplace labour market structure

It is important to outline West's workplace labour market structure e.g. sectoral mix, demography and skills characteristics in order to fully understand and contextualise forecasted skill requirements.

The workplace refers to the jobs within West, not the jobs held by West's residents. Therefore, jobs held by residents which are located outside West are not included in the analysis which follows.

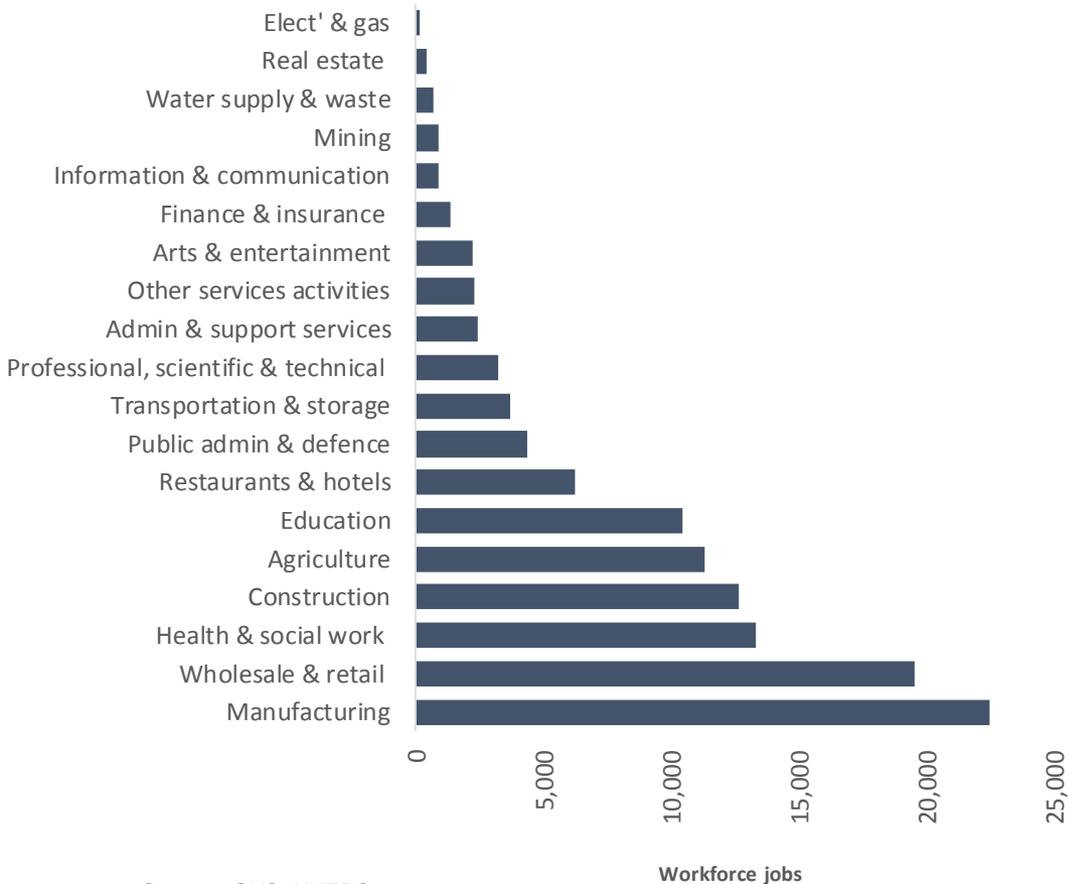
Data caveats

If analysis refers to the year 2017 or after the data has been estimated using information from UUEPC's economic model. In all other cases figures relate to the most recently published official data.

Although a number of figures in this chapter use data from the 2011 Census, the stock of skills changes very slowly over time. Therefore, the 2011 Census is still considered to be a data source which reflects current skills patterns across NI.

Manufacturing and retail are the largest employers in West

Workforce jobs by sector (1-digit), West (2017)



Source: ONS, UUEPC

The largest employment sector in West is manufacturing employing 22,500 workers. This accounts for 19% of the West total and 24% of all jobs in this sector in NI.

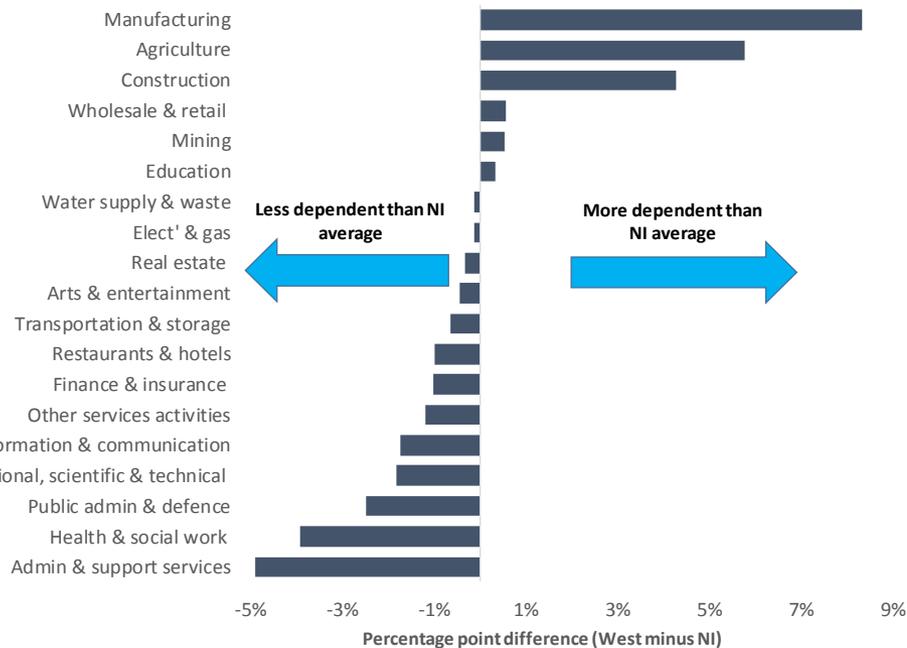
The second largest employment sector in West is wholesale and retail which accounts for 19,500 workers. This translates to 16% of the West total and 14% of all jobs in this sector in NI.

Other large employment sectors include health and social work (13,400 workers, 11% of West's total), construction (12,700 workers, 11% of West's total) and agriculture (11,300, 10% of West's workers).

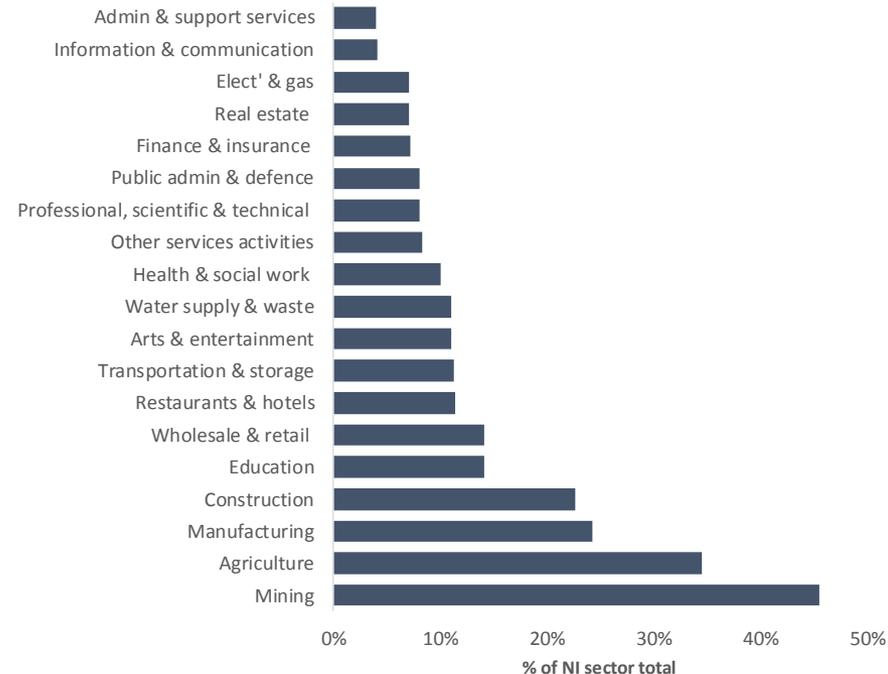
Higher job concentration in manufacturing, agriculture and construction relative to NI

Workforce jobs by sector (1-digit), West versus NI (2017)

Percentage point difference in share of workforce jobs by sector (1-digit), West versus NI (2017)



West workforce jobs as proportion of NI total by sector (1-digit) (2017)



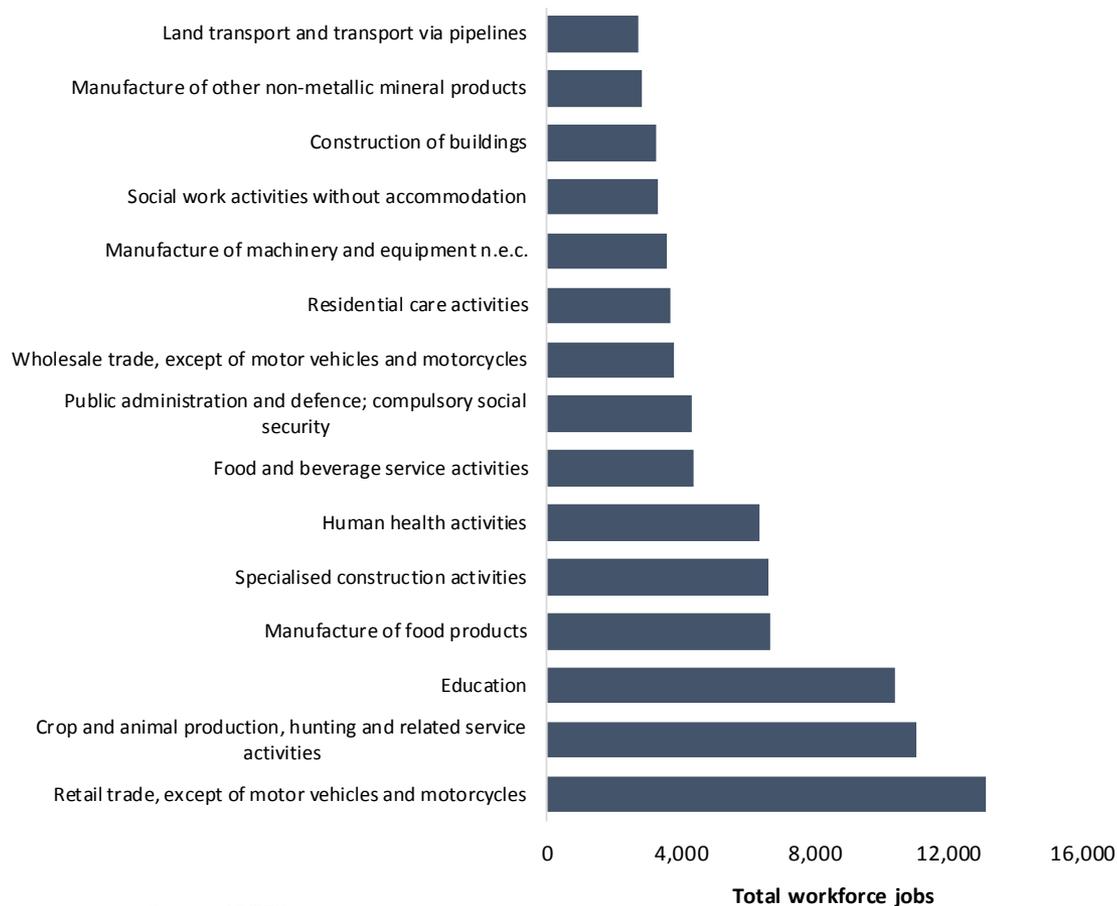
Source: ONS, UUEPC

Source: ONS, UUEPC

Relative to the NI average, West has a higher concentration of jobs in a number of sectors including manufacturing, agriculture, construction and wholesale and retail. Jobs in high growth sectors such as professional and scientific or ICT are less concentrated in West, relative to the NI average.

Retail trade is the largest sub-sector employer in West

Workforce jobs by sector (top 15 2-digit), West (2017)



Source: UUPEC

The largest workplace sub-sector in West is retail trade (13,100 jobs) followed by crop and animal production (11,000) and education (10,400). Manufacture of food products and specialised construction activities also represent 6,700 and 6,600 jobs respectively.

10,480 jobs created in West from 2012-2017

Workforce jobs growth by sector (1-digit), West versus NI (2012-2017)

The number of jobs in West increased by 10,480 over the 5 year period 2012-2017. This accounted for 15% of total workforce job growth in NI.

In absolute terms the strongest sectoral growth over the period was in manufacturing (4,870), construction (1,910) and restaurants and hotels (1,020). The largest job losses occurred in agriculture (-720), health and social work (-480) and public admin and defence (-350).

Overall job growth in West was marginally above the NI average, 10% and 9% respectively over the 2012-2017 period.

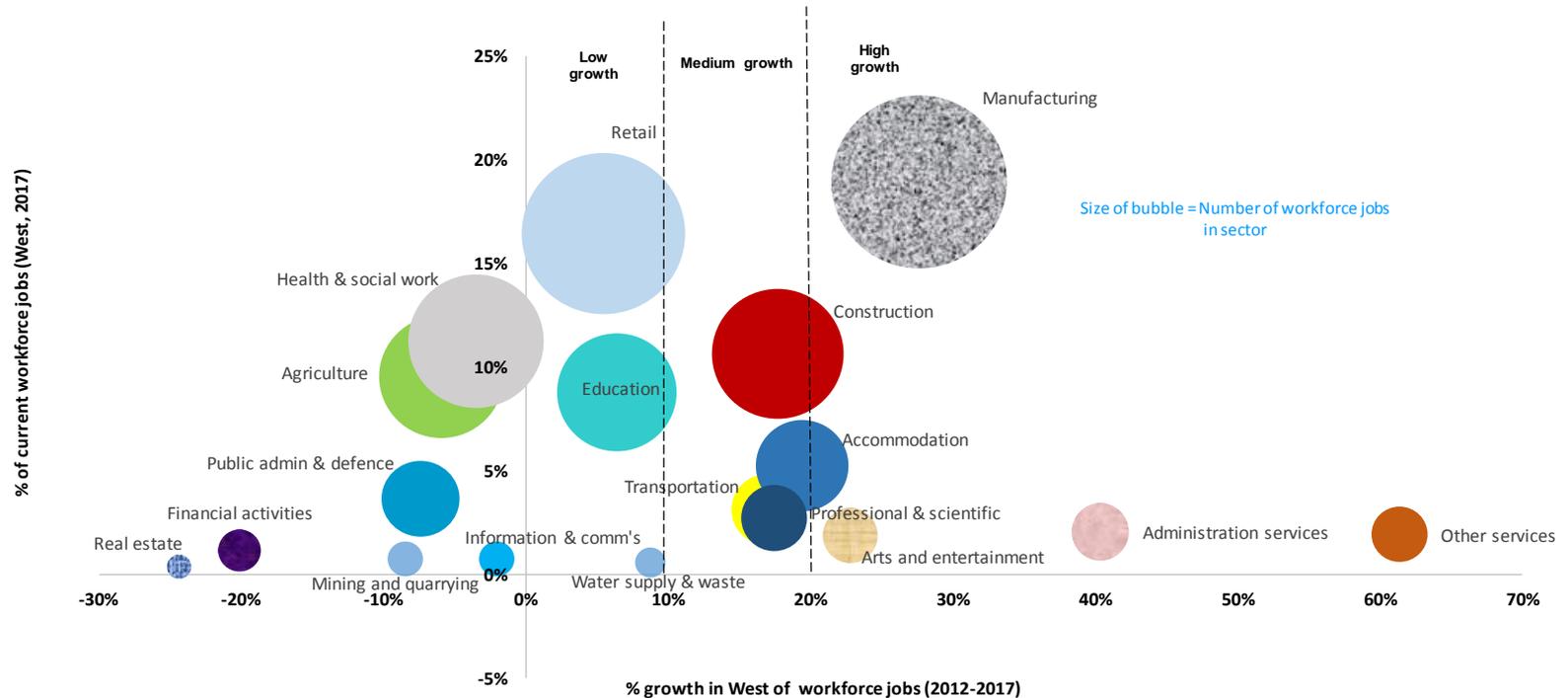
Sector	West		Northern Ireland
	Job growth 2012-2017	% change	% change
Agriculture	-720	-6%	-6%
Mining	-80	-8%	-11%
Manufacturing	4,870	28%	20%
Elect' & gas	130	296%	100%
Water supply & waste	50	9%	14%
Construction	1,910	18%	8%
Wholesale & retail	1,010	5%	1%
Transportation & storage	540	17%	8%
Restaurants & hotels	1,020	19%	22%
Information & communication	-20	-2%	17%
Finance & insurance	-340	-20%	-6%
Real estate	-140	-24%	-19%
Professional, scientific & technical	480	17%	20%
Admin & support services	710	40%	33%
Public admin & defence	-350	-7%	-9%
Education	620	6%	3%
Health & social work	-480	-3%	5%
Arts & entertainment	420	23%	14%
Other services activities	870	61%	45%
Total	10,480	10%	9%

Source: ONS, UUEPC

Note: Figures may not sum due to rounding

High growth in small and medium sized sectors

Workforce jobs growth by sector (1-digit) and number of jobs (workplace based), West (2012-2017)

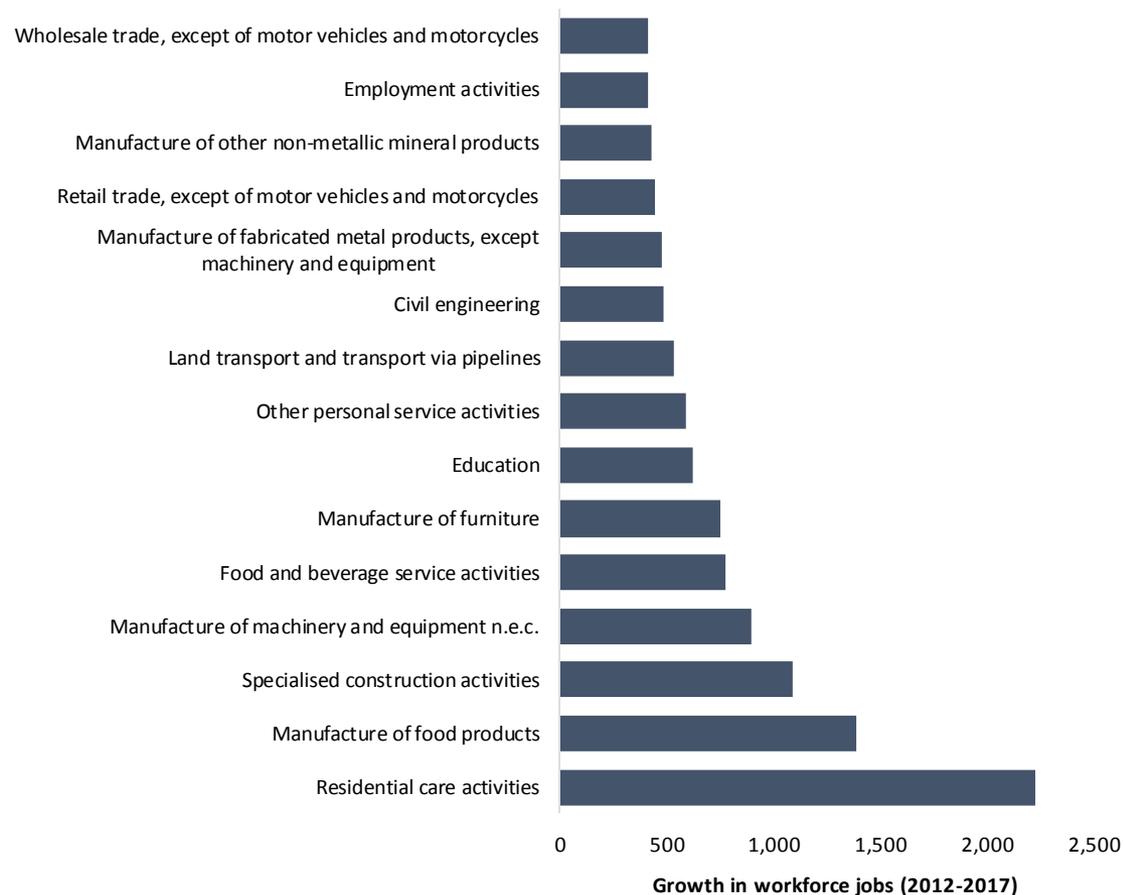


Source: UUEPC

It is important to contextualise job growth figures with the size of a sector. For instance, some sectors may have experienced very high growth but remain relatively small in size (e.g. other services). Whereas, other sectors may have experienced medium to high growth but as they are larger sectors will contribute a significant number of absolute jobs (e.g. manufacturing).

Residential care activities have created the largest quantum of jobs in West since 2012

Workforce jobs growth by sector (top 15 2-digit), West (2012-2017)

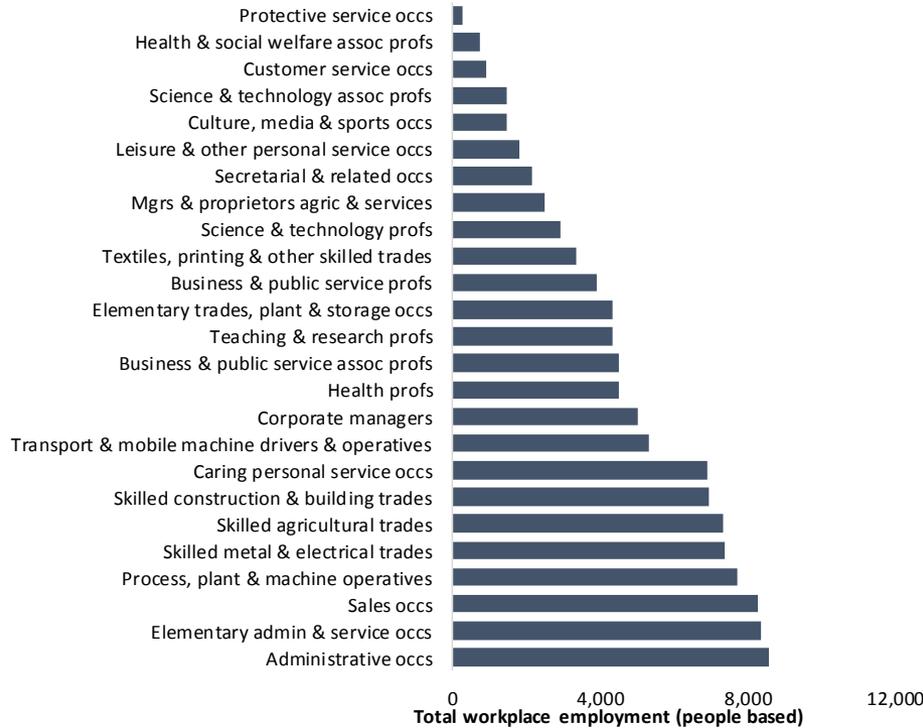


The largest quantum of sub-sectoral job growth was recorded in residential care activities creating 2,200 jobs over the period 2012-2017. This was followed by manufacture of food products (1,400 jobs) and specialised construction activities (1,100 jobs).

Higher concentration of trade and operative occupations in West relative to the NI average

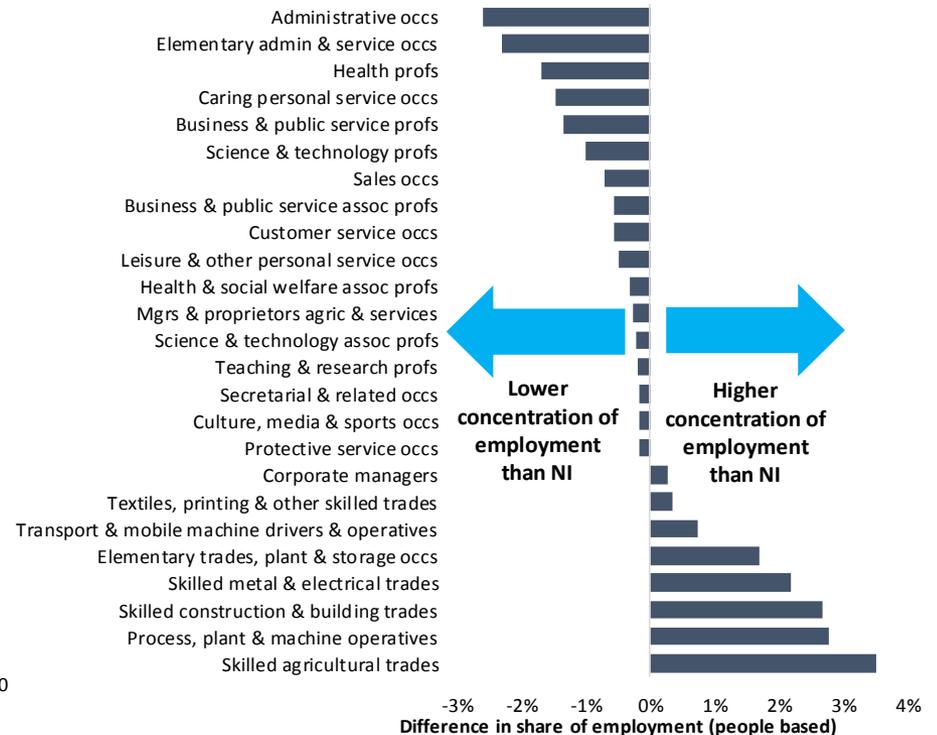
Workplace jobs by occupation (2-digit), West versus NI (2017)

Workplace structure by occupation (2-digit), West (people based) (2017)



Source: UUEPC

Workplace based structure by occupation (2-digit), West versus NI (people based) (2017)



Source: UUEPC

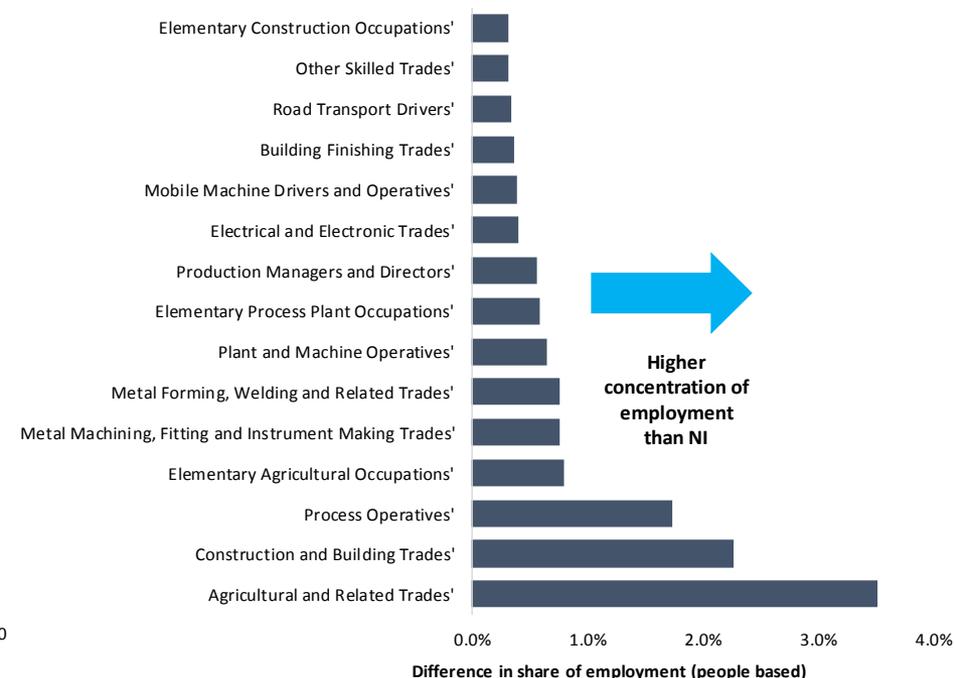
West's occupational structure is different to NI's, as it is driven by a different sectoral structure. For example, there is a higher concentration of skilled agricultural trades (7% in West compared to 3% in NI as a whole) and a relatively lower concentration of administration occupations (8% in West compared to 10% in NI).

Agricultural and related trades is the largest detailed occupation in West

Workplace based employment by occupation (top 15 3-digit), West versus NI (2017)

Workplace structure by occupation (3-digit), West (people based) (2017)

Workplace based structure by occupation (3-digit), West versus NI (people based) (2017)



Source: UUEPC

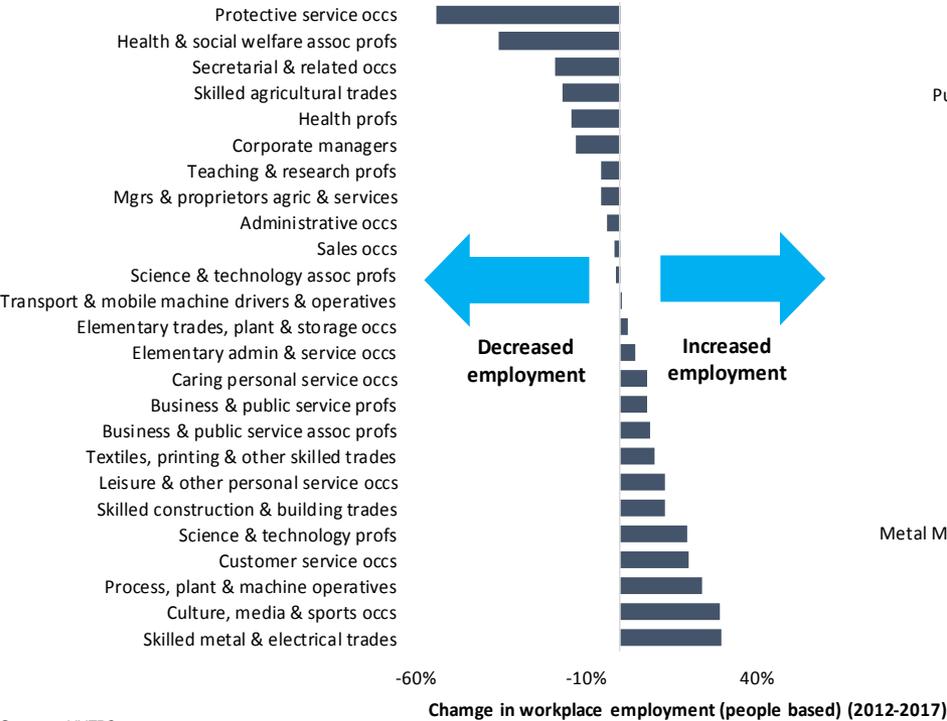
Source: UUEPC

At a more granular level the largest detailed (3-digit) occupations are agricultural and related trades (7,300 employed), sales assistants and retail cashiers (7,200 employed) and construction and building trades (5,500 employed).

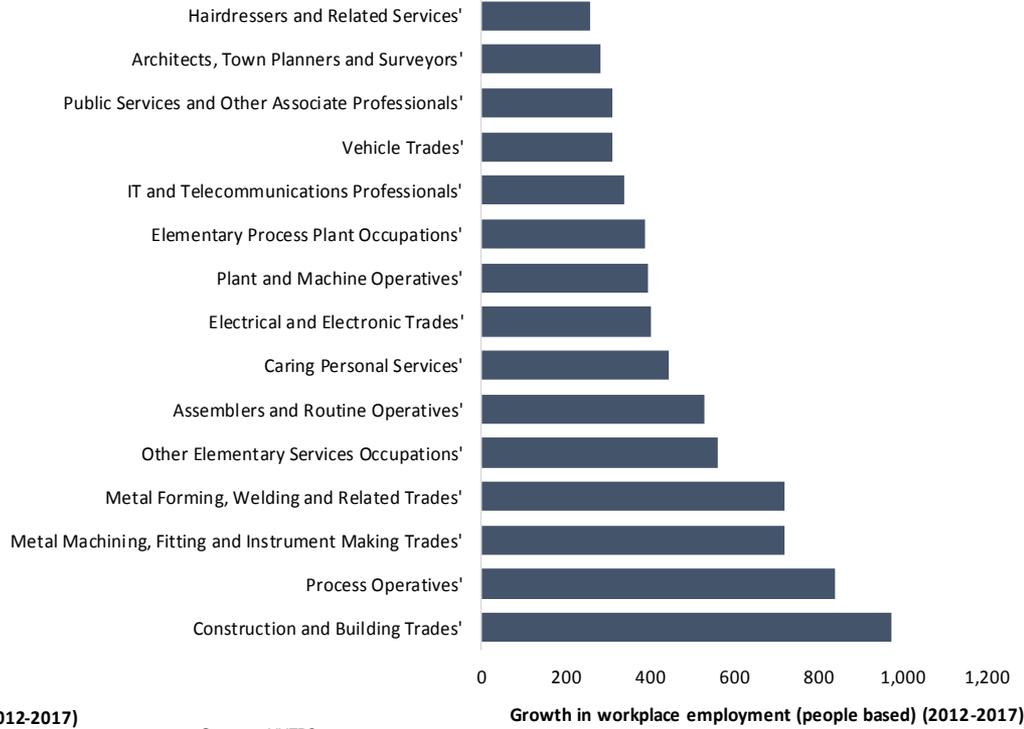
Protective service occupations experienced a considerable decline since 2012

Workplace based growth by occupation (2-digit), West (people based) (2012-2017)

Workplace based jobs by occupation (2-digit) structure, West versus NI, (2012-2017)



Workplace based jobs growth by occupation (top 15 3-digit), West (workplace based) (2012-2017)



The occupation with the largest quantum of growth within West over the past five years is construction and building trades (1,000 jobs) followed by process operatives (800), metal machine fitting and instrument making trades (700) and metal forming, welding and related trades (700).

Summary of workplace labour market structure

Sectoral structure - The largest sectoral employers are manufacturing (19% of total jobs), wholesale and retail (16% of total jobs) and health and social work (11% of total jobs). Relative to the NI average West has a higher concentration of workforce jobs in sectors including manufacturing, agriculture and construction.

Scale of workforce - West accounts for almost half (49%) of total NI mining jobs, over one third (35%) of total agricultural jobs and just under one quarter (24%) of manufacturing jobs.

Sectoral growth - The largest quantum of job growth was in manufacturing (4,870 jobs) over the 2012-2017 period, followed by construction (1,910 jobs) and restaurants and hotels (1,020 jobs). Overall job growth in West was marginally above the NI average, 10% and 9% respectively.

Occupation structure - West has a different occupation structure compared to NI as a whole, driven by differences in the sectoral structures. West's largest occupation is administrative occupations, (8% of total), followed elementary administrative and service occupations (8% of total) and sales occupations (7% of total).

Relative to the NI average West has a higher concentration in a number of occupations including skilled agricultural trades, process, plant and machine operatives and skilled construction and building trades. However, West is less dependent upon administration occupations, elementary administration and service occupations and health professionals, compared to the NI average.

Summary of workplace labour market structure (continued)

Occupation growth - The fastest growing occupation within West over the period 2012-2017 was skilled metal and electrical trades (30%). This was followed by culture, media and sports occupations (29%) and process, plant and machine operatives (24%). At a more granular level and in absolute terms construction and building trades increased by the largest quantum (1,000) followed by process operatives (800).

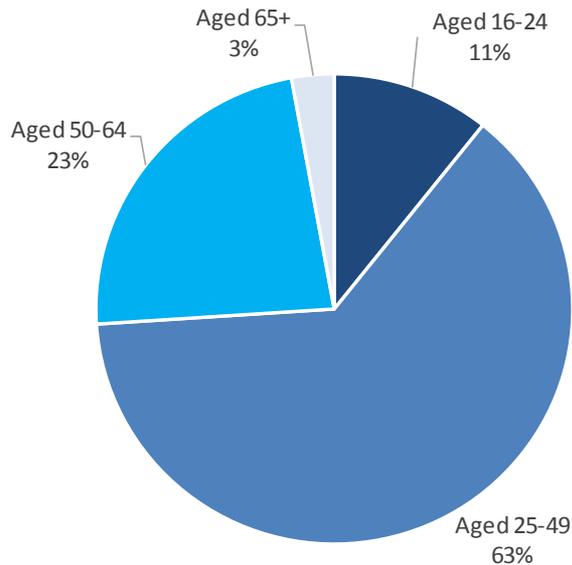
Occupation decline - A number of occupations have also declined over the past five years. For example, protective services (-148) and health and social welfare associate professionals (-265). These can be linked to either a change in the occupational composition within sectors or an overall decline in sectors where specific occupations are highly concentrated. For example, a decline in corporate managers can be linked to the decline of the finance sector, as there is a high concentration of branch managers of banks etc.

Workplace demographic factors

Older workers account for one quarter of West workplace, similar to NI

Workplace based employment by age, West (2011)

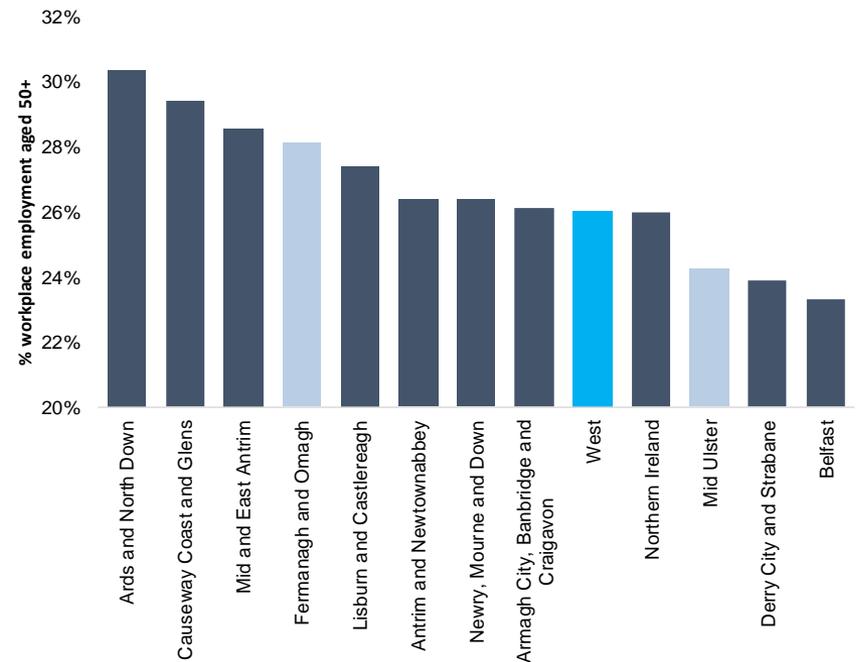
Workplace employment (excluding students) by age, West (2011)



Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

Proportion of workplace employment (excluding students) aged over 50, LGDs (2011)

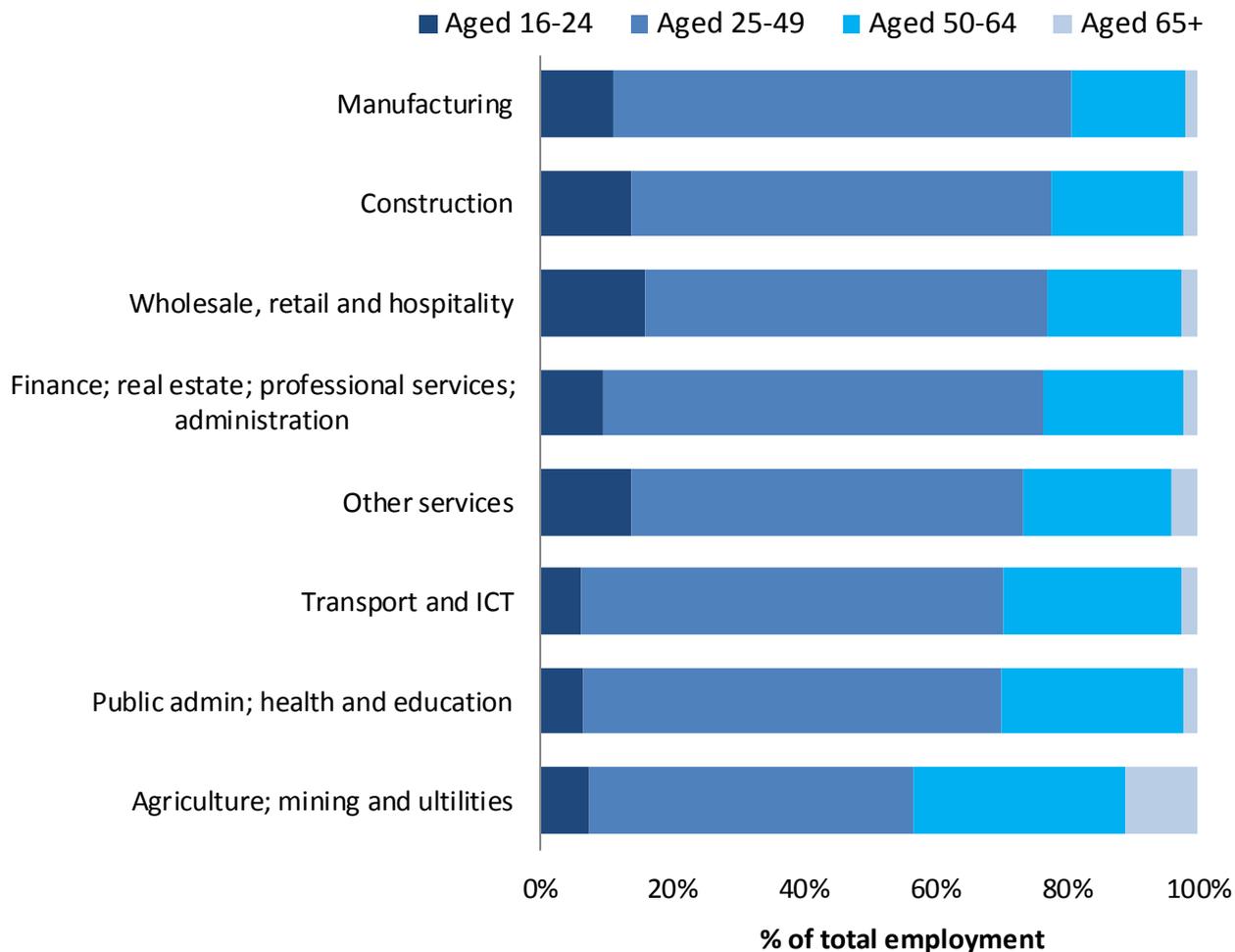


Source: NI Census 2011

The higher the proportion of older workers the higher the level of replacement demand. That is, as older workers move into retirement vacancies become available within the labour market which must be replaced. The proportion of workplace employment aged over 50 is equal to the NI average but varies from 28% in Fermanagh and Omagh to 24% in Mid Ulster. This suggests retiring workers will have to be replaced at a rate equal to the NI average.

Agriculture, mining & utilities sectors have highest proportion of older workers in West economy

Workplace based employment by age and sector (1-digit), West (2011)

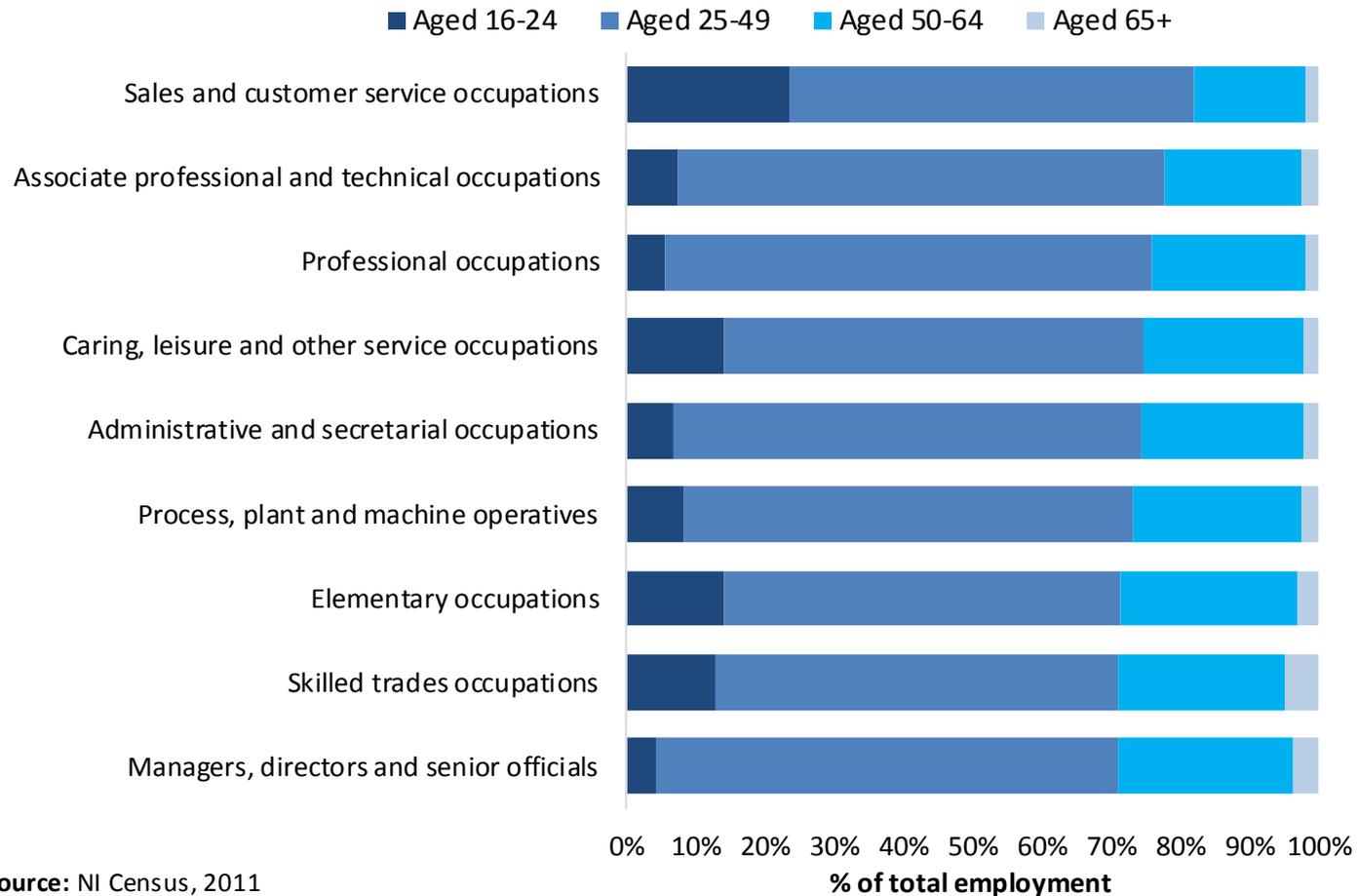


Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

Sales assistants and customer service occupations have the highest proportion of workers aged under 25

Workplace based employment by occupation (1-digit), West (2011)

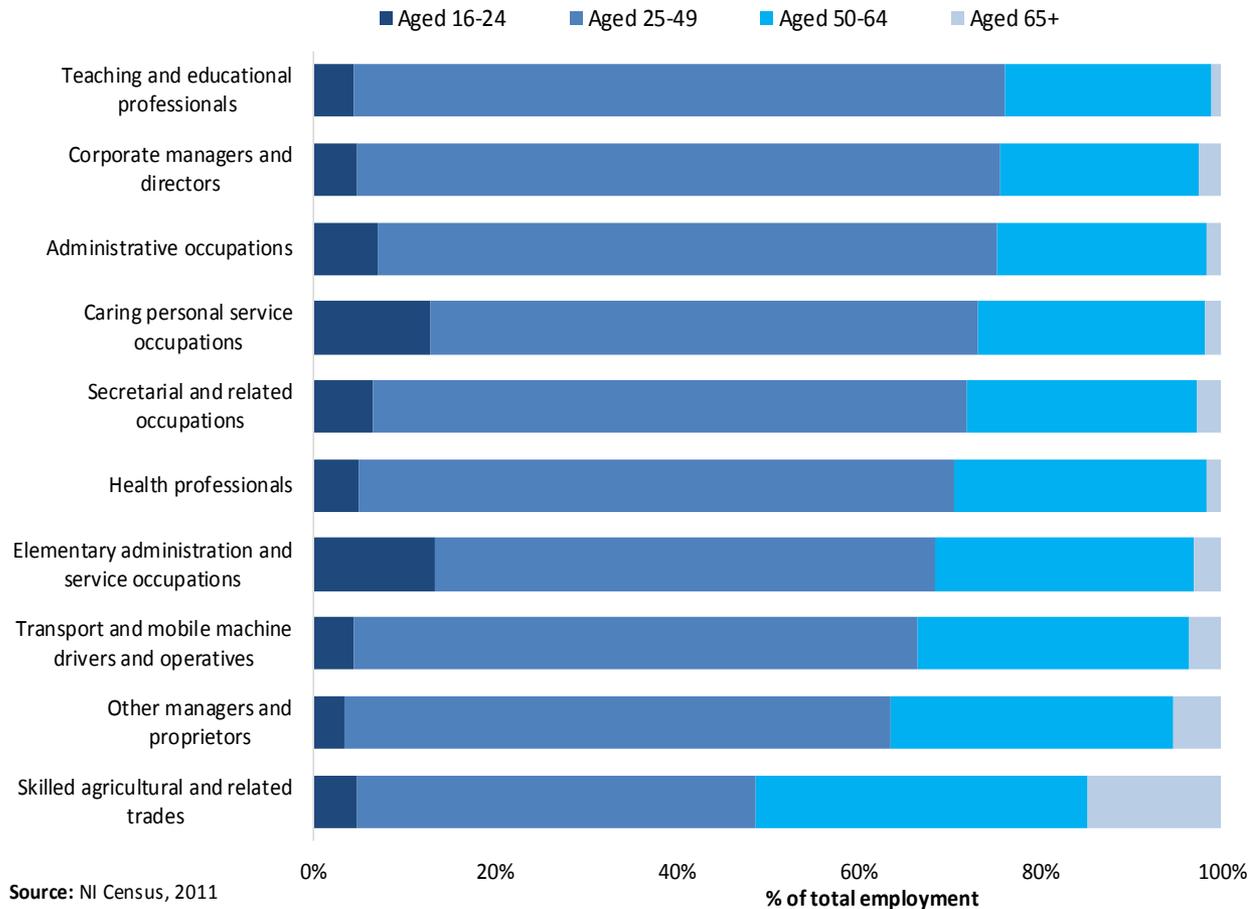


Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

Over half of skilled agricultural and related trade workers are aged 50 or above

Workplace based employment by top 10 occupations (2-digit) with workers aged over 50, West (2011)



Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

Summary of workplace demography

Workplace age - The age distribution of West's workplace is similar to the NI average:

- 11% of West workforce aged 16-24 (1 percentage point above NI average)
- 63% of West workforce aged 25-49 (1 percentage point below NI average) and
- 26% of West workers aged 50+ (equal to NI average).

The rate of workers aged over 50 varies amongst LGDs which constitute West, ranging from 28% of workers in Fermanagh and Omagh to 24% of workers in Mid Ulster.

However, an overall similar rate of workers aged over 50 between West and NI indicates the West labour market will have to replace retiring workers at a rate similar to the NI average.

Workplace occupation and age - Agriculture, mining and utilities has the highest concentration of workers aged 50+ (43%) followed by public sectors (30%). Therefore, these sectors will require a higher level of demand to replace retiring workers, relative to other sectors.

Contrastingly wholesale, retail and hospitality employs the largest proportion of workers aged below 25 (16%). This suggests a relatively lower demand with regard to replacing retired workers.

Workplace occupation and age - The sales and customer service occupations have the largest proportion of workers aged 16-24 (24%) and managers, directors and senior officials constitute the highest proportion of workers aged 50 and above (29%).

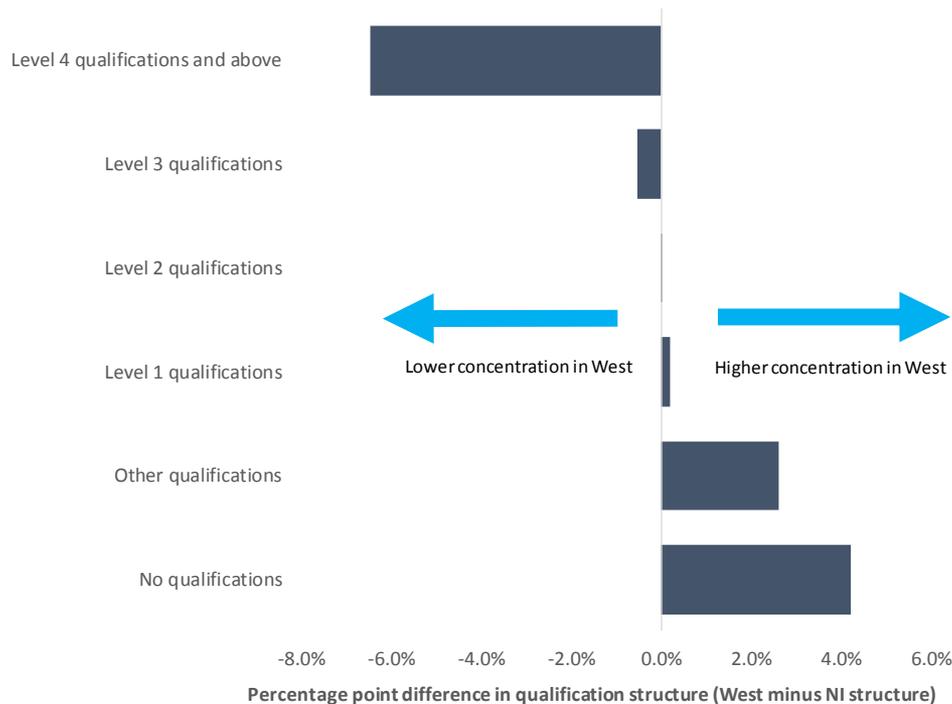
At a more granular level skilled agricultural and related trades have the largest proportion of workers aged over 50 (52%) followed by other managers and proprietors (36%).

Workplace skills structure

Workplace qualifications in West are below the NI average

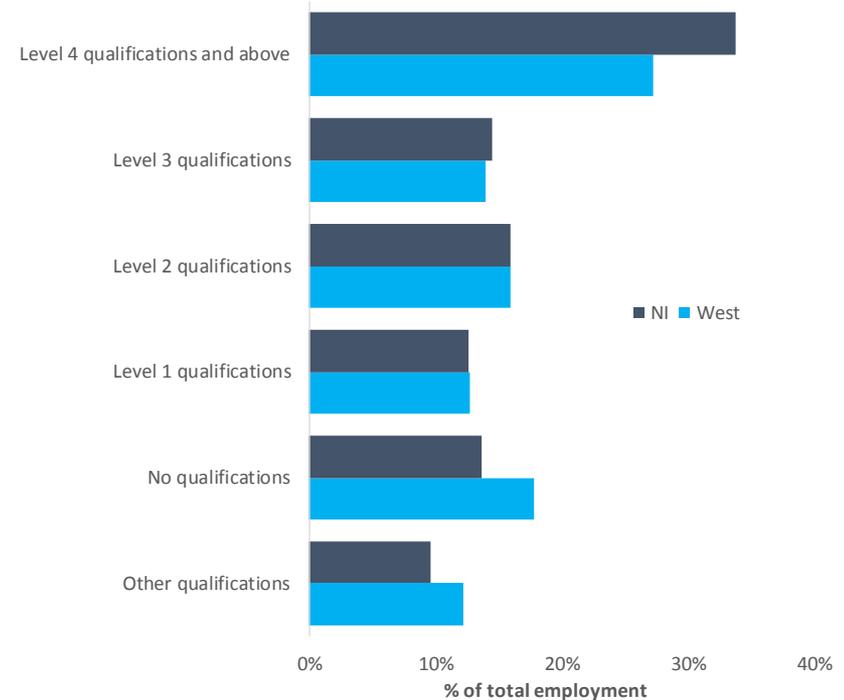
Workplace based skills structure (NQF), West versus NI (2011)

Percentage point difference in workplace qualification profile (NQF), West versus NI (2011)



Source: NI Census 2011
 Note: Based on those aged 16-74 in employment, excluding students

Workplace qualification profile (NQF), West versus NI (2011)



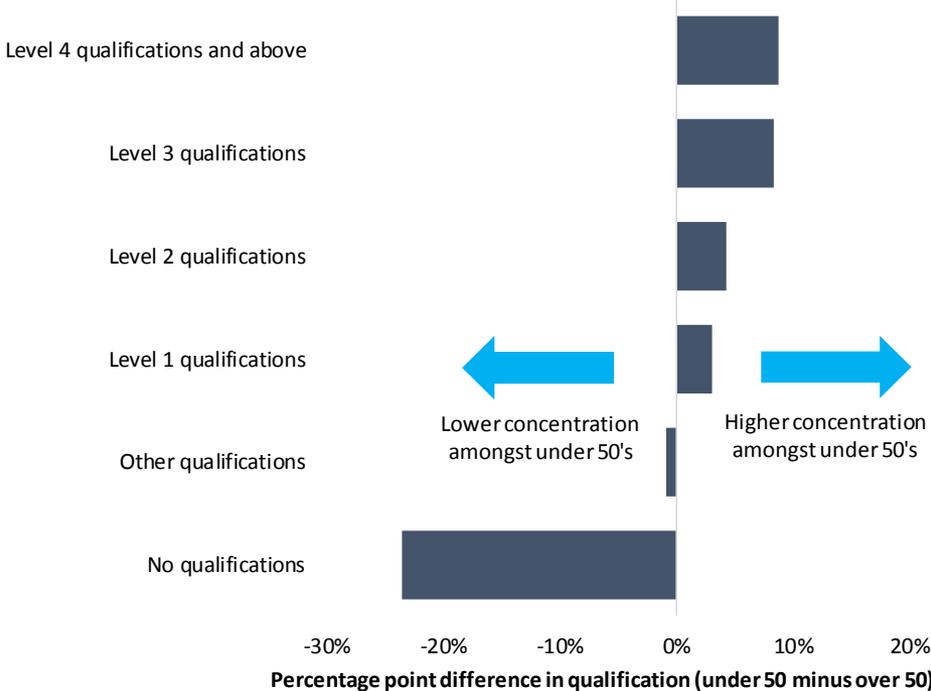
Source: NI Census 2011
 Note: Based on those aged 16-74 in employment, excluding students

West workplace has a higher proportion of workers with low qualifications (NQF level 1 or below) compared to NI, 43% and 36% respectively. The relatively lower workplace skills is a function of a higher concentration of typically low skilled sectors such as agriculture and construction.

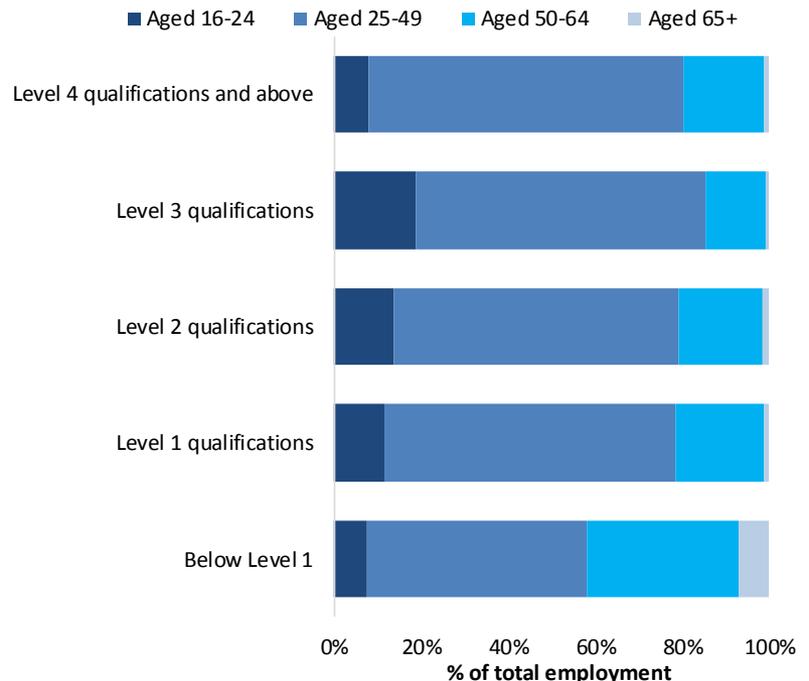
As older workers with lower qualifications retire the stock of qualifications will trend upwards

Workplace qualification structure (NQF) by age, West (2011)

Percentage point difference in employed skill profile (NQF), under 50's versus over 50's, West (2011)



Age profile by qualification (NQF), West (2011)



Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

Source: NI Census, 2011

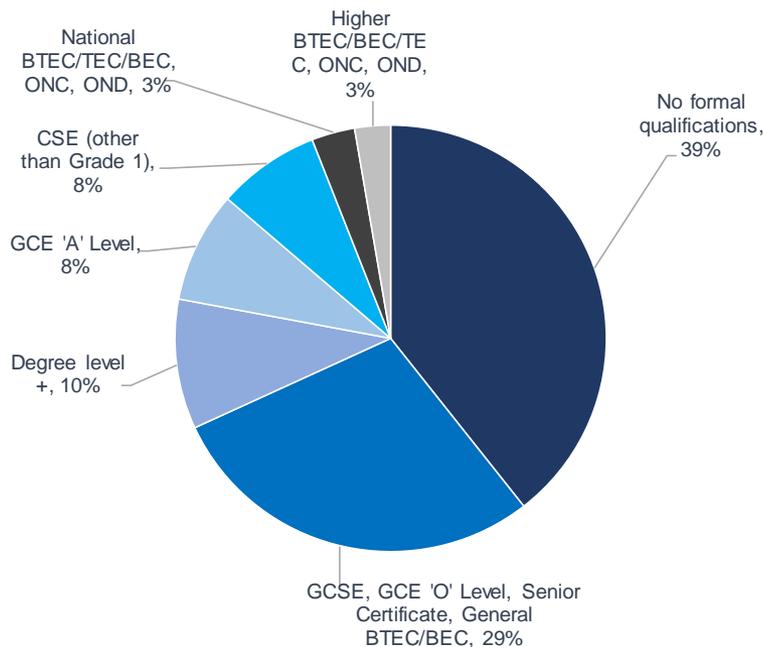
Note: Based on those aged 16-74 in employment, excluding students

Older workers tend to be associated with lower levels of formal qualifications relative to younger workers. This aligns to the upwards trend in education participation and employer attitudes towards the requirement of formal qualifications. In West, 29% of the workplace aged 50 or over have achieved NQF level 3+ qualifications, compared to 46% of those aged under 50.

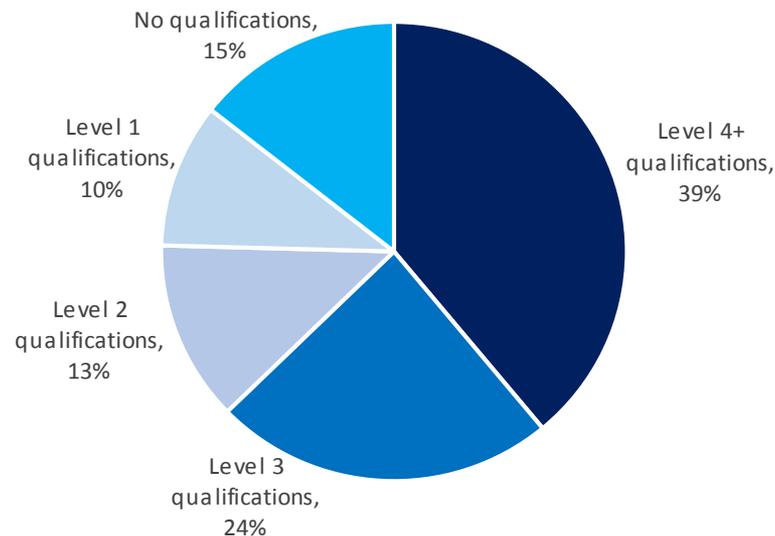
Older workers may have lower qualification levels, but not necessarily lower skilled

Qualification profile of employed residents, West (2017) and NI (1991)

Qualification profile of employed residents, NI (1991)



Qualification profile of economically active, West (2017)



Source: Labour Force Survey

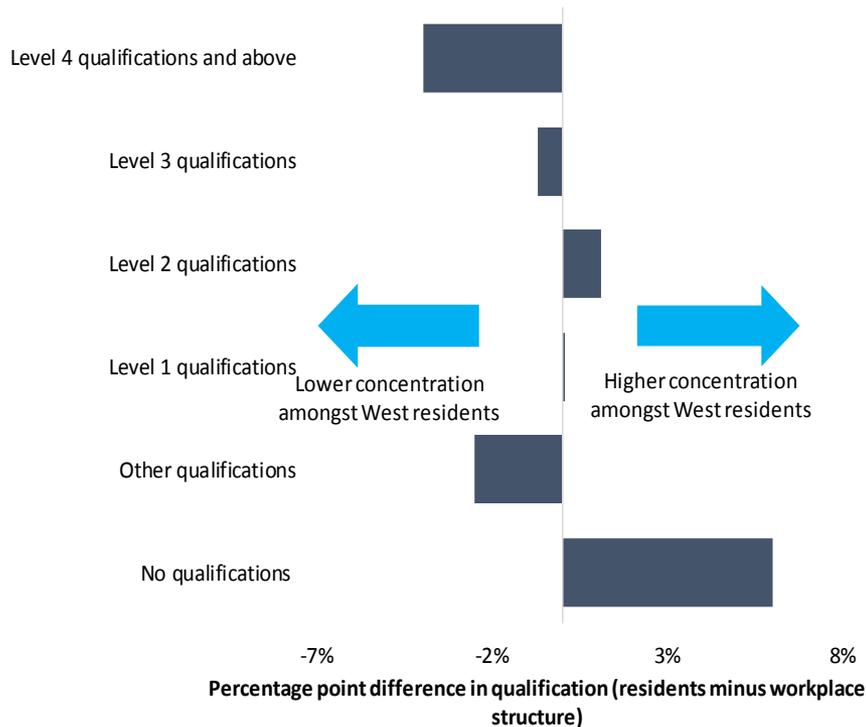
Source: Census 1991

There has been a remarkable change in the qualification profile of the population across a generation. However, it is important to note a 16 year old entering the labour market with low qualifications in 1991 (when almost 40% of the employed had no qualifications) could still be in today's labour market aged 43 with similar qualification levels but almost three decades of work experience, therefore they are not unskilled.

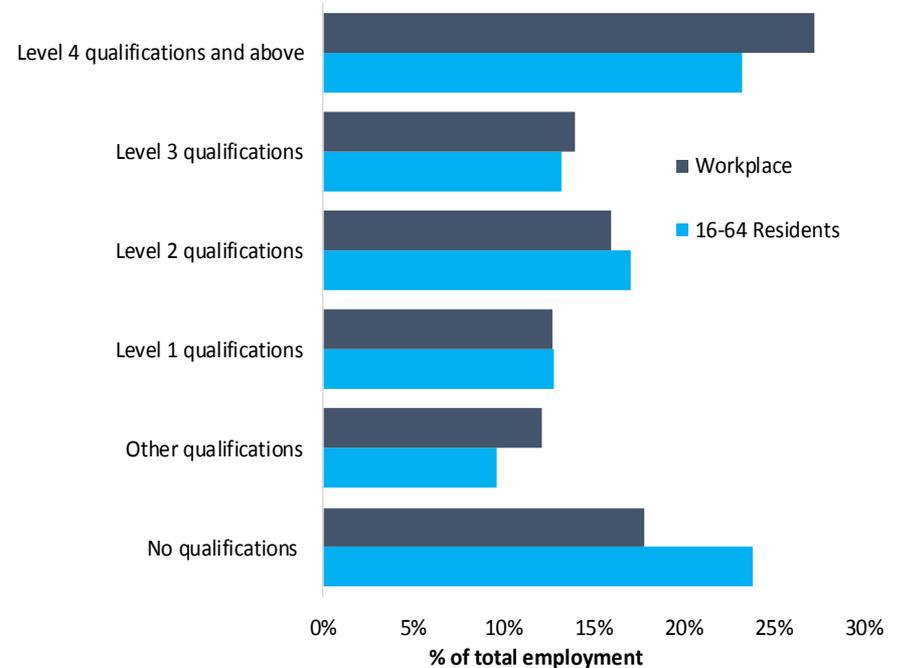
Some mismatches between resident and workplace qualifications in West

Resident versus workplace qualifications (NQF), West (2011)

Percentage point difference in qualification structure (NQF), resident versus workplace, West (2011)



Qualification structure (NQF), resident versus workplace, West (2011)



Source: NI Census, 2011

Note: Based on those aged 16-64, excluding students

Source: NI Census, 2011

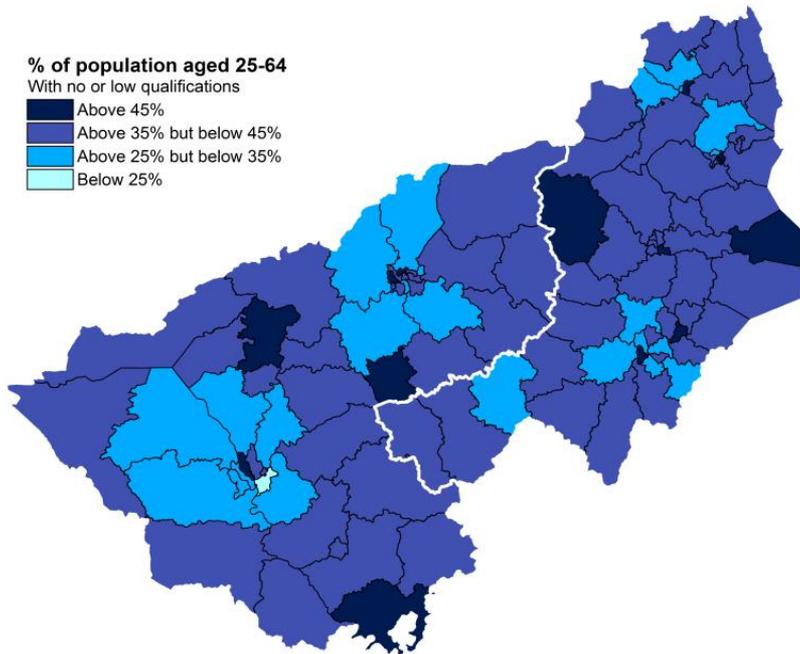
Note: Based on those aged 16-64, excluding students

A mismatch between resident and workplace skill structure can generate labour market barriers, particularly for those at the bottom of the skills spectrum. In West, 27% of the workplace have tertiary level education (NQF level 4+) compared to 23% of West's resident population. This suggests West must either import skills from other LGDs at the higher end of the skills spectrum or raise the qualification profile of the resident population to fill the deficit.

Relatively high concentration of low resident and workplace skills

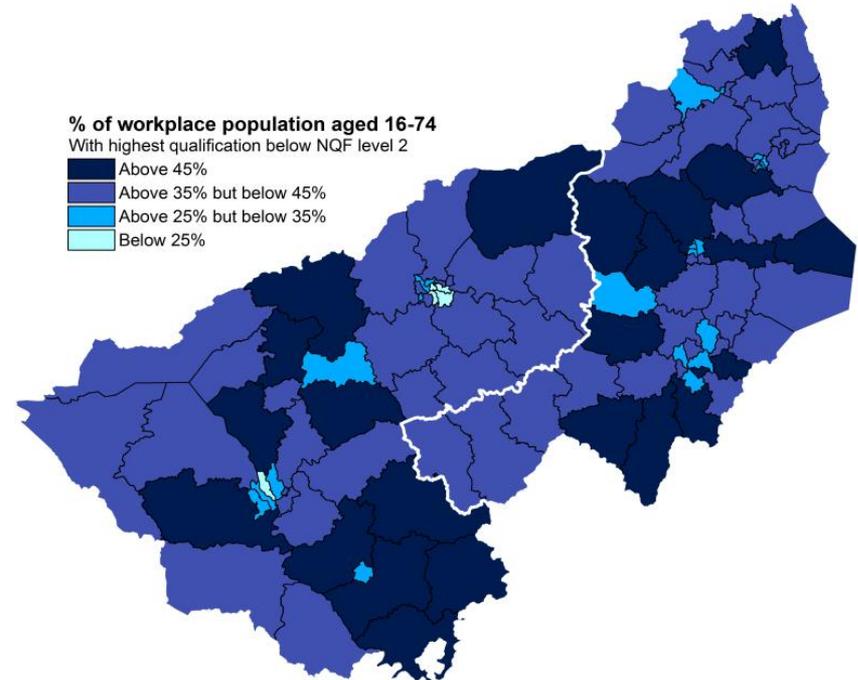
Qualification profile (NQF), workplace versus resident, West SOA's (2011)

Resident population aged 25-64 (%) with low or no qualifications, West SOA's, 2011



Source: NISRA, NI Multiple Deprivation Survey

Workplace population aged 16-74 (%) with highest qualification below NQF level 2, West SOA's, 2011

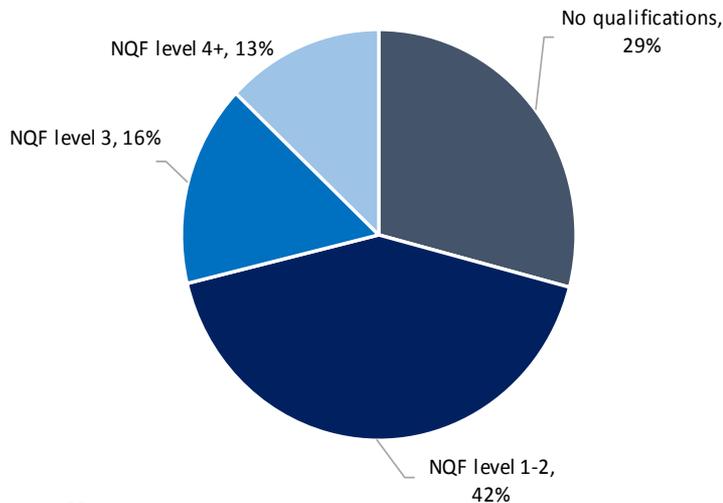


Source: NISRA, Census 2011

Significant qualification differences between employed and non-employed residents

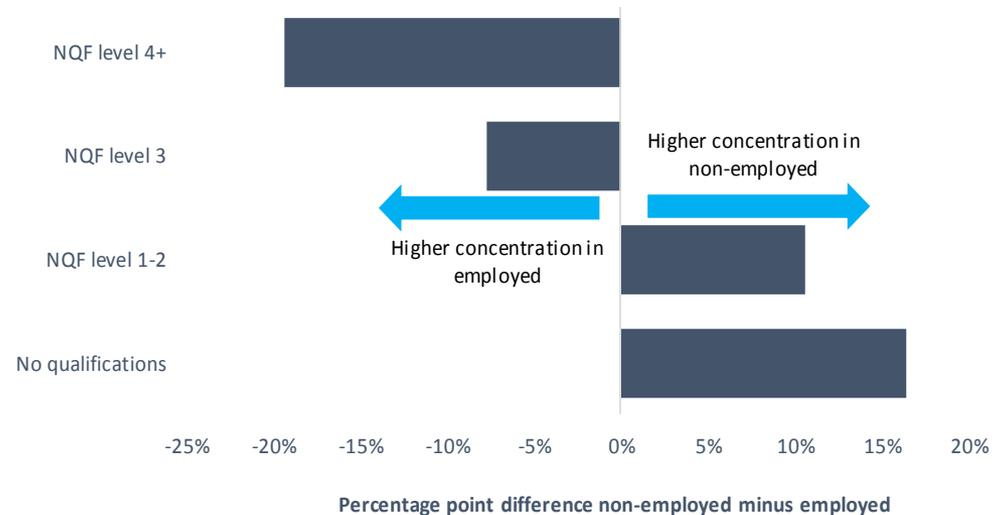
Resident qualification profile (NQF), employed versus non-employed, West (2016)

Qualification structure (NQF) of non-employed residents, West (2016)



Source: LADB

Percentage point difference in employed versus non-employed resident qualifications (NQF), West (2016)



Source: LADB

Note: Non-employed refers to the sum of unemployed and economically inactive

The difference in qualification structure between employed and non-employed emphasises the relationship between skills and employability. For example, 71% of non-employed residents have a qualification level of NQF level 2 or below compared to 44% of employed residents.

Summary of workplace skills structure

Workplace qualification structure versus NI – West's workplace has a higher proportion of workers with low qualifications (NQF level 1 or below) compared to NI, 43% and 36% respectively. Contrastingly, 34% of the workplace have tertiary level qualifications in NI compared to 27% in West.

Age profile and qualification structure - The skill profile of West's workplace varies significantly across age brackets. That is, younger workers tend to have higher levels of qualifications relative to older people aligning to the upward trend in education participation. In West, 59% of the workplace aged 50 and above have low qualifications (NQF level 1 or below), compared to 35% of those workers aged 16-24.

As older workers with relatively lower levels of qualifications move into retirement and higher qualified younger workers enter the labour market West's workplace skills profile will naturally improve.

Qualification levels over time - There has been significant improvement in workplace qualification levels over a generation. However, it is important to note that low qualification levels do not always directly translate to an unskilled individual. An individual may have low level qualifications but have significant experience in the labour and so are highly skilled.

Summary of workplace skills structure (continued)

Resident qualifications versus workplace qualifications - There are significant differences between the level of resident qualifications and workplace qualifications. In West, 27% of the workplace have achieved tertiary level education (NQF level 4+) compared to 23% of residents. Contrastingly, 24% of residents have no qualifications compared to 18% employed in West's workplace.

These trends should be considered in the context of employability challenges as a mismatch between residents skills and required workplace skills can reduce employment opportunities, specifically for those at the bottom of the skills spectrum.

Employed skills versus non-employed skills - The profile of employed individual's qualifications against non-employed individuals highlights the relationship between skills and employability.

In West, almost three quarters (71%) of non-employed residents have NQF level 2 or below qualifications, compared to 44% of the employed. Contrastingly, 13% of individuals out of work have achieved NQF level 4+ qualifications compared to 32% of the employed.

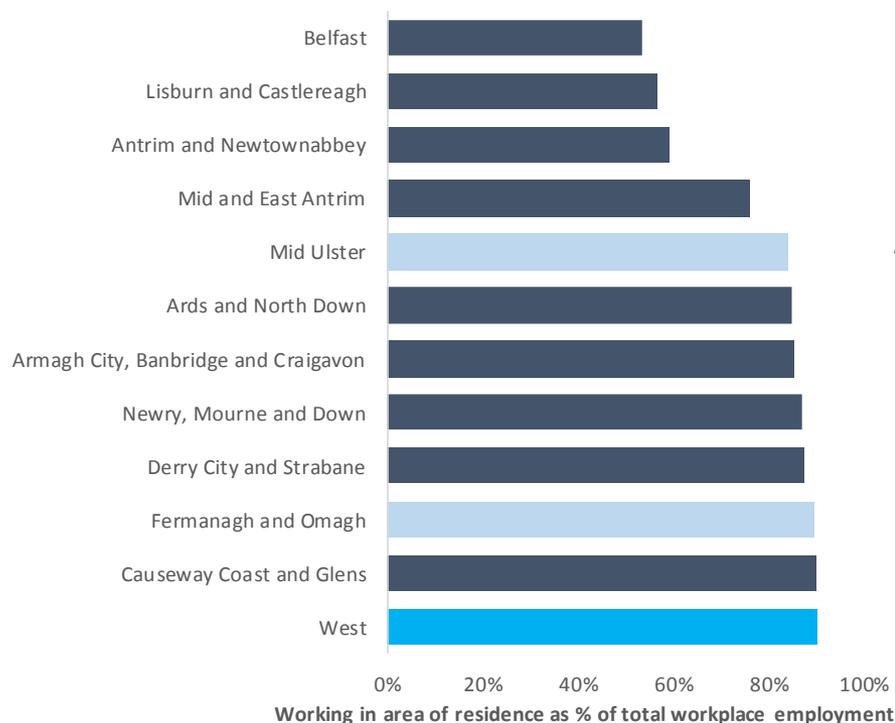
Therefore, policy ambitions to reduce the number of out of work individuals through reintegration to the labour market should consider the need for upskilling.

Commuting flows

West residents account for 90% of workplace employment

Commuting incidence by Local Government District (2011)

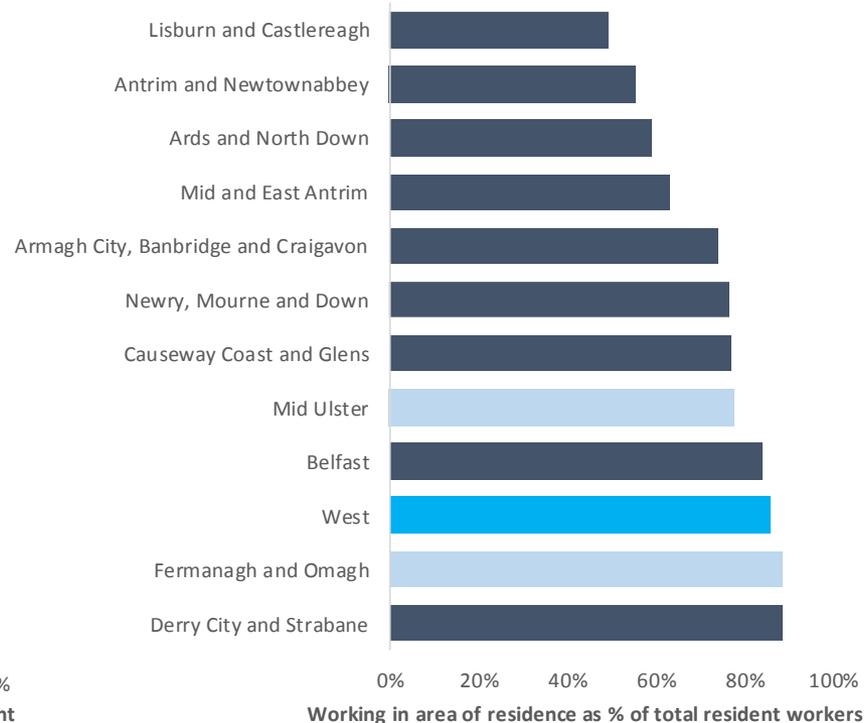
Resident employment within council as a proportion of total workplace employment (excluding students), LGDs (2011)



Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

Resident employment within council as a proportion of total resident employment (excluding students), LGDs (2011)



Source: NI Census, 2011

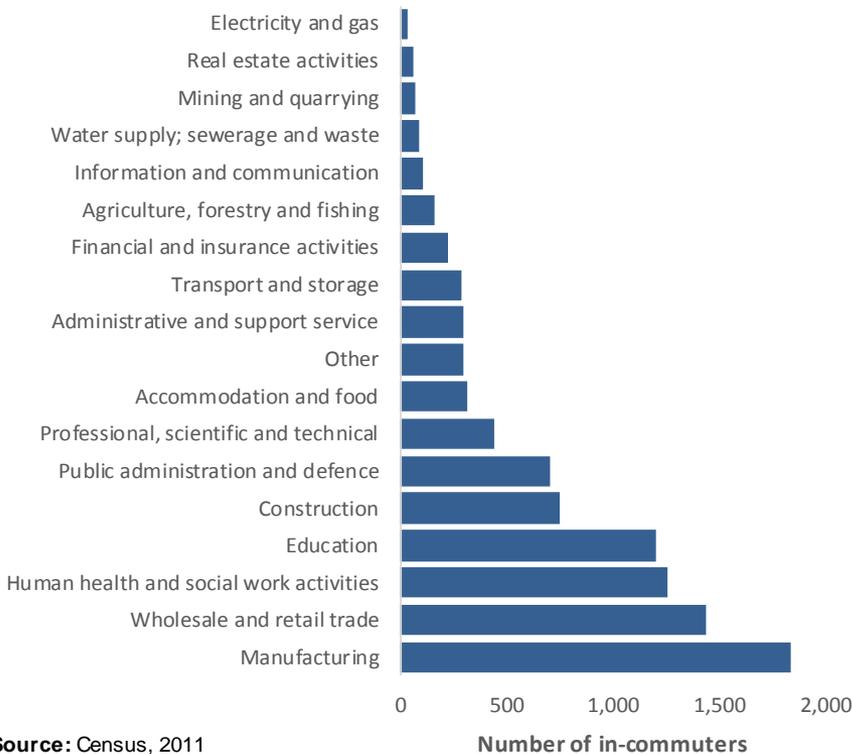
Note: Based on those aged 16-74 in employment, excluding students

Residents in West account for 90% of total workplace employment, there are relatively few in-commuters to the region. However, given the proximity to the border there is likely to be some degree of in-commuting not captured within this data. On the other hand West's residents that work within West account for 86% of total resident employment, suggesting 14% of residents commute elsewhere.

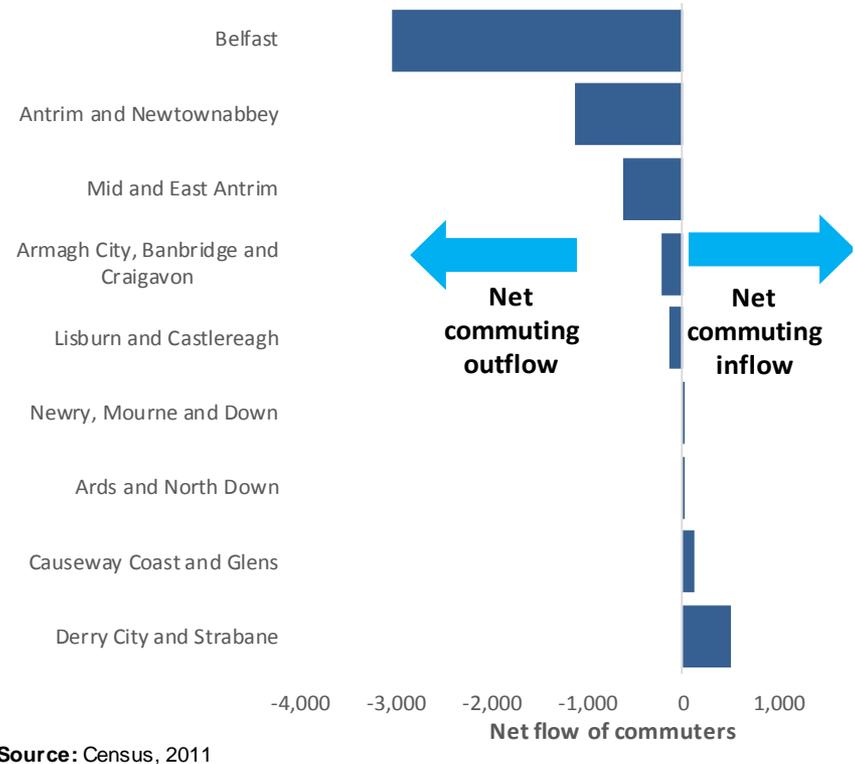
West has a net commuting outflow

Commuting patterns in West (2011)

Commuter inflow (excluding students) by sector (1-digit), West (2011)



Net commuting flow (excluding students), West versus LGDs (2011)

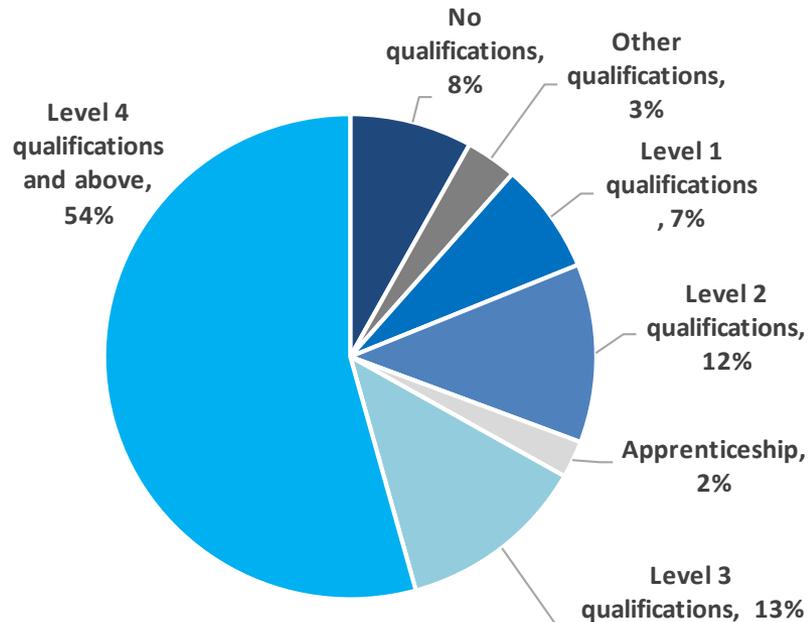


West has a net commuting outflow with five of the nine LGD's. That translates to more workers leaving West for employment than entering West to work from other LGD's. The largest net outflow is to Belfast followed by Antrim and Newtownabbey. Workers typically commute out of West for jobs within health and social (2,840); wholesale and retail (1,780); and education (1,650).

Over half of West out-commuters have degree level or above qualifications

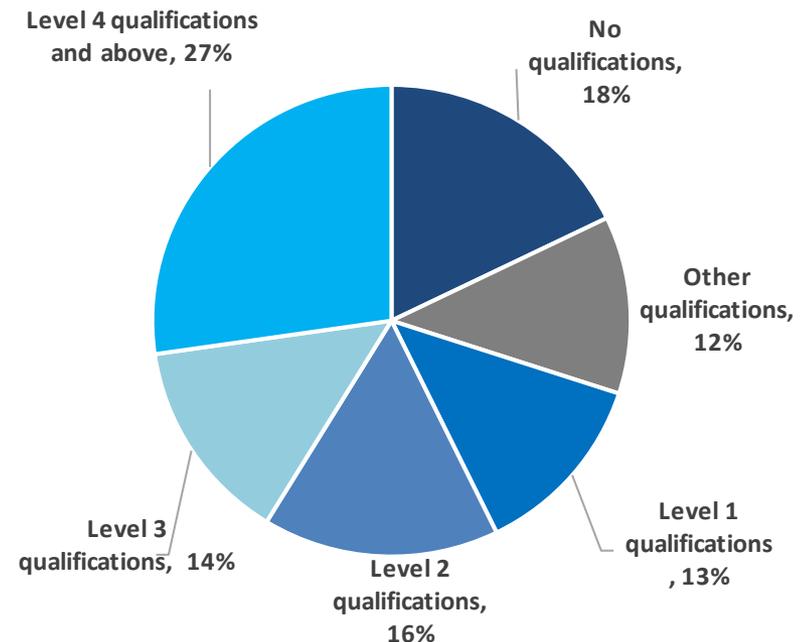
Skill differences between residents and commuters working in West (2011)

Highest level of qualification of West residents (excluding students) working elsewhere (out-commuters) (2011)



Source: Census 2011

Highest level of qualification of West residents working in West (2011)



Source: Census 2011

Over half (54%) of West out-commuters have tertiary level qualifications (NQF level 4+), compared to 27% of West residents employed in West. Likewise, only 19% of out-commuters have NQF level 2 and below qualifications compared to 43% of West residents employed in West. This highlights the relationship between qualifications and commuting.

Summary of commuting flows

Commuters - The vast majority of West's workforce reside within the West region (90%). However, it is estimated around 14% of employed residents commute outside the region for employment. The largest net commuting flow is to Belfast, followed by Antrim and Newtownabbey.

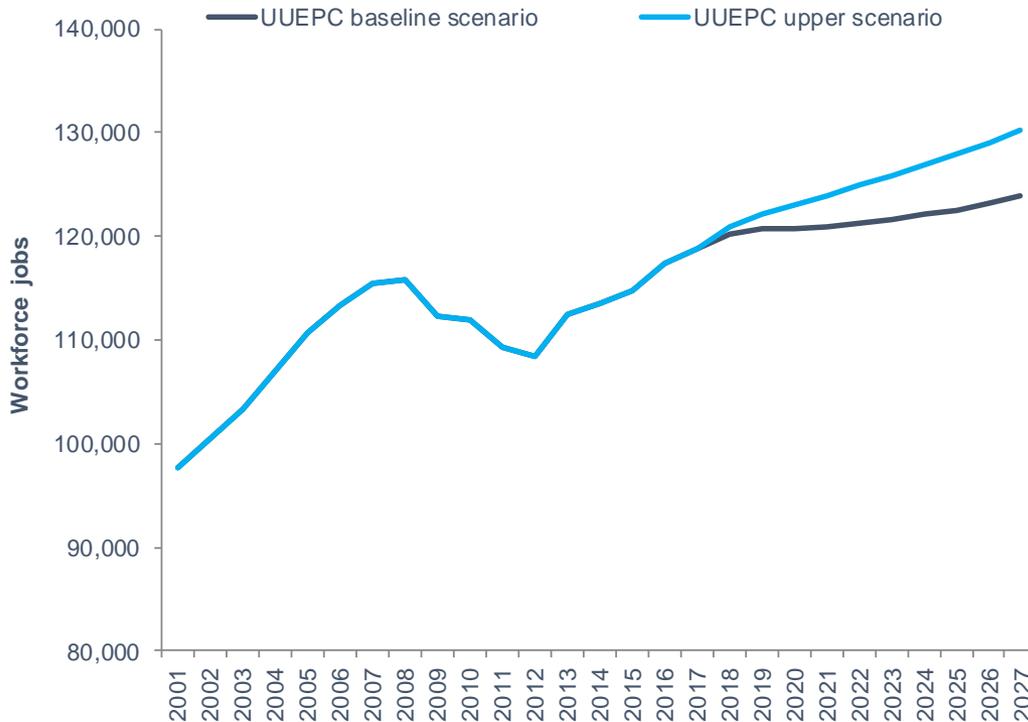
Out-commuters by sector - In West, more workers leave for employment outside the region (most likely to Belfast) than enter to work in West from another region. Workers typically commute out of West for jobs within health and social (2,840); wholesale and retail (1,780); and education (1,650).

Out-commuters by skill - On average workers commuting out of West have higher levels of qualifications than West residents working in the region. For example, over half (54%) of West out-commuters have tertiary level qualifications (NQF level 4+), compared to 27% of employed residents. Likewise, only 18% of out-commuters have below NQF level 2 qualifications compared to 43% of employed residents.

High growth scenario

UUEPC's high growth scenario predicts 11.4k extra jobs – 6.4k above the baseline by 2027

Workforce jobs, high growth versus baseline scenarios, West (2001-2027)



Source: UUEPC

UUEPC's high growth scenario outputs are aligned to NI achieving future policy success aligning to targets set within the Programme for Government (PfG).

At a sub-regional level the high growth scenario outputs are consistent with LGDs general economic ambitions, but not directly linked to specific LGD targets.

The model accounts for three scenarios; baseline; central; and high growth. This report will focus on outputs from the high growth scenario.

UUEPC estimates that under a high growth scenario employment in West has the potential to grow from 118,900 in 2017 to 130,300 in 2027.

Planning for skills in an aspirational nature

It is prudent to plan for skill needs in an aspirational nature based on economic ambitions of an economy. If such ambitions are not met there is a cost to individuals achieving such skills however research suggests this cost is lower than the cost of undersupplying skills.

For example, if businesses are unable to meet their demand for skilled labour the competitiveness of an economy will fall, productive capacity decrease ultimately dampening future job growth.

Likewise, it is important to have in place measures to offset any potential individual costs if policy ambitions are not met leading to an oversupply of skills.

For example, a contingency plan may include conversion courses for redundant workers or training rights for young people unable to secure employment after graduation.

Note: The results for a lower growth baseline scenario are provided in Annex A.

IT and professional service sectors are forecast to grow most rapidly over the coming decade

Baseline scenario and high growth scenario job growth by sector (1-digit), West (2017-2027)

Industry	Total jobs 2017 baseline	Job growth (absolute terms) 2017-2027		Job growth (compound annual growth rate)	
		Baseline	High growth scenario	High growth scenario 2017-2027	Actual 2012-2017
Agriculture	11,330	-740	-340	-0.3%	-1.2%
Mining	910	-20	-20	-0.2%	-1.8%
Manufacturing	22,530	+2,370	+3,070	1.3%	5.0%
Electricity & gas	180	+40	+50	2.6%	31.7%
Water supply & waste	660	+50	+70	1.1%	1.7%
Construction	12,660	+710	+1,530	1.1%	3.3%
Wholesale & retail	19,540	-50	+130	0.1%	1.1%
Transport & storage	3,710	+360	+510	1.3%	3.2%
Restaurants and hotels	6,260	+640	+1,170	1.7%	3.6%
Information & communication	920	+160	+510	4.5%	-0.4%
Finance & insurance	1,370	+0	+350	2.3%	-4.4%
Real estate	440	+30	+60	1.4%	-5.4%
Professional scientific & technical	3,240	+560	+1,700	4.3%	3.3%
Administrative & support services	2,450	+350	+500	1.9%	7.0%
Public admin & defence	4,360	-190	+110	0.2%	-1.5%
Education	10,430	+110	+350	0.3%	1.2%
Health & social work	13,360	+530	+1,200	0.9%	-0.7%
Arts & entertainment	2,240	+110	+330	1.4%	4.2%
Other service activities	2,280	+20	+130	0.5%	10.0%
Total	118,870	+5,030	+11,430	0.9%	1.9%

Source: UUEPC

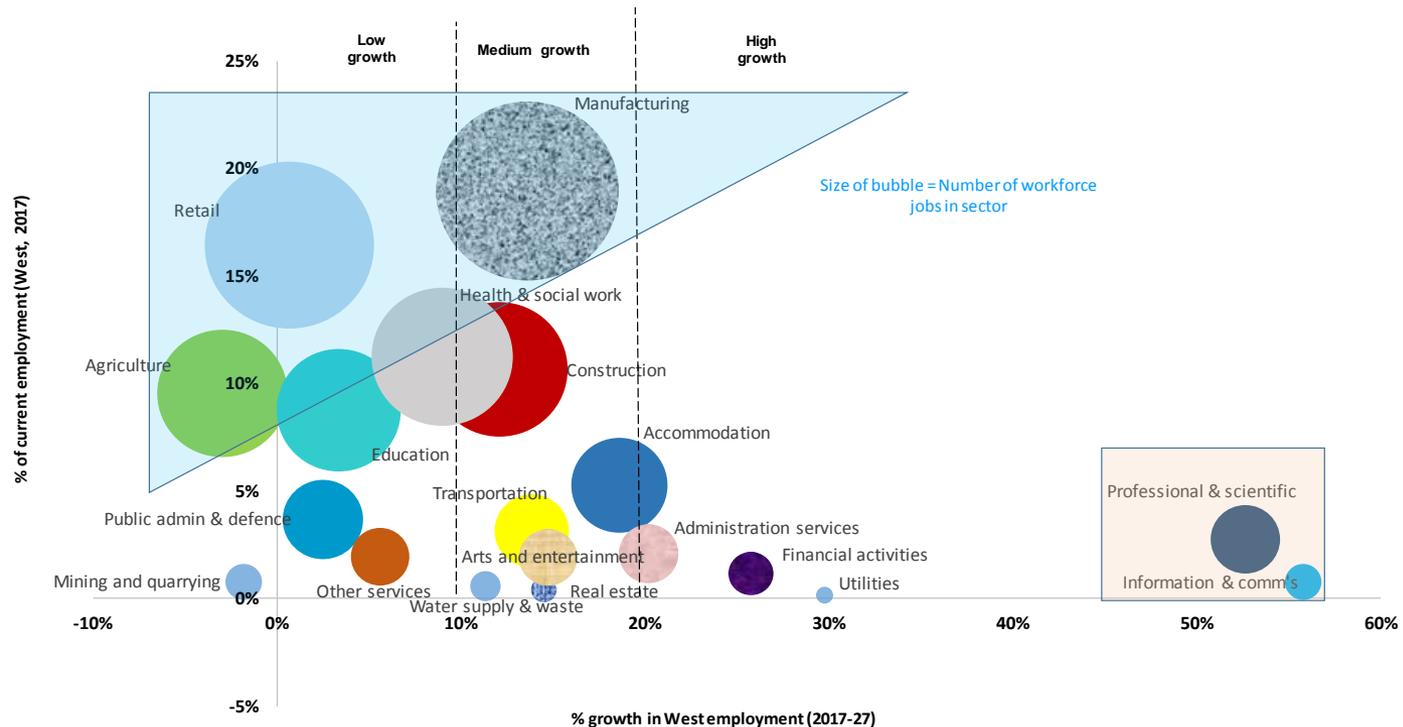
Note: Figures may not sum to total due to rounding

Relative to the baseline, the additional 6,400 jobs are primarily generated within the following sectors; professional scientific and technical (1,140 jobs above baseline); construction (820 jobs above baseline); and manufacturing (700 jobs above baseline).

The sectors expected to contribute the largest increase in jobs in absolute terms over the period 2017-2027 are: manufacturing (3,070); professional scientific and technical (1,700); and construction (1,530).

Significantly high growth expected in IT and professional services

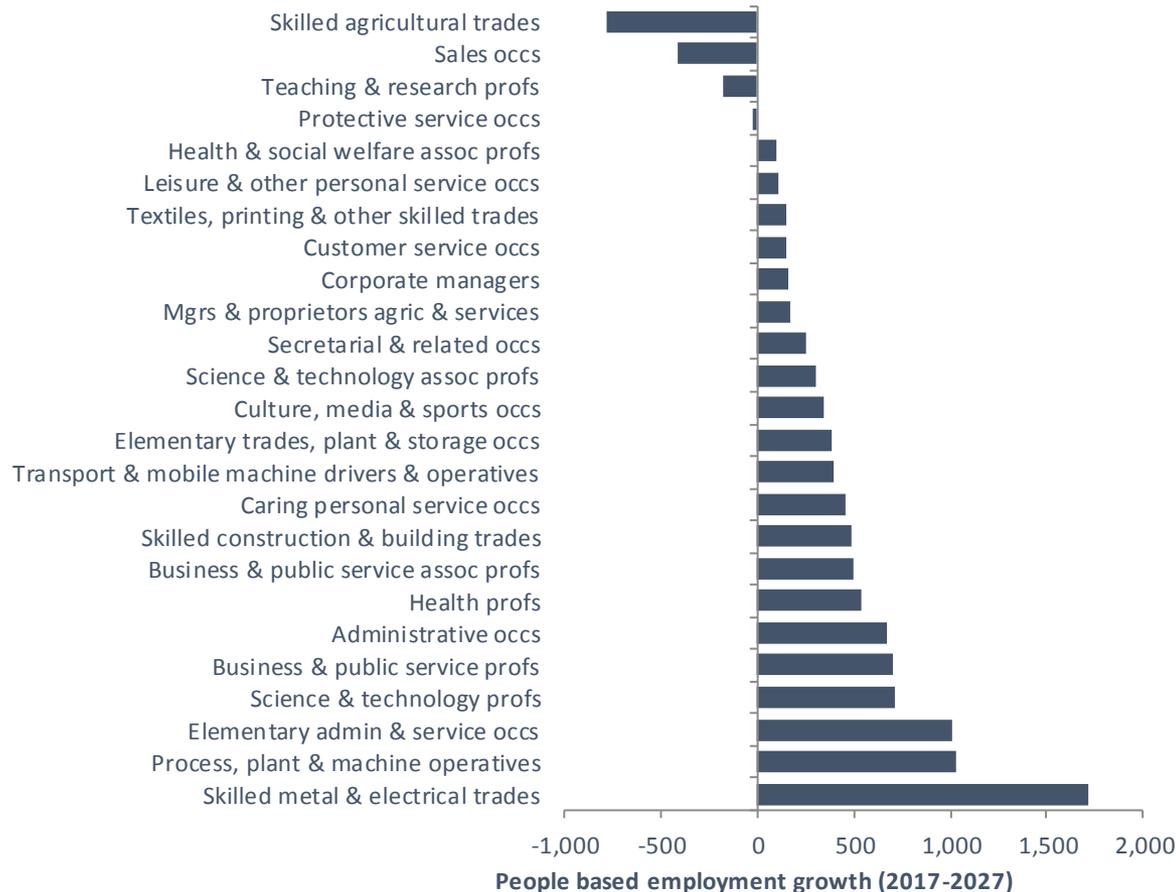
Workforce job growth by sector (1-digit) and number of jobs (workplace based), West (2017-2027)



Medium to large employment sectors such as manufacturing and construction are expected to have relatively medium growth rates over the coming decade, 14% and construction 12% respectively. Given the large scale of such sectors these growth rates will still constitute significant job numbers (3,070 and 1,530 jobs respectively).

Largest growth forecast within elementary administration and service occupations

Employment growth (people based) by occupation (2 digit), West (2017-2027)

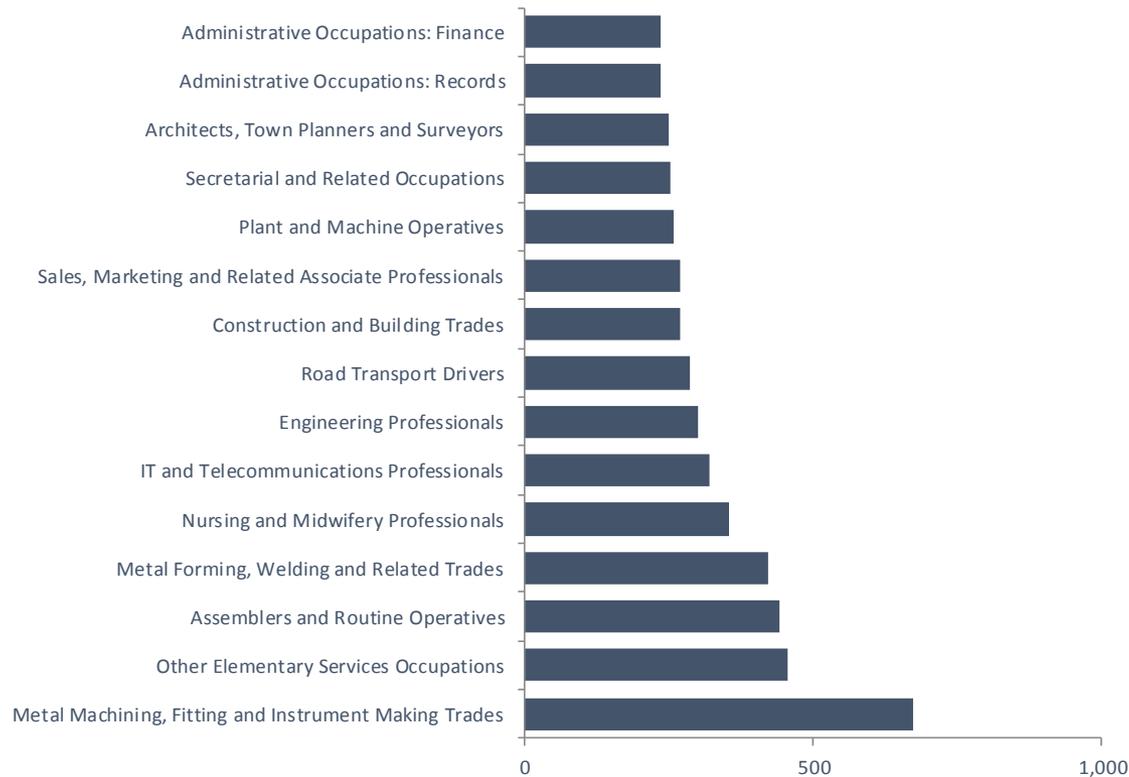


Source: UUEPC

Occupations accounting for the largest absolute growth over the coming decade are skilled metal and electrical trades (1,700), process, plant and machine operatives (1,000) and elementary administration and service occupations (1,000).

IT and telecommunications professionals set to be the largest contributor to job growth

Employment growth (people based) by occupation (3 digit), West (2017-2027)



Source: UUEPC

People based employment growth (2017-2027)

A granular analysis of occupation growth highlights specific areas of expected growth. At a detailed level metal machining, fitting and instrument making trades are expected to see the highest amount of absolute growth (700) over the coming decade, followed by other elementary service occupations (500) and assemblers and routine operatives (400).

Summary of UUEPC's high growth scenario

High growth scenario – UUEPC's high growth scenario is aligned (but not directly linked) to the general economic ambitions of LGDs, forecasting 11,400 additional jobs over the period 2017-2027. That is, 2.3 times as many jobs forecast in the baseline scenario.

Sector growth over coming decade - The fastest growing sectors are expected to be IT (4.5%) and professional services (4.3%) over the period 2017-2027.

In absolute terms the largest growth is expected to be in manufacturing (3,070) and professional scientific and technical (1,700).

Occupation growth over coming decade - The occupation forecast to account for the largest absolute growth over the period 2017-2027 is skilled metal and electrical trades (1,700) followed by process, plant and machine operatives (1,000) and elementary administration and service occupations (1,000).

At a more granular level the occupations (3-digit) expected to grow most rapidly in absolute terms are metal machine fitting and instrument making trades (700), other elementary services occupations (500) and assemblers and routine operatives (400). Occupation growth is linked to the forecast sectoral structure of West.

Demand side – Sectors and occupations

Demand side concepts

Expansion demand is the additional jobs created due to growth in a sector.

Replacement demand refers to the number of positions which become available as a result of staff leaving employment (typically due to retirement, family reasons, ill health or to move to another sector).

Net replacement demand is the difference between all leavers from employment – to retirement, inactivity, unemployment, other occupations and out migration - and joiners to employment – from unemployment, inactivity (excluding education leavers) and other occupations.

Net requirement from education and migration indicates the number of vacancies that can not be filled from within the existing labour market and therefore must be met from those leaving education and/ or from migration. The annual average net requirement does not include the positions to be filled by labour market participants from other sectors, from unemployment or from economic inactivity.

Annual average gross demand in simple terms, refers to all vacancies to be filled in a year. It is the total expansion and replacement demand for staff per annum and the jobs are filled by those currently working in the labour market, those currently out of work and also those from education and migration.

Net requirement from education and migration

The figure of most interest is the **net requirement from education and migration** (net replacement demand plus expansion demand). This measures the quantum of vacancies for education leavers and migrants.

It takes account of 'churn' in the labour market. Skills demand associated with replacement demand is dependent largely on the existing stock and skill needs of current jobs. It can be compared directly to education outputs and the level of migrant inflows and is therefore useful for skills and wider workforce planning.

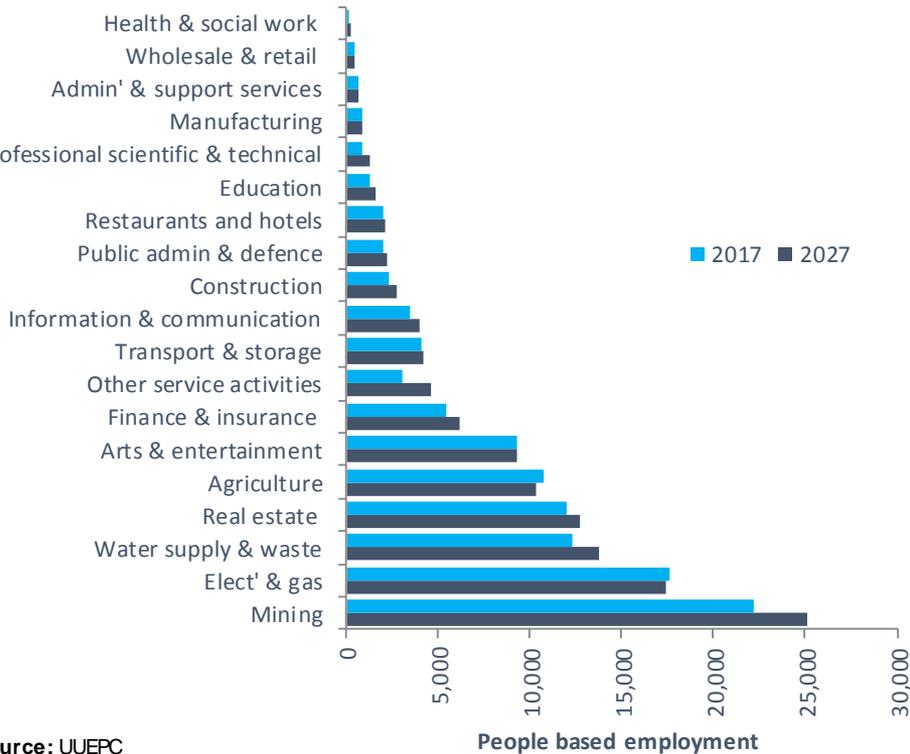
The focus on vacancies for education leavers and migrants should not be interpreted to mean that job opportunities for those out of work are ignored. Rather it is the case that joiners from unemployment and inactivity are already factored into replacement demand assumptions, and will essentially compete with education leavers and migrants for total arising vacancies.

The expansion demand (net change in the stock of jobs) is often more widely understood as a driver of future demand, it remains the case that, future skills and employability demand will still be significantly determined by net replacement demand.

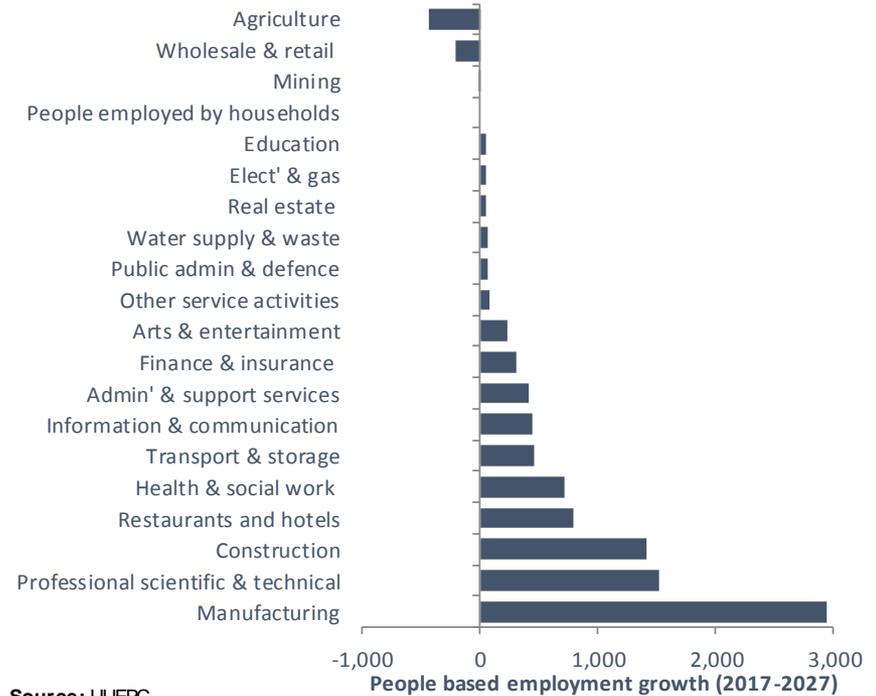
Manufacturing is forecast to remain the largest employer in West

Employment (people based) by sector (1-digit), West (2017-2027)

Employment (people based) by sector (1-digit), West (2017 versus 2027)

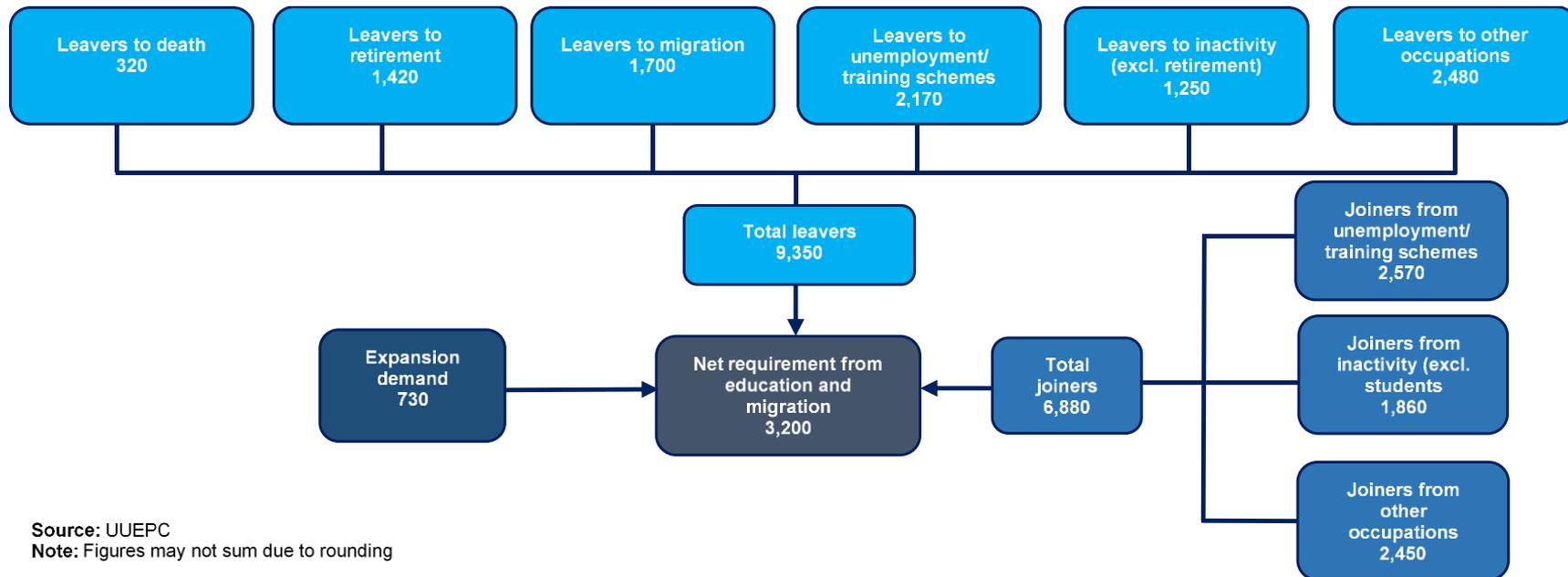


Employment (people based) growth by sector (1-digit), West (2017-2027)



Labour market flows determine skills demand

Components of net requirement from education and migration, West (2017-2027)



Expansion demand and replacement demand, West (2017-2027)

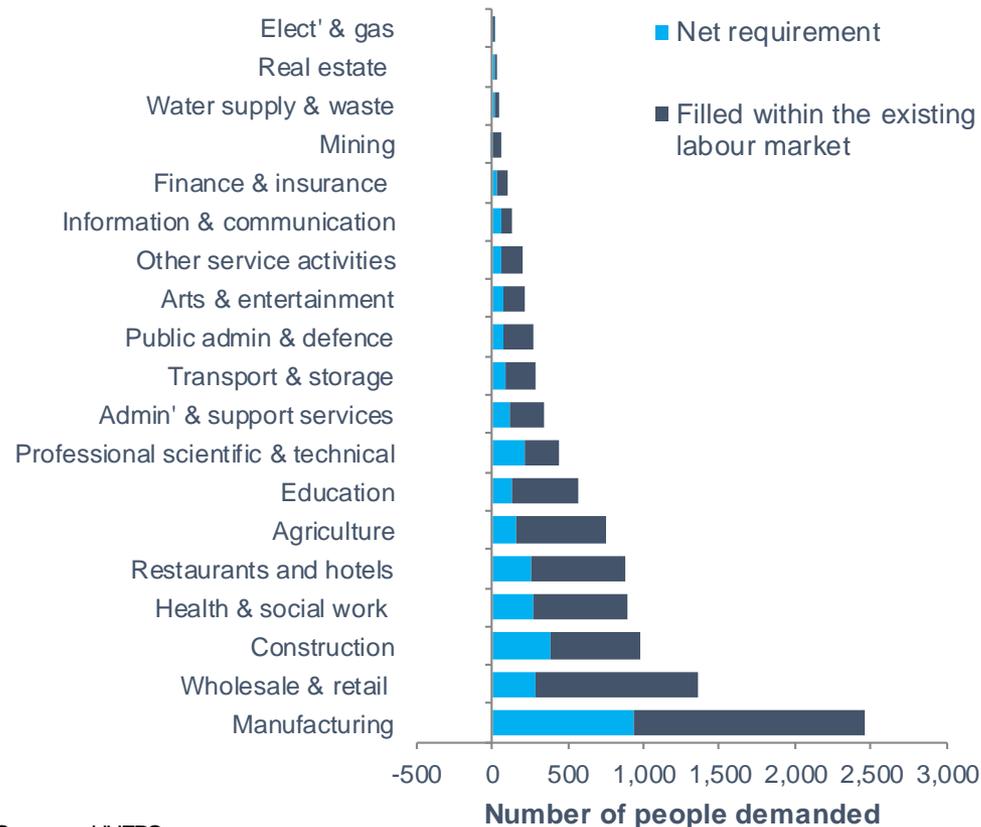
Demand category	2012-2017 (annual)	2017-2027 (annual)
(A) Gross demand	10,090	10,080
(B) Expansion demand	900	730
(C) Replacement demand	9,200	9,350
(D) Filled from within the existing labour market	6,860	6,880
(E) Net replacement demand	2,340	2,470
(F) Net requirement from education and migration	3,240	3,200

Source: UUEPC

Relationship between rows: A=B+C, E=C-D, F=E+B

A High proportion of job opportunities filled from within the existing labour market across sectors

Average annual gross demand by sector (1-digit), West (2017-2027)

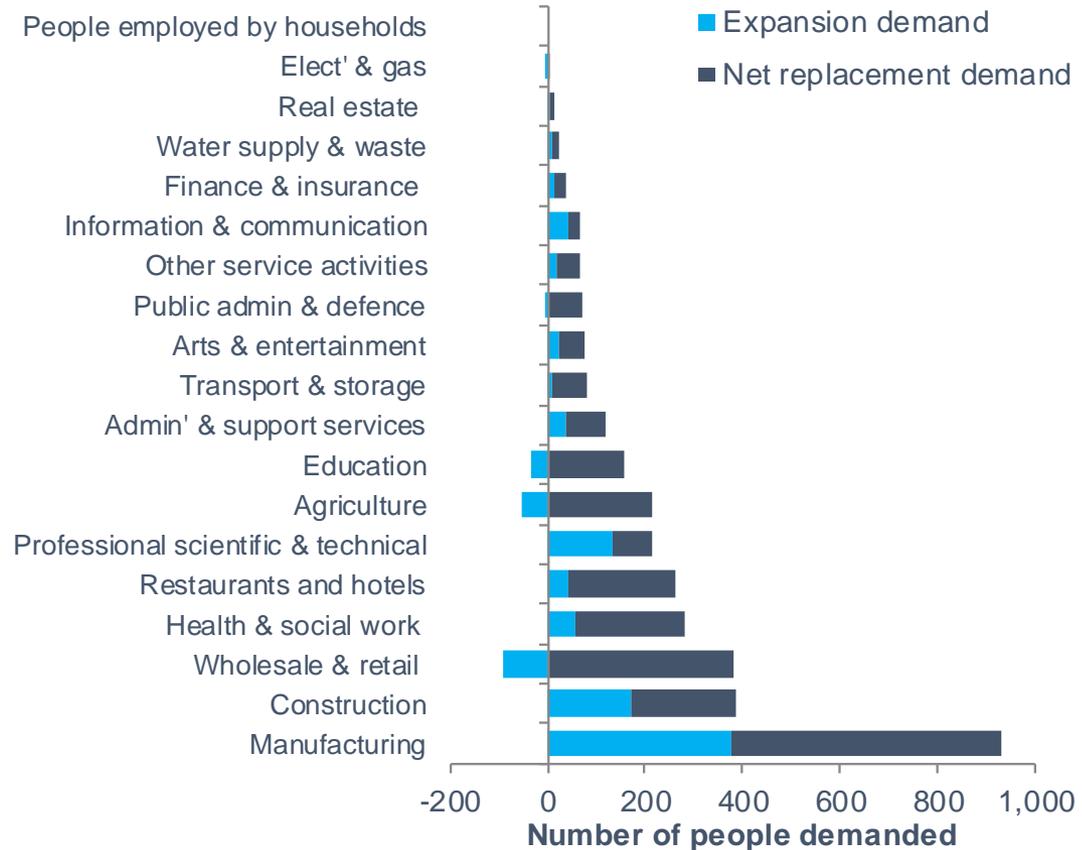


Source: UUEPC

Gross demand highlights a significant number of total job opportunities are filled from recruitment within the existing labour market (i.e. employed or unemployed). For example, in wholesale and retail 78% of total job opportunities are expected to be filled by individuals already within the existing labour market compared to 22% filled by net requirement from education and migration.

Sectors do not have to be growing fast to create a plentiful supply of opportunities

Average annual net requirement from education and migration by sector (1-digit), West (2017-2027)



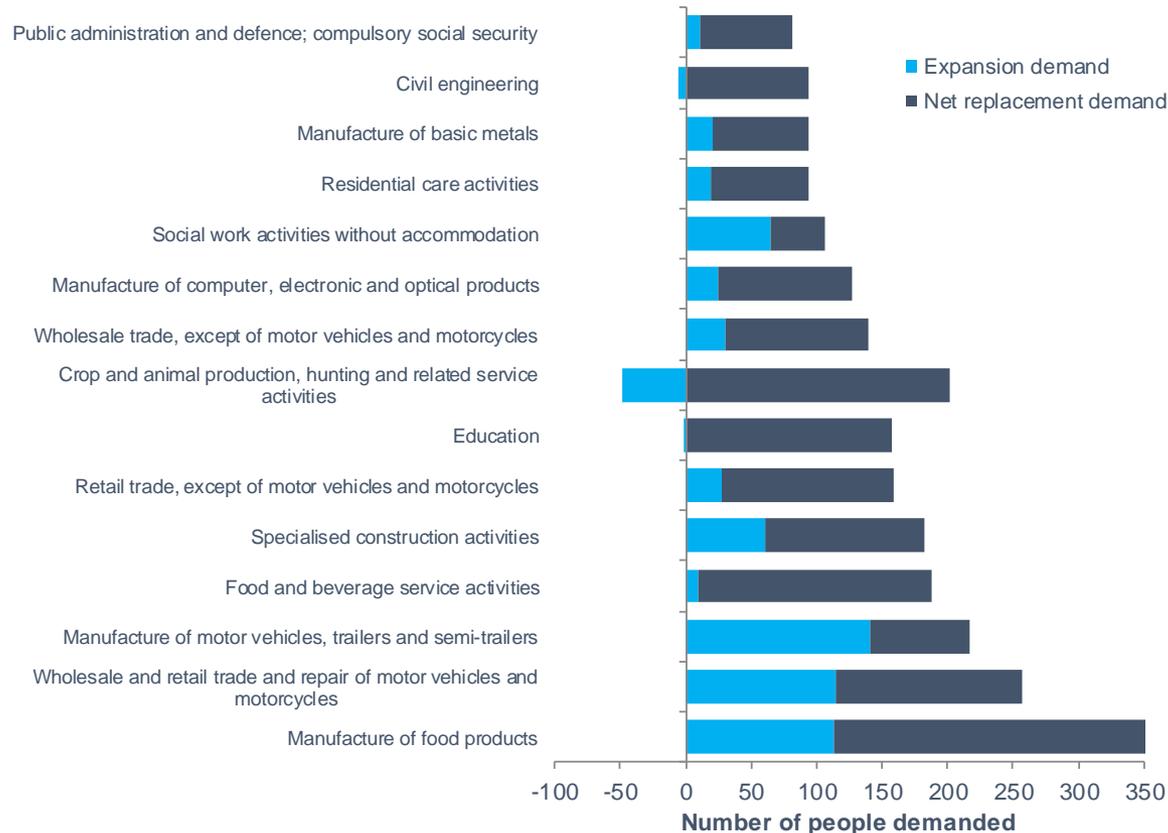
Source: UUEPC

The composition of expansion demand and replacement demand within a sector depends upon the sectoral nature. For example, expansion demand is likely to account for the majority of net requirement in a sector with projected high growth rates i.e. professional and scientific.



Manufacturing of food products constitutes the highest labour demand

Average annual net requirement from education and migration by sector (top 15 2-digit), West (2017-2027)

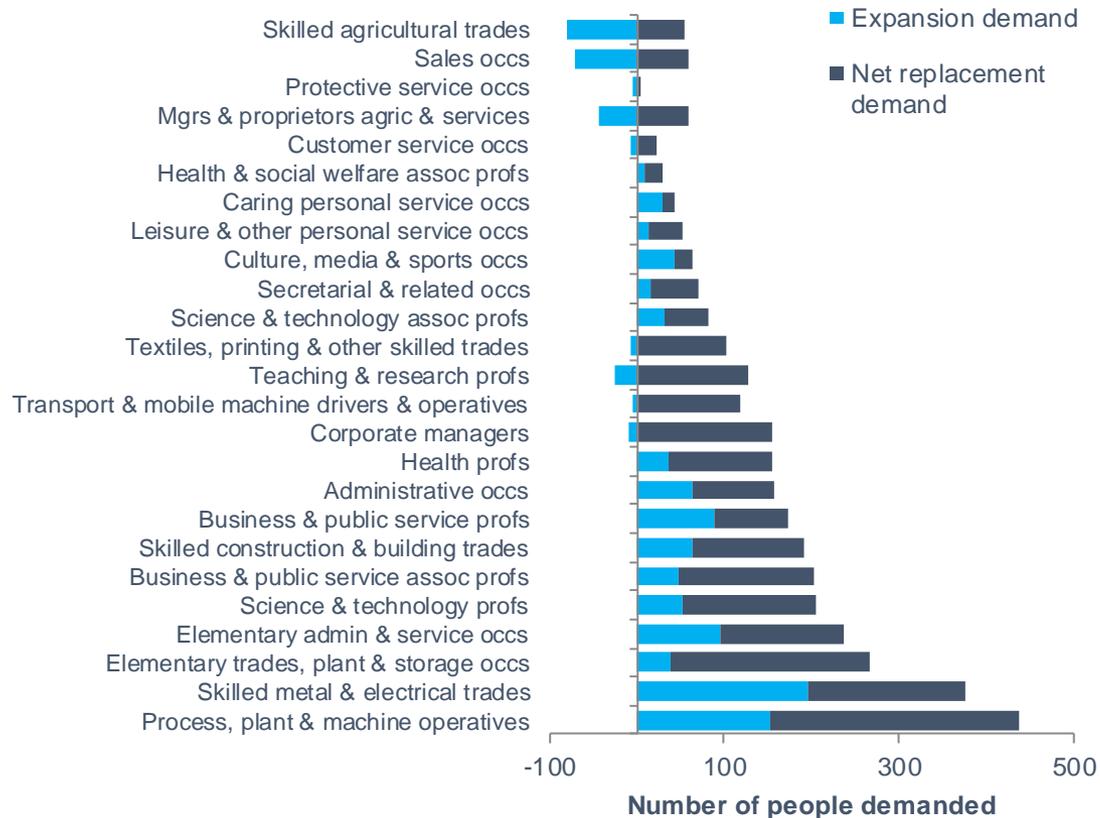


Source: UUEPC

A more granular analysis of labour demand highlights the top 15 detailed sectors (2-digit) account for 75% of total net requirement. The largest net requirement is manufacture of food products (11% of total net requirement) followed by retail trade (8%).

Occupation demand is a function of sector growth (expansion) and scale (replacement)

Average annual net requirement from education and migration by occupation (2-digit), West (2017-2027)

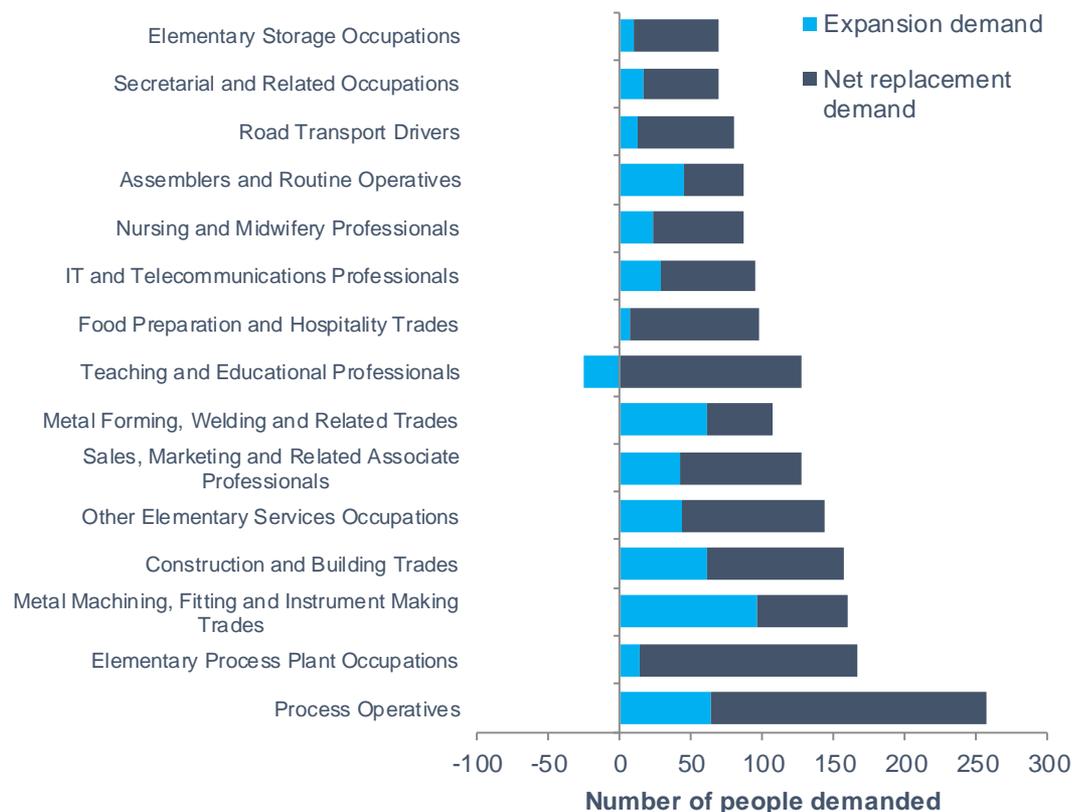


Source: UUEPC

Occupations that are expected to provide the most job opportunities in the coming decade are process, plant and machine operatives (14% of total net requirement), skilled metal and electrical trades (12%), and elementary trades, plant and storage occupations (8%).

Process operatives occupations are forecast to create the largest net requirement

Average annual net requirement from education and migration by occupation (top 15 3-digit), West (2017-2027)



Source: UUEPC

At a more detailed level the occupations (3-digit) expected to be in 'high demand' over the coming decade are process operatives (8% of the net requirement), elementary process plant operatives (5%) and metal machining, fitting and instrument making trades (5%).

Summary of demand side sectors and occupations

Demand side concepts - It is important to fully understand each of the demand side concepts and recognise how they interact with one another.

Labour market flows and skills demand - The largest component of labour demand comes from replacing workers who have created a vacancy by leaving their position (for retirement, sickness, moving to another job etc.). However, most of these vacancies will be taken by people already within the labour market (e.g. job movers, individuals moving from unemployment to employment).

This replacement demand under a high growth scenario is expected to be 9,350 over the next 10 years compared to expansion demand of 730.

Vacancies not filled by labour market participants must be filled by either leavers the education system or migrants. In West the average annual individuals required from education and migration is 3,200 over the 2017-2027 period.

Gross demand by sector - The sector expected to require the largest gross demand over the 2017-2027 period is manufacturing (24% of total gross demand) followed by wholesale and retail (14%) and construction (10%).

Summary of demand side sectors and occupations (continued)

Net requirement by sector - In high growth sectors expansion demand accounts for a more significant proportion of overall labour demand. For example, professional scientific and technical is relatively small in scale but is forecast to experience rapid growth. Therefore expansion demand accounts for 62% of net requirement and replacement demand 38%.

In other sectors a sizeable amount of labour demand is driven by replacement demand rather than expansion of the sector. For example, restaurants and hotels has high entry and exit rates. Therefore, just over 85% of labour demand comes from vacancies created by workers who leave their jobs and just under 15% from expansion demand.

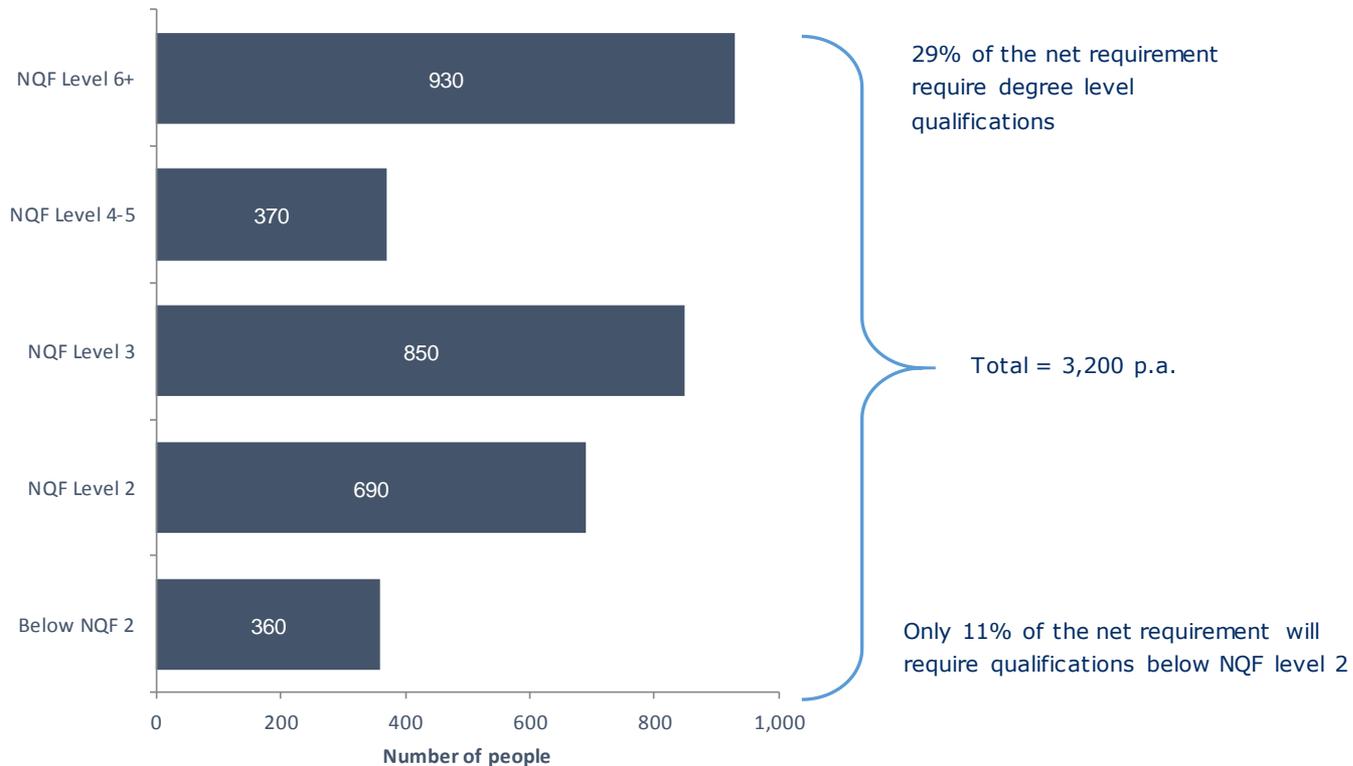
Net requirement by occupation - The occupations forecast to provide the most job opportunities for education leavers and migrants are process, plant and machine operatives (14% of total net requirement), skilled metal and electrical trades (12%) and elementary trades, plant and storage occupations (8%).

At a more granular level the top 15 occupations (3-digit) account for 56% of the total net requirement. The largest net requirement in detailed occupations is expected in process operatives (8% of net requirement), elementary process plant operatives (5%) and metal machining, fitting and instrument making (5%).

Demand side - Qualifications

Demand for graduates in West's marginally below the NI average

Average annual net requirement by qualification (NQF), West (2017-2027)



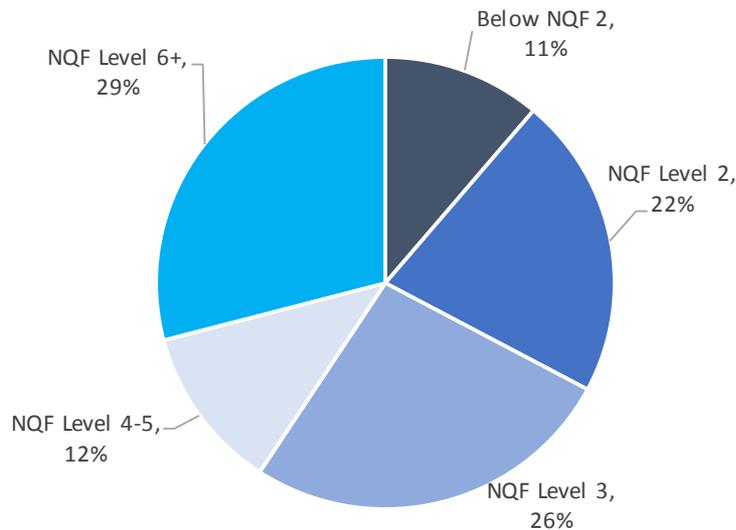
Source: UUEPC

UUEPC's skills model estimates the net requirement by highest NQF level. West is expected to require 930 graduates per annum over the next decade, accounting for 29% of the net requirement. However, it should be noted skills and qualifications are not the same. For example, labour may be highly skilled but have low levels of formal qualifications (particularly older workers) and vice versa.

The profile of demand is more graduate intensive than the current stock of skills

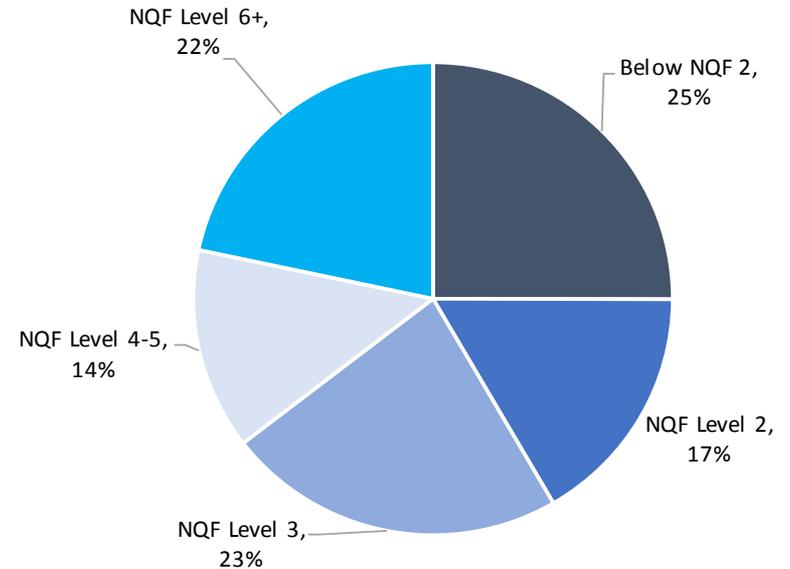
Average annual net requirement by qualification (NQF) versus current workforce qualification (NQF) profile, West (2017-2027)

Average annual net requirement by qualification (NQF), West (2017-2027)



Source: UUEPC

Qualification profile of employed, West (2016)



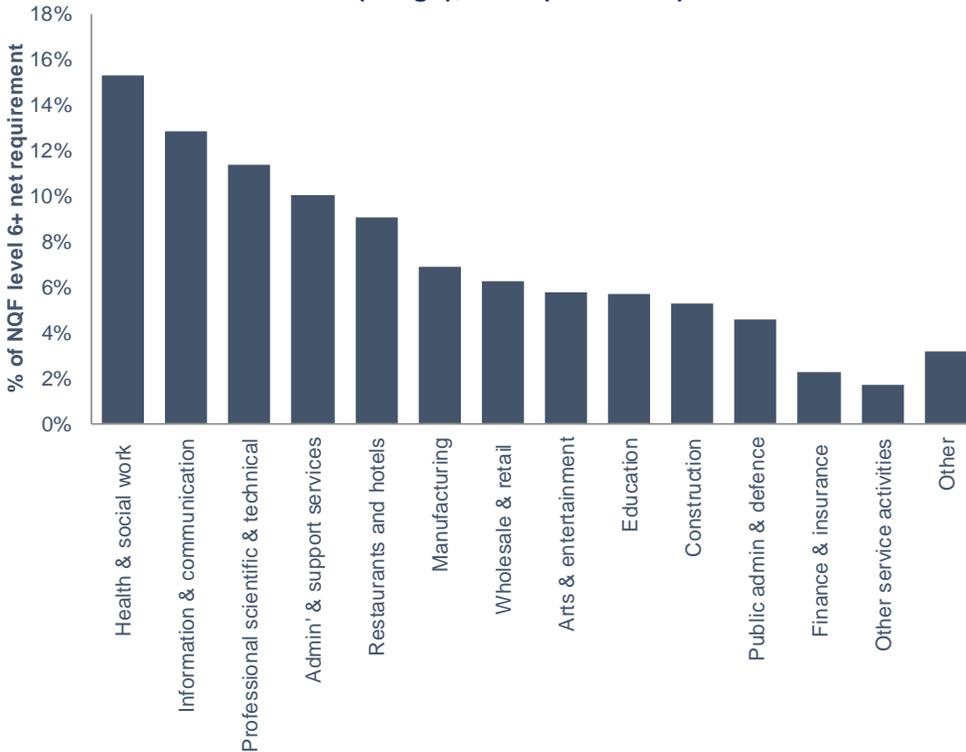
Source: UUEPC

Increasing HE participation levels and employers attitudes towards qualifications has influenced the higher weighting towards degree level qualifications in the workplace, squeezing out the lower qualified. For example, one quarter (25%) of the employed hold a qualification below NQF level 2, future demand is forecast to require only 11% of workers with below NQF level 2. This implies the current qualification profile of the employed does not match future skill needs.

Health and social work & ICT account for over 29% of graduate demand

Average annual net requirement for NQF level 6+ by sector, West (2017-2027)

Average annual net requirement for NQF level 6+ by sector (1-digit), West (2017-2027)



Average annual net requirement for NQF level 6+ by sector (2-digit top 15), West (2017-2027)

2 digit SIC	% of NQF level 6+ net requirement
Human health activities	7.7%
Food and beverage service activities	7.0%
Education	6.7%
Residential care activities	6.5%
Public administration and defence; compulsory social security	5.1%
Civil engineering	4.3%
Wholesale trade, except of motor vehicles and motorcycles	4.2%
Manufacture of food products	4.1%
Manufacture of machinery and equipment n.e.c.	3.7%
Legal and accounting activities	3.6%
Computer programming, consultancy and related activities	2.8%
Specialised construction activities	2.8%
Travel agency, tour operator and other reservation service and related activities	2.7%
Publishing activities	2.7%
Architectural and engineering activities; technical testing and analysis	2.6%

Source: UUEPC

Source: UUEPC

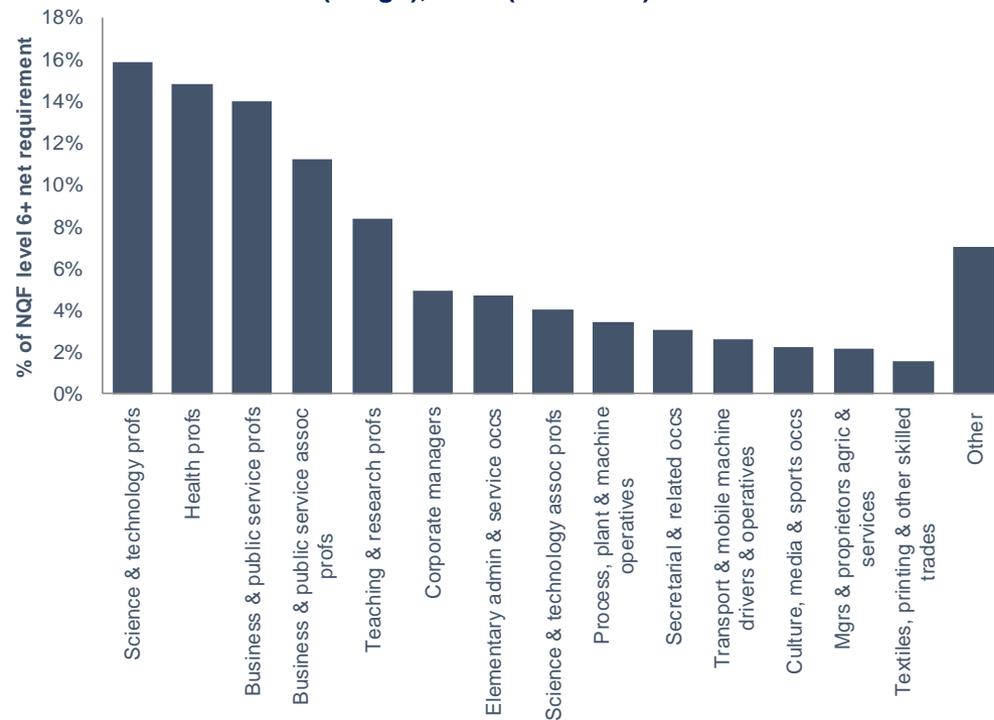
The proportion of graduates required from education and migration varies across sectors. For example, in ICT sector 64% of the net requirement is forecast to require at least an undergraduate level degree, compared to 34% in health and social work professionals.

Science and technology graduates require 16% of graduate demand

Average annual net requirement for NQF level 6+ by occupation, West (2017-2027)

Average annual net requirement for NQF level 6+ by occupation (2-digit), West (2017-2027)

Average annual net requirement for NQF level 6+ by occupation (top 15 3-digit), West (2017-2027)



3 digit SOC	% of NQF level 6+ net requirement
Information technology and telecommunications professionals	9.4%
Nursing and midwifery professionals	8.5%
Teaching and educational professionals	8.4%
Sales, marketing and related associate professionals	6.4%
Business, research and administrative professionals	5.5%
Health professionals	4.8%
Engineering professionals	3.4%
Other elementary services occupations	3.2%
Secretarial and related occupations	3.0%
Public services and other associate professionals	2.8%
Managers and proprietors in hospitality and leisure services	2.3%
Managers and directors in retail and wholesale	2.3%
Architects, town planners and surveyors	2.2%
Quality and regulatory professionals	2.2%
Natural and social science professionals	2.1%

Source: UUEPC

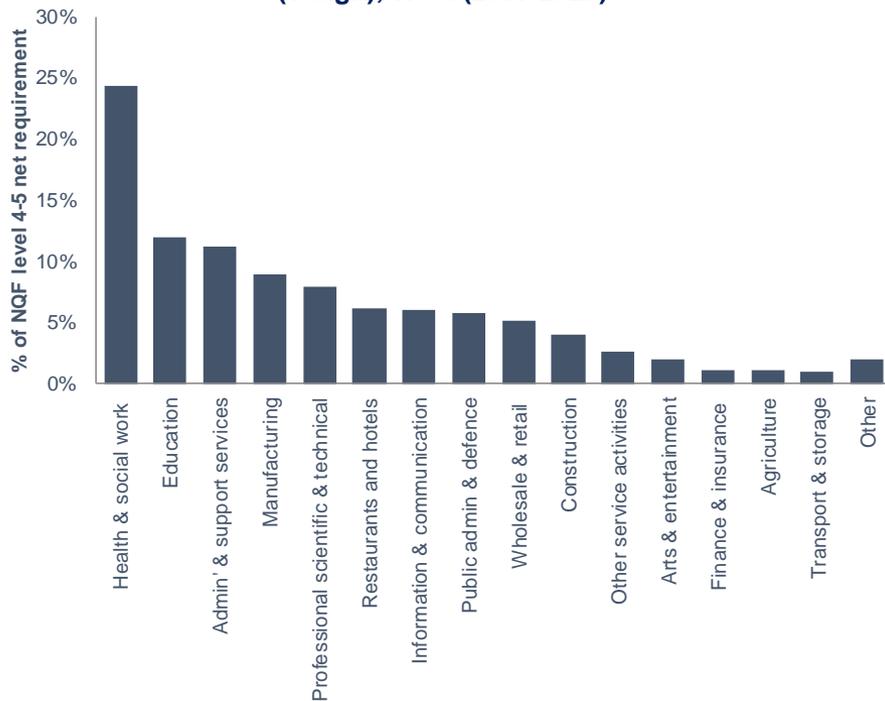
Source: UUEPC

The occupation profile of the net requirement is driven by West's sectoral structure. The occupations which account for the highest proportion of net requirement are science and technology professionals (16% of net requirement), health professionals (15%) and business and public service professionals (14%).

Health and social work sector requires one quarter of sub-degree qualifiers demanded

Average annual net requirement for NQF level 4-5 by sector, West (2017-2027)

Average annual net requirement for NQF level 4-5 by sector (1-digit), West (2017-2027)



Source: UUEPC

Average annual net requirement for NQF level 4-5 by sector (top 15 2-digit), West (2017-2027)

2 digit SIC	% of NQF level 4-5 net requirement
Residential care activities	13.3%
Education	13.1%
Human health activities	9.4%
Public administration and defence; compulsory social security	5.9%
Manufacture of food products	5.5%
Manufacture of machinery and equipment n.e.c.	4.5%
Food and beverage service activities	4.2%
Legal and accounting activities	3.9%
Travel agency, tour operator and other reservation service and related activities	3.1%
Employment activities	2.7%
Civil engineering	2.5%
Wholesale trade, except of motor vehicles and motorcycles	2.5%
Specialised construction activities	2.4%
Publishing activities	2.1%
Manufacture of computer, electronic and optical products	2.0%

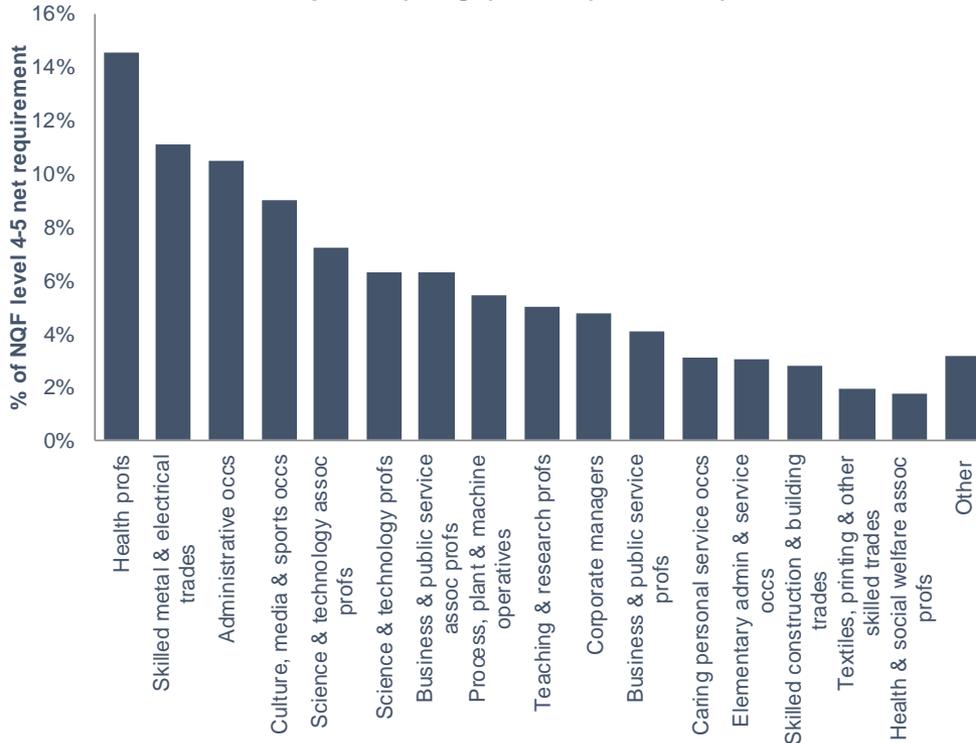
Source: UUEPC

The industry mix of NQF level 4-5 demand is similar to NQF level 6+. The sectors accounting for the largest proportion of NQF level 4-5 net requirement are health and social work (24%), education (12%) and administration and support services (11%).

Health professionals require the highest proportion of sub-degree qualifiers demanded

Average annual net requirement for NQF level 4-5 by occupation, West (2017-2027)

Average annual net requirement for NQF level 4-5 by occupation (2-digit), West (2017-2027)



Average annual net requirement for NQF level 4-5 by occupation (top 15 3-digit), West (2017-2027)

3 digit SOC	% of NQF level 4-5 net requirement
Nursing and midwifery professionals	8.3%
Teaching and educational professionals	5.0%
Health professionals	4.8%
Metal machining, fitting and instrument making trades	4.6%
Artistic, literary and media occupations	4.2%
Administrative occupations: Finance	3.8%
Information technology and telecommunications professionals	3.7%
Sales, marketing and related associate professionals	3.6%
Administrative occupations: Records	3.4%
Design occupations	3.2%
Information technology technicians	3.0%
Metal forming, welding and related trades	2.9%
Science, engineering and production technicians	2.9%
Process operatives	2.8%
Construction and building trades	2.3%

Source: UUEPC

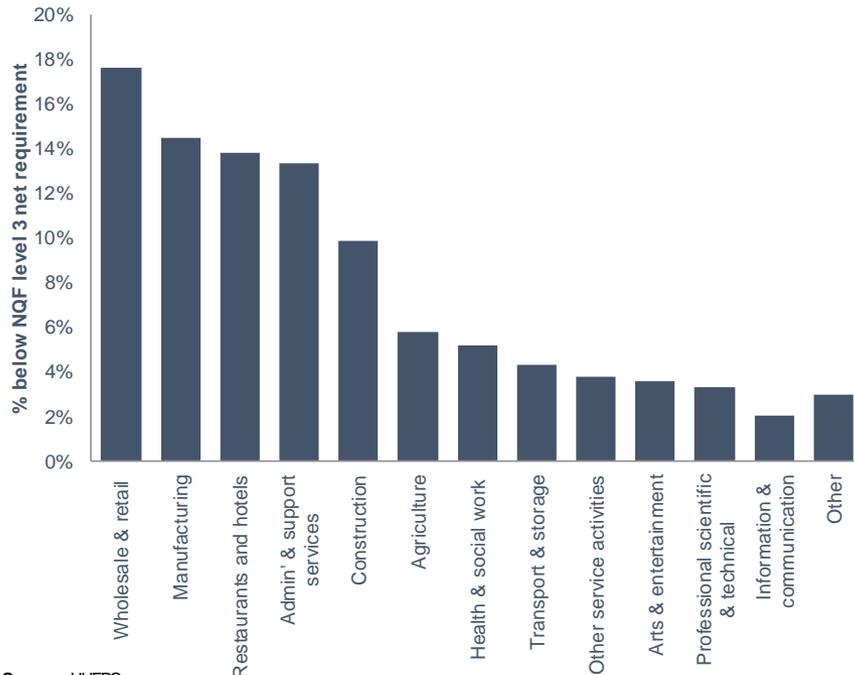
The occupations which account for the largest proportion of the future NQF level 4-5 net requirement are health professionals (15%), skilled metal and electrical trades (11%) and administrative occupations (10%).



Wholesale and retail demands the highest proportion of below NQF level 3 qualifiers

Average annual net requirement for below NQF level 3 by sector, West (2017-2027)

Average annual net requirement for below NQF level 3 by sector (1-digit), West (2017-2027)



Source: UUEPC

Average annual net requirement below NQF level 3 by sector (top 15 2-digit), West (2017-2027)

2 digit SIC	% below NQF level 3 net requirement
Food and beverage service activities	10.9%
Manufacture of food products	10.4%
Specialised construction activities	7.6%
Wholesale and retail trade and repair of motor vehicles and motorcycles	7.0%
Wholesale trade, except of motor vehicles and motorcycles	6.7%
Manufacture of machinery and equipment n.e.c.	5.1%
Civil engineering	4.4%
Land transport and transport via pipelines	4.2%
Crop and animal production, hunting and related service activities	3.8%
Residential care activities	3.4%
Office administrative, office support and other business support activities	3.4%
Travel agency, tour operator and other reservation service and related activities	3.1%
Manufacture of motor vehicles, trailers and semi-trailers	2.8%
Manufacture of basic metals	2.7%
Employment activities	1.6%

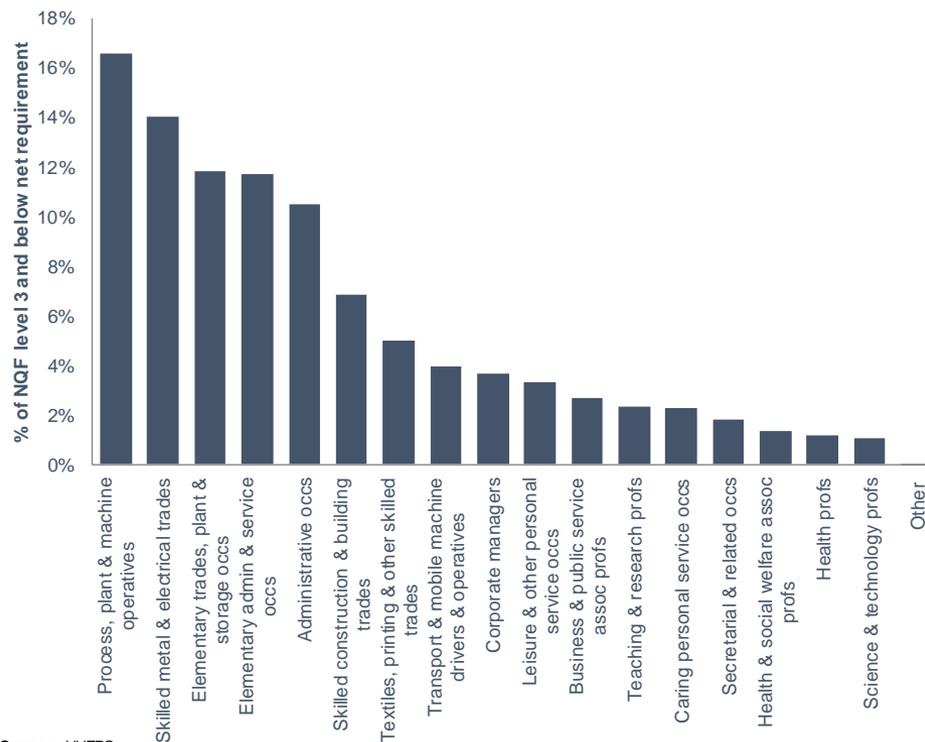
Source: UUEPC

The industry profile of the net requirement at below NQF level 3 varies significantly relative to tertiary level qualifications. The largest proportion of the net requirement is wholesale and retail (18%), manufacturing (15%) and restaurants and hotels (14%). Due to graduate intensity within high growth sectors it is important that job opportunities are available across the skills spectrum.

Process, plant and machine operatives account for the largest proportion of below NQF level 3 demand

Average annual net requirement for below NQF level 3 by occupation, West (2017-2027)

Average annual net requirement for below NQF level 3 by occupation (2-digit), West (2017-2027)



Average annual net requirement for below NQF level 3 by occupation (top 15 3-digit), West (2017-2027)

3 digit SOC	% of below NQF level 3 net requirement
Process operatives	8.7%
Other elementary services occupations	8.0%
Elementary process plant occupations	6.9%
Metal machining, fitting and instrument making trades	5.8%
Construction and building trades	5.7%
Food preparation and hospitality trades	5.3%
Assemblers and routine operatives	3.8%
Administrative occupations: Finance	3.8%
Metal forming, welding and related trades	3.7%
Administrative occupations: Records	3.4%
Elementary construction occupations	3.2%
Road transport drivers	3.0%
Plant and machine operatives	2.5%
Electrical and electronic trades	2.4%
Teaching and educational professionals	2.4%

Source: UUEPC

The occupation profile follows those which are most prevalent within the high demand sectors for low level qualifications. The occupations which account for the most below NQF level 3 net requirement are process plant and machine operatives (17%), skilled metal and electrical trades (14%) and elementary trades, plant and storage occupations (12%).

Summary of demand side qualifications

Net requirement by NQF - It is forecast that 29% of total demand will require at least a degree level qualification, which is below the NI average. However, it is expected only 8% of job opportunities will be available to individuals with a qualification level equivalent to below NQF level 2. Research at an NI level in 2009 highlighted this figure was as high as 22% and has since continued to fall. As qualifications hungry employers squeeze out lower qualified workers, it is expected this trend will continue.

The higher weighting of opportunities for those with degree level qualifications relative to low or no qualifications highlights the need to address educational underachievement within NI.

Workforce qualifications current versus future - Current workforce qualifications do not match expected future qualifications. For example, in West 22% of people employed have NQF level 6+ qualifications compared to 29% forecast for the coming decade.

At mid-level (NQF level 2, 3 and 4-5) qualifications are closely aligned between current and future qualification demands. There is a large gap between the employed with below NQF level 2 (25%) and the future net requirement (11%).

However, current workforce qualifications are skewed by a high proportion of older workers who hold less formal qualifications (relative to younger workers) but are not necessarily low skilled, and so drag down the qualification profile of the workforce.

Net requirement by NQF level 6+ by sector - The graduate intensity within the net requirement differs relatively across sectors. Around two thirds (64%) of net requirement for the ICT require NQF level 6+ qualifications compared to only 34% in health and social. Although there is a large difference in proportionate requirement, the size difference in sectors impacts the number of required graduates. For example, ICT is forecast to require 130 graduates per annum over the next decade compared to 140 in health and social work.

Summary of demand side qualifications (continued)

Net requirement by NQF level 6+ by occupation - The occupation profile of the net requirement at graduate level is shaped by the sectoral structure. The occupations which account for the highest proportion of NQF level 6+ net requirement are science and technology professionals (16%) and health professionals (15%).

Net requirement by NQF level 4-5 by sector - The industry mix for NQF level 4-5 is similar to NQF level 6+. The sectors accounting for the largest proportion of NQF level 4-5 net requirement are health and social work (24%) and education (12%).

Net requirement by NQF level 4-5 by occupation - In the same vein the sectoral structure determines the occupations demanded. The occupation accounting for the largest proportion of net requirement is health professionals (15%) followed by skilled metal and electrical trades (11%).

Net requirement by below NQF level 3 by sector - The sectoral mix of net requirement at below NQF level 3 differs from tertiary level qualifications. The largest proportion of net requirement is within wholesale and retail (18%) followed by manufacturing (15%).

Due to graduate intensity many of the high growth sectors provide very few opportunities for individuals with non-tertiary level qualifications. Therefore the sectors requiring low qualified individuals play a vital role in the local economy, specifically if it is to achieve inclusive growth.

Net requirement by below NQF level 3 by occupation - The occupations which account for the highest proportion of below NQF level 3 net requirement are process plant and machine operatives (17%) and skilled metal and electrical trades (14%).

Demand side – Subjects

Interpreting outputs relating to subject demand

UUEPC's skills model estimates the subjects demand across occupations. The outputs should be interpreted as a rough proxy as at a sub-regional level the demand for skills can be significantly altered by a new large employer (e.g. large FDI firm) or a large employer closing or moving to another area.

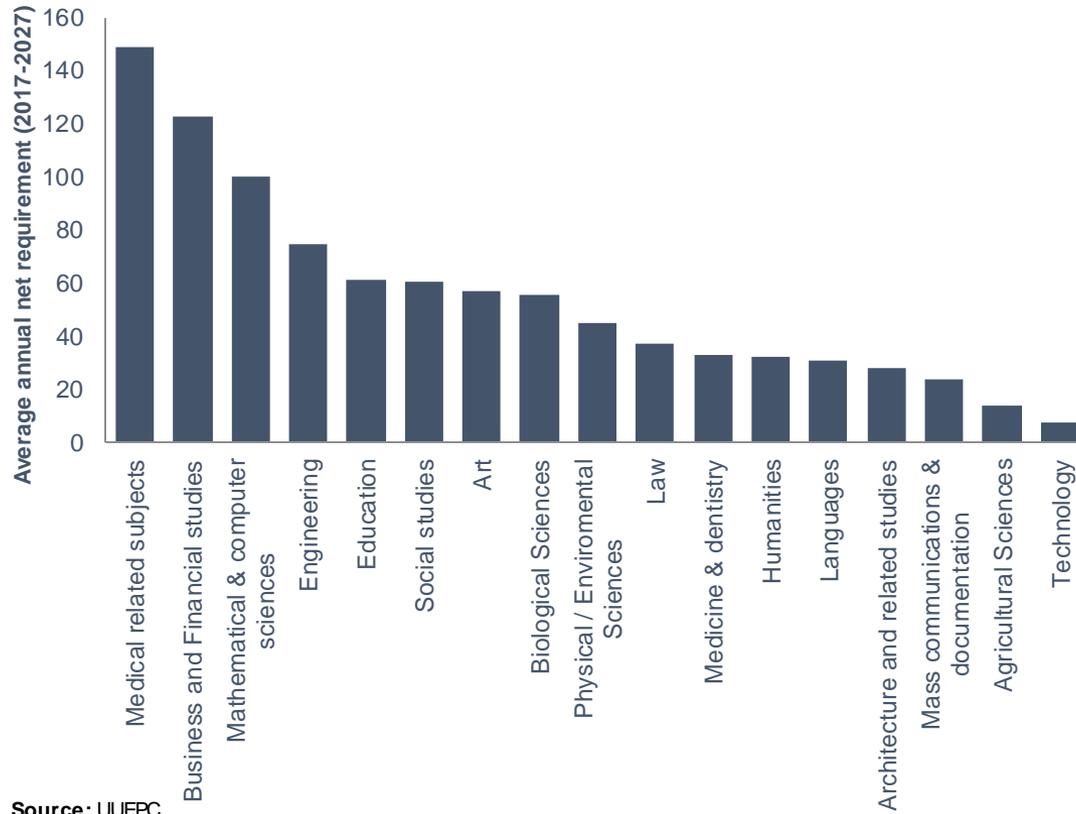
In addition, estimates of future skills demands are based on historic patterns. Therefore it is possible demand in some sectors has the potential to evolve over time changing the required subject mix within sectors (e.g. growth in artificial intelligence or cyber-security).

This section will outline subject demand for:

- NQF level 6+ (undergraduate, masters and PhD); and
- NQF level 4-5 (sub-degree level qualifications).

Medical related subjects account for highest proportion of graduate demand

Average annual net requirement for NQF level 6+ by subject (JACS, 1-digit), West (2017-2027)

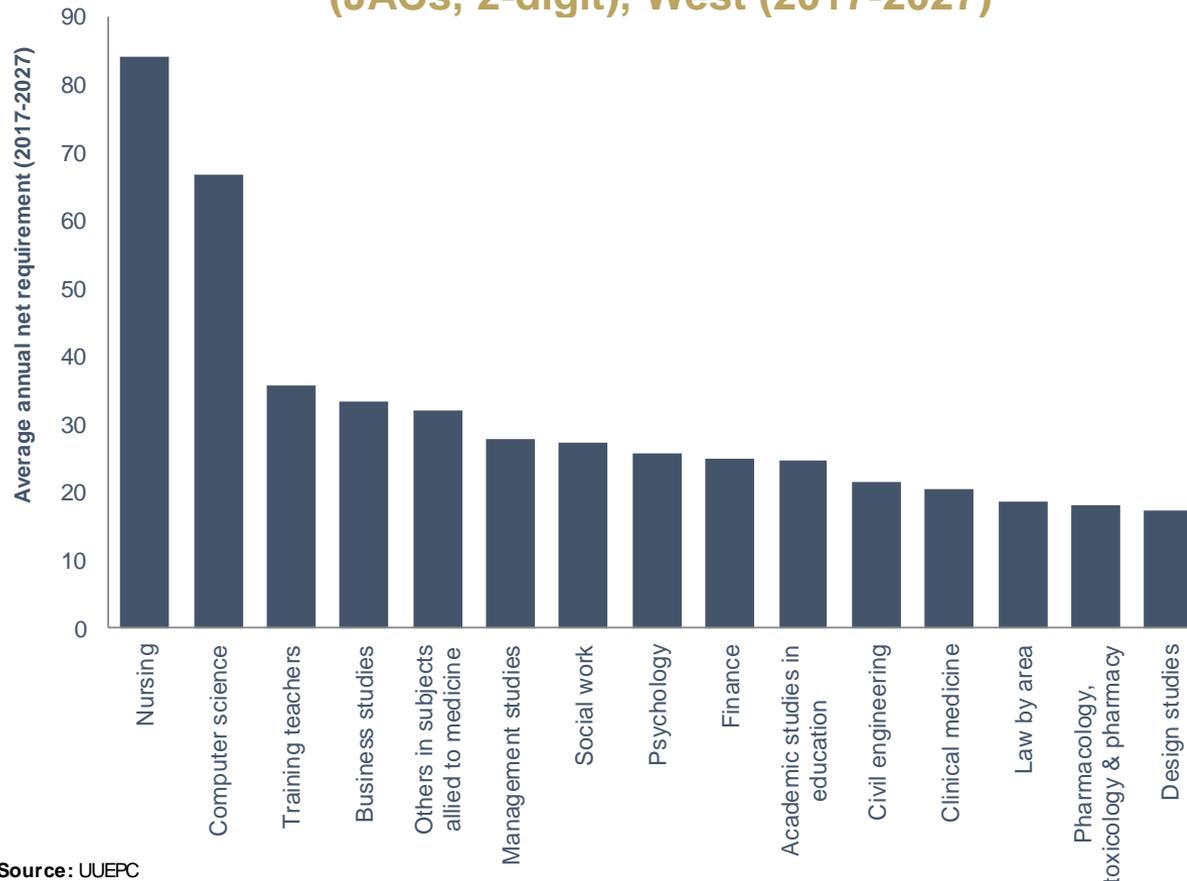


Source: UUEPC

Medical related subjects account for the largest proportion of the NQF level 6+ net requirement (16%). This is followed by business and financial studies (13%) and mathematical and computer sciences (11%).

At a more detailed level nursing accounts for the highest proportion of graduate demand

Average annual net requirement for NQF level 6+ by subject (JACs, 2-digit), West (2017-2027)

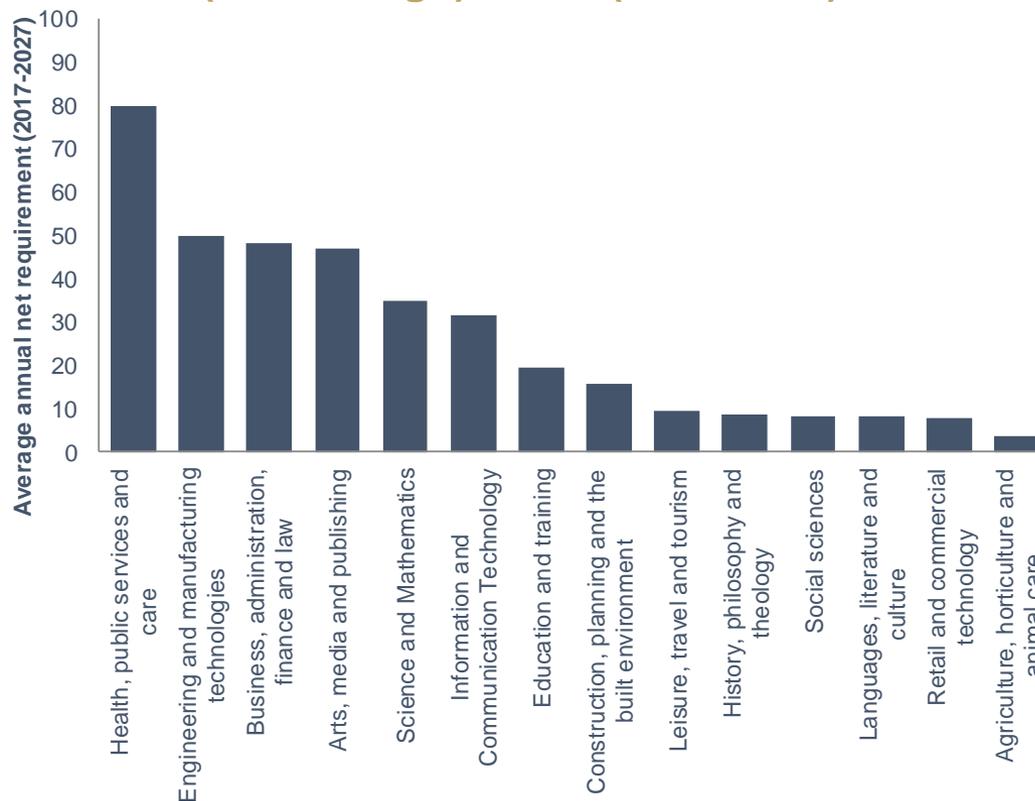


Source: UUEPC

A more detailed analysis highlights that nursing accounts for the highest NQF level 6+ annual net requirement of (85), followed by computer science (70), training teachers (35) and business studies (30).

Health, public services and care account for the largest sub-degree subject demand

Average annual net requirement for NQF level 4-5 by subject (SSA, 1-digit), West (2017-2027)



Source: UUEPC

At a sub-degree level the largest proportion of the net requirement is in health, public services and care (22%), followed by engineering and manufacturing technologies (13%) and business, administration, finance and law (13%).

Summary of demand side subjects

Interpreting subject demand - Subject outputs should be interpreted as a rough guide as at a sub-regional level many factors can have a significant influence on net requirement. For example, a new large employer, the closure of a large employer or move of a large employer elsewhere.

The largest subject demand is in medical related subjects, driven by large replacement demand within the health and social work sector. A strong expansion demand in professional services also drives a relatively high net requirement for subjects such as business studies and finance and mathematical and computer science.

Net requirement by NQF level 6+ subjects - The subject which accounts for the largest proportion of NQF level 6+ demand is medical related subjects (16%). This is followed by business and financial studies (13%) and maths and computer science (11%).

Granular level analysis can provide detailed insight. For example, nursing accounts for the largest proportion of NQF level 6+ net requirement. The next largest subjects in demand at a detailed level are computer science and business studies.

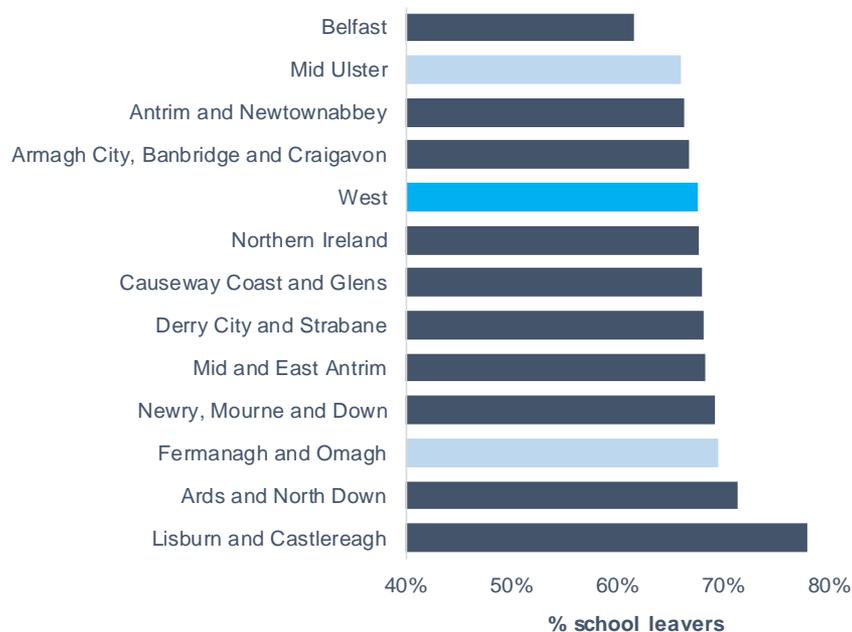
Net requirement by NQF level 4-5 subjects - The largest subject in demand at a sub-degree level is health, public services and care (22% of the NQF level 4-5 net requirement). The next largest sub-degree subjects in demand are engineering and manufacturing technologies (13% of the NQF level 4-5 net requirement) driven by a large manufacturing sector, followed by business, administration, finance and law (13%).

Supply side – School leavers achievement

West's school leavers perform marginally below NI average at GCSE level

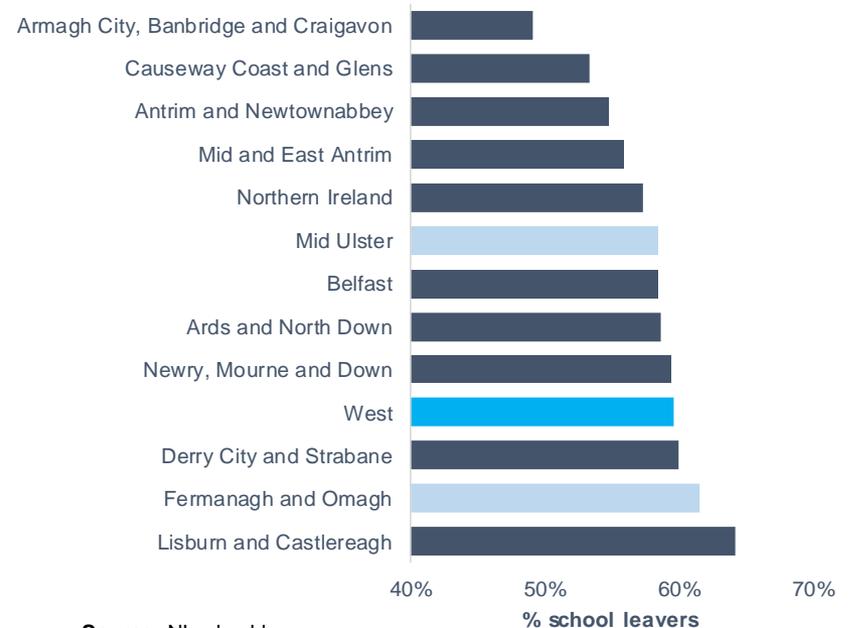
GCSE and A-level attainment of school leavers, LGDs (2015/16)

Proportion (%) of school leavers achieving 5+ GCSEs A*-C including English and maths, LGDs (2015/16)



Source: NI school leavers survey

Proportion (%) of school leavers achieving 2+ A-levels A*-E, LGDs (2015/16)



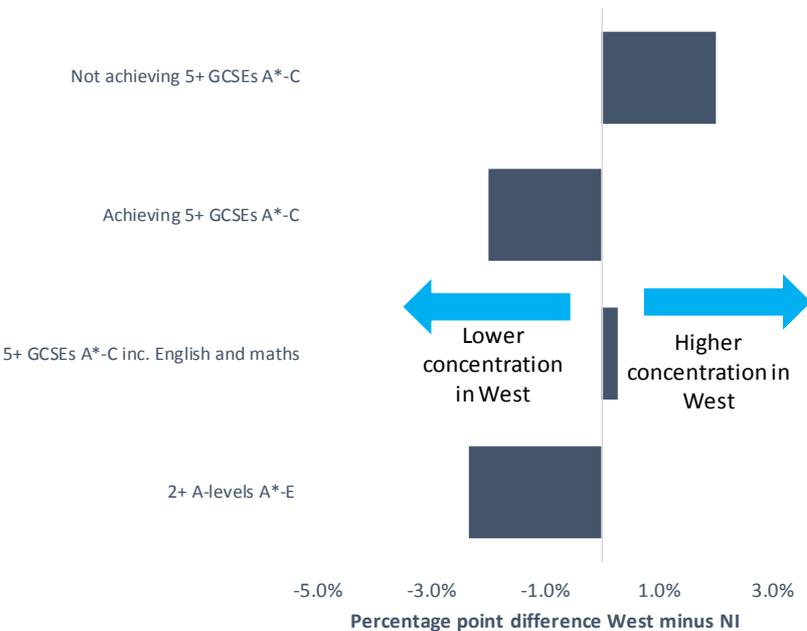
Source: NI school leavers survey

There is a difference in the A-level and GCSE performance of the two LGDs which constitute West. For example, in Fermanagh and Omagh 62% of school leavers achieve 2+ A-levels A*-E compared to 58% in Mid Ulster. Likewise, 66% of school leavers achieve 5+ GCSEs A*-C including English in maths in Mid Ulster, compared to 70% in Fermanagh and Omagh.

Relatively weak improvement in the proportion school leavers achieving 5+ GCSEs A*-C inc. English and maths

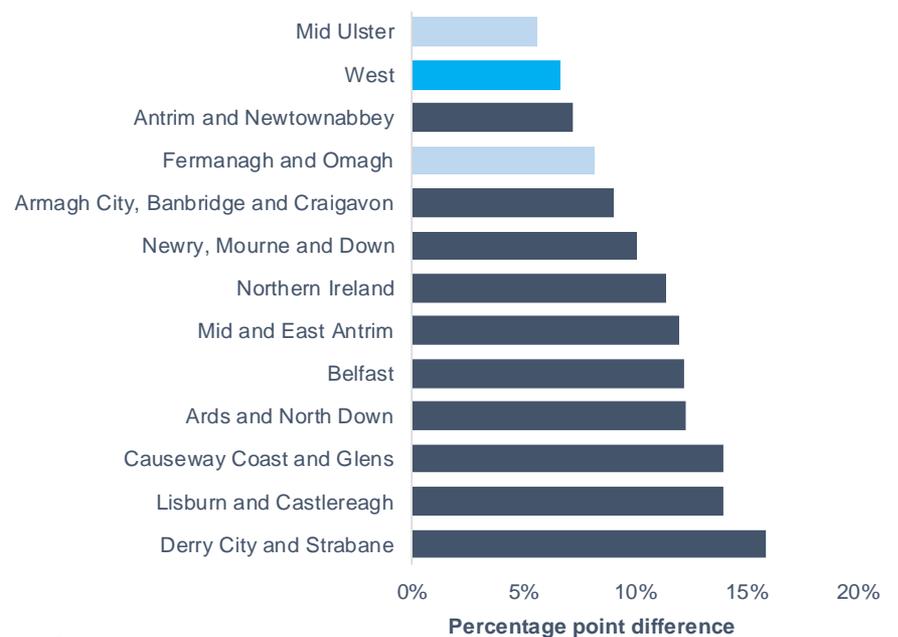
Skill structure of school leavers (2015/16) and change in performance (2007/08-2015/16)

Percentage point difference in qualifications of school leavers, West versus NI (2015/16)



Source: NI school leavers survey

Percentage point difference in school leavers achieving 5+ GCSEs A*-C including English and maths, LGDs (2007/08-2015/16)

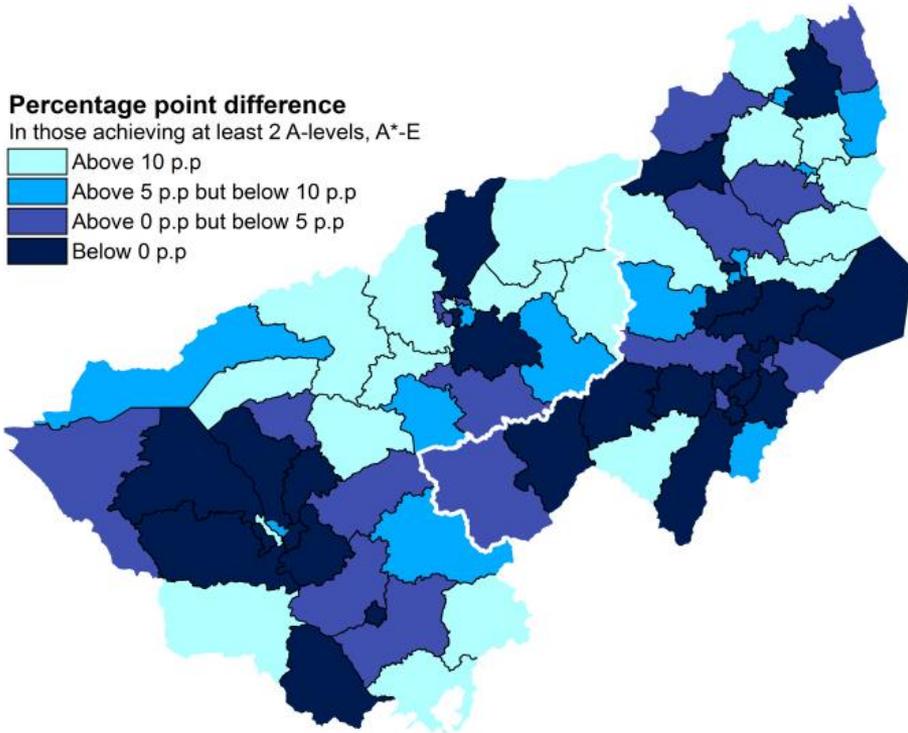


Source: NI school leavers survey

The rate of school leavers achieving 5+ GCSEs A*-C including English and maths in West has improved by 7 percentage points over the 8 year period 2007/08-2015/16.

Are there lessons to be learned from schools in improving areas?

Percentage point difference in proportion (%) of school leavers achieving 2+ A-levels A*-E, West (2007-2010 versus 2013-2016)



Most Improved Wards in West

	Ward	LGD	p.p. change
1	Newtownbutler	Fermanagh and Omagh	29%
2	Drumquin	Fermanagh and Omagh	27%
3	Dromore	Fermanagh and Omagh	23%
4	Trillick	Fermanagh and Omagh	18%
5	Coagh	Mid Ulster	16%
6	Drumnakilly	Fermanagh and Omagh	16%
7	Strule	Fermanagh and Omagh	15%
8	Fairy Water	Fermanagh and Omagh	14%
9	Florence Court and Kinawley	Fermanagh and Omagh	14%
10	Ballymaguigan	Mid Ulster	14%
11	The Loup	Mid Ulster	13%
12	Termon	Fermanagh and Omagh	13%
13	Tobermore	Mid Ulster	13%
14	Swatragh	Mid Ulster	12%
15	Edemey and Kesh	Fermanagh and Omagh	12%
16	Castledawson	Mid Ulster	12%
17	Town Parks East	Mid Ulster	12%
18	Rosslea	Fermanagh and Omagh	11%
19	Oaklands	Mid Ulster	11%
20	Portora	Fermanagh and Omagh	11%

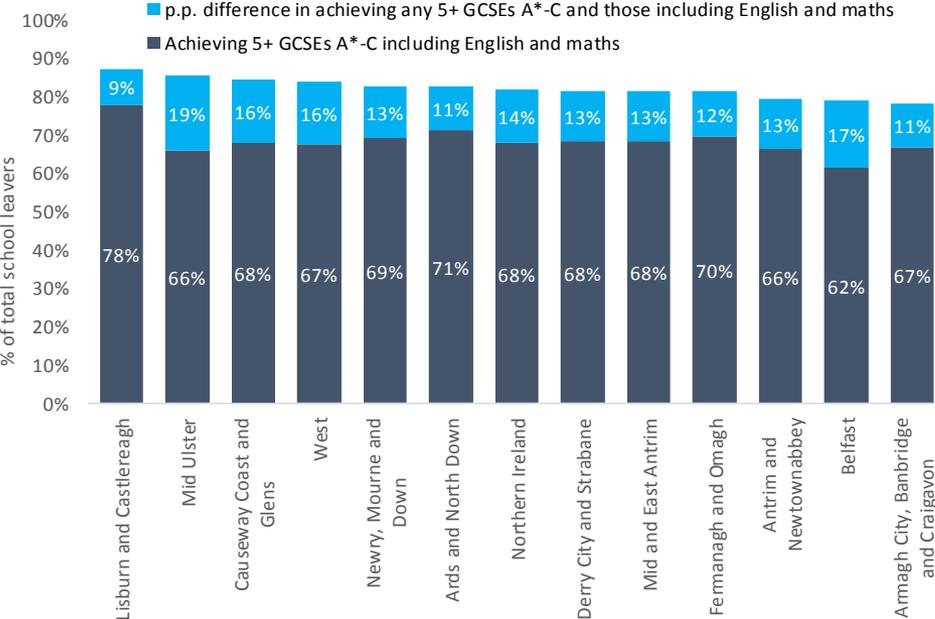
Source: NI School Leavers Survey

To improve school achievement it is important to look at good practice in order to understand what works in which contexts. Analysis of school leaver achievements in West at a granular level highlights a 29 percentage point improvement in Newtownbutler and a 27 percentage point improvement in Drumquin over the period 2007/08-2015/16. These are the 1st and 2nd most improved wards across all 462 wards.

16% of NQF level 2 school leavers are not achieving a pass grade in core subjects English and maths

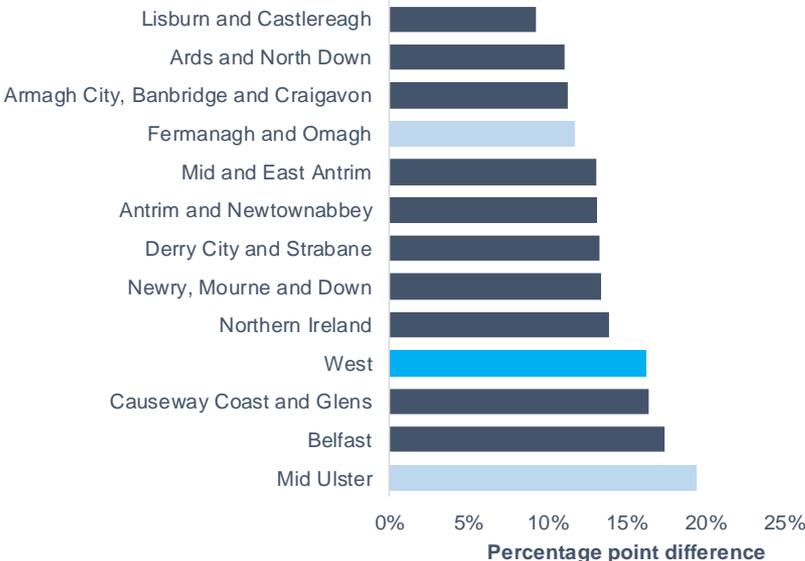
School leavers achieving any 5 GCSEs A*-C and those that include English and maths, LGDs (2015/16)

Proportion (%) of school leavers achieving 5+ GCSEs and those including and excluding English and maths, LGDs (2015/16)



Source: NI school leavers survey

P.p. difference in rate of school leavers achieving 5+ GCSEs A*-C, including English and maths versus not including English and maths, LGDs 2015/16



Source: NI school leavers survey

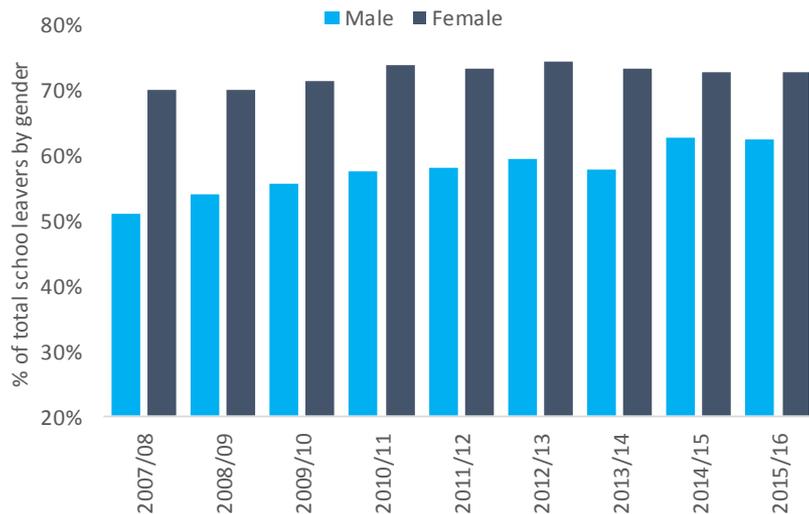
At least a pass grade in English and maths at GCSE is often a prerequisite for jobs and a precondition for education and training courses. A high difference between the proportion of school leavers achieving this and those not represents potential barriers to labour force participation. In West of the 2,700 school leavers that qualified with at least 5+ GCSE's A*-C 1,000 did not achieve a pass grade in English and maths.



Females consistently outperform males school attainment across West

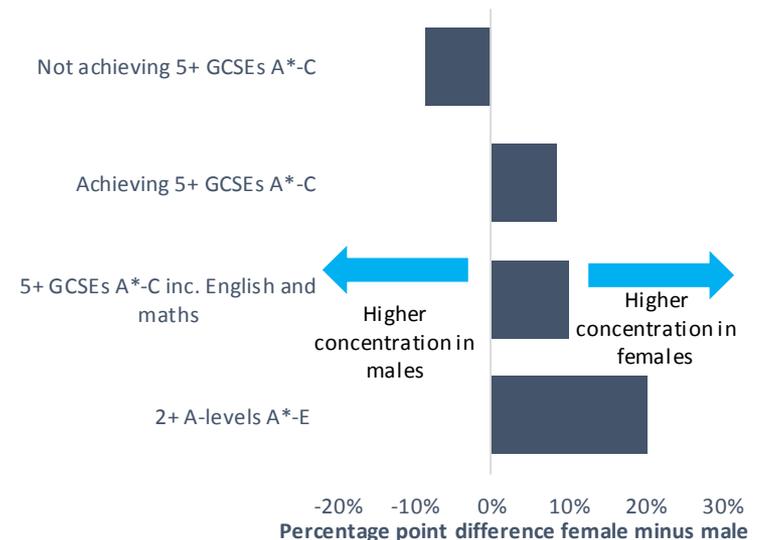
School leavers achieving 5+ GCSEs A*-C including English and maths, male versus female, West (2015/16)

Proportion (%) of school leavers achieving 5+ GCSEs A*-C including English and maths, male versus female, West (2007/08-2015/16)



Source: NI school leavers survey

Percentage point difference in school leavers qualification level, male versus female, West (2015/16)



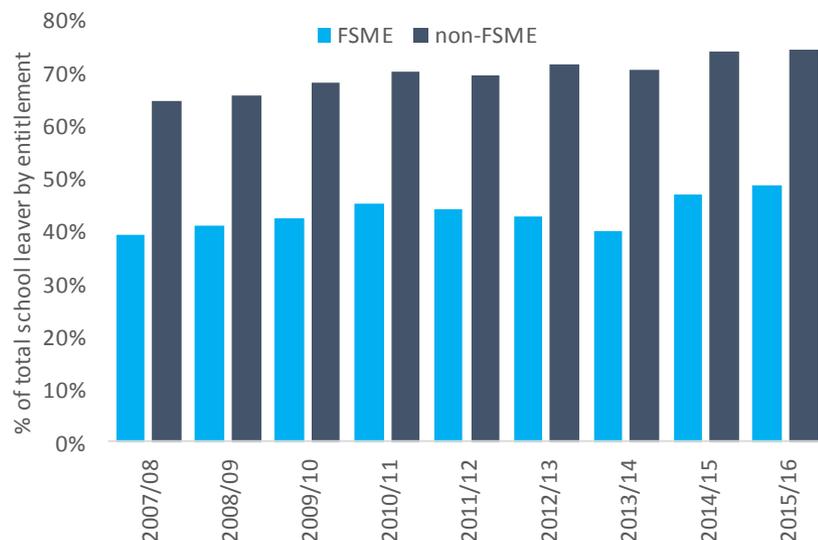
Source: NI school leavers survey

Gender analysis highlights female school leavers in West tend to outperform male school leavers across both GCSE and A-level attainment. For example, the difference in the rate of female and male school leavers achieving 2+ A-levels A*-E is 20 percentage points. This compares to a difference of 17 percentage points across NI as a whole.

FSME achievement is improving, but the gap is narrowing slowly

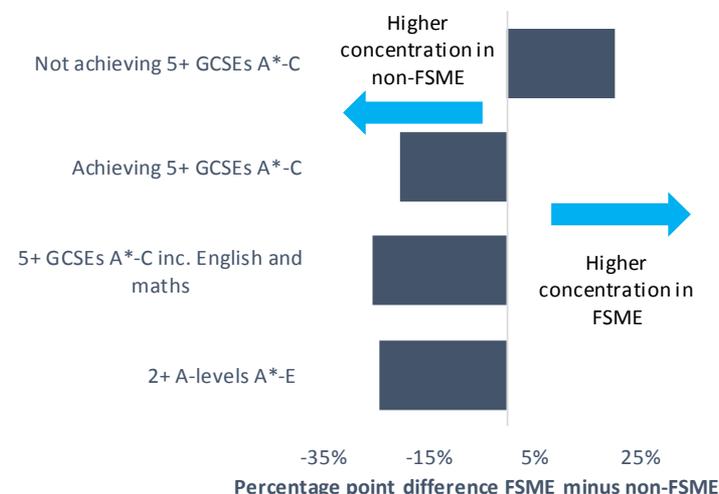
School leavers achieving 5+ GCSEs A*-C including English and maths, FSME versus non-FSME, West (2015/16)

Proportion (%) of school leavers achieving 5+ GCSEs A*-C including English and maths, FSME versus non-FSME, West (2007/08-2015/16)



Source: NI school leavers survey

Percentage point difference in school leavers qualification level, FSME vs non-FSME, West (2015/16)



Source: NI school leavers survey

School leaver qualification profile (NQF) by gender and FSME, West (2015/16)

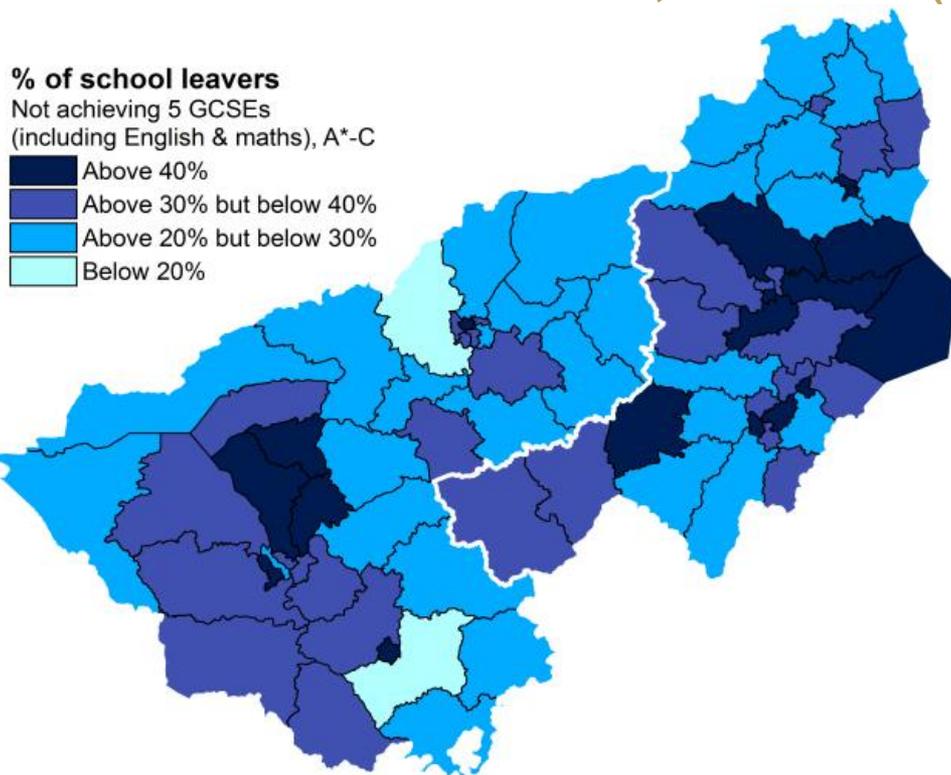
Qualification level	Male			Female		
	FSME	non-FSME	Percentage point difference	FSME	non-FSME	Percentage point difference
2+ A-levels A*-E	33%	56%	-23%	52%	77%	-25%
5+ GCSEs A*-C inc. English and maths	46%	69%	-23%	52%	80%	-28%
Any 5+ GCSEs A*-C	63%	86%	-23%	75%	93%	-18%
Not achieving 5+ GCSEs A*-C	37%	14%	23%	25%	7%	18%

Source: NI school leavers survey

Note: Percentage point difference refers to FSME minus non-FSME

Areas within West where a high rate of school leavers do not achieve the minimum standard required by employers

Proportion (%) of school leavers not achieving 5 GCSEs (A*-C) including English and maths, West wards (2013/14 – 2015/16)



Lowest achievers in West

	Ward	LGD	%
1	Ballysaggart	Mid Ulster	53%
2	Loughry	Mid Ulster	49%
3	Ardboe	Mid Ulster	49%
4	Strule	Fermanagh and Omagh	46%
5	Coagh	Mid Ulster	46%
6	Town Parks East	Mid Ulster	46%
7	Lisnaskea	Fermanagh and Omagh	45%
8	Ballinamallard	Fermanagh and Omagh	44%
9	Rossorry	Fermanagh and Omagh	43%
10	Lissan	Mid Ulster	43%

Highest achievers in West

	Ward	LGD	%
1	Donagh	Fermanagh and Omagh	12%
2	Fairy Water	Fermanagh and Omagh	15%
3	Newtownsaville	Fermanagh and Omagh	20%
4	Swatragh	Mid Ulster	21%
5	Lower Glenshane	Mid Ulster	21%
6	Dromore	Fermanagh and Omagh	21%
7	Camowen	Fermanagh and Omagh	21%
8	Brookeborough	Fermanagh and Omagh	21%
9	Owenkillew	Fermanagh and Omagh	22%
10	Newtownbutler	Fermanagh and Omagh	22%

Source: NISRA, NI School Leavers Survey

The ward with the poorest school attainment in West is Ballysaggart (Mid Ulster) where 53% of school leavers fail to achieve 5+ GCSEs A*-C including English and maths. This is ranked 429th out of 462 wards in NI. On the other hand in Donagh (Fermanagh and Omagh) only 12% of school leavers fail to achieve 5+ GCSEs A*-C including English and maths, which is ranked 10th out of 462 wards.

West accounts for a lower number of low achieving areas

School leavers not achieving 5 GCSEs A*-C including English and maths, Wards (2015/16)

	% of total wards	% of wards in lowest performing quartile	% of wards in lowest performing decile
Antrim and Newtownabbey	9%	12%	15%
Armagh City, Banbridge and Craigavon	9%	8%	9%
Belfast	13%	24%	39%
Causeway Coast and Glens	9%	7%	7%
Derry City and Strabane	9%	12%	4%
Fermanagh and Omagh	9%	3%	0%
Lisburn and Castlereagh	9%	4%	4%
Mid and East Antrim	9%	7%	11%
Mid Ulster	9%	9%	2%
Newry, Mourne and Down	9%	6%	2%
Ards and North Down	9%	8%	7%
Northern Ireland	100%	100%	100%
West	17%	12%	2%

Source: NI school leavers survey

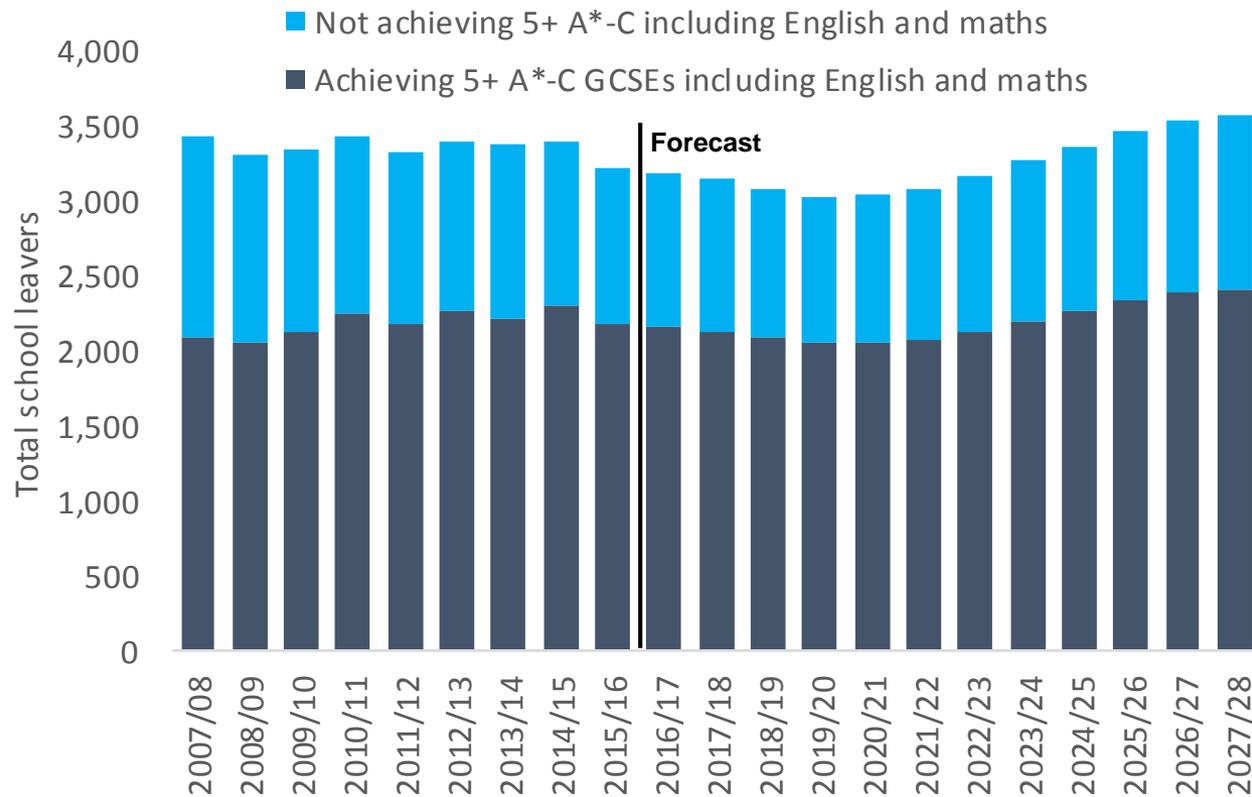
An analysis of school performance using small geographical areas highlights if an area has a proportionate or disproportionate share of pupils underachieving.

West accounts for 17% of total wards and only 12% of those in the lowest performing quartile in relation to school leavers achieving 5+ GCSE's A*-C including English and maths.

This is influenced by Fermanagh and Omagh accounting for 9% of total NI wards but only 3% of wards within the lowest performing quartile and 0% of wards in the lowest performing decile.

Potentially 11.6k pupils to leave school by 2027 without achieving 5 GCSE's A*-C inc English and maths

School leavers achieving 5+ GCSEs A*-C including English and maths and those not, West (2007/08-2027/28)



Source: UUEPC, NI school leavers survey

Summary of school leavers attainment

2+ A-levels A*-E - The proportion of West's school leavers achieving 2+ A-levels A*-E performs above the NI average, 60% and 57% respectively.

It is important to note the performance of the two LGDs which constitute West ranges from 58% of school leavers in Mid Ulster achieving 2+ A-levels A*-E to 62% of Fermanagh and Omagh – a 4 percentage point difference.

5+ GCSEs A*-C - The rate of school leavers in West achieving 5+ GCSEs A*-C including English and maths performs marginally below the NI average, 67% in West compared to 68% in NI.

The rate of school leavers achieving 5+ GCSEs A*-C including English and maths has increased by 7 percentage points over the period 2007/08-2015/16. This improvement is relatively lower than the NI average.

GCSE's and employability - The difference between the proportion of school leavers achieving 5+ GCSEs A*-C including English and maths and those not including English and maths is important from an employability context. At least a pass grade in the two subjects is often a prerequisite for many jobs in the labour market, as well as a pre-condition for entry to many education and training courses. A high difference between the two achievements in the area could indicate a barrier to labour force participation.

In West of the 2,700 school leavers that qualified with at least 5+ GCSE's A*-C 1,000 did not achieve a pass grade in English and maths.

Summary of school leavers attainment (continued)

Male versus female - There are also gender differences in the attainment of school leavers wherein females out perform males. For example, a higher proportion of females achieved 2+ A-levels A*-E, 5+ GCSEs A*-C including English and maths and any 5+ GCSEs A*-C, relative to males. Whereas males are more likely to not achieve 5+ GCSEs A*-C.

FSME - Broadly speaking pupils receiving FSME have a significantly lower level of school attainment relative to their peers not in receipt of FSME. For example, 49% of FSME school leavers achieve 5+ GCSEs A*-C including English and maths compared to 74% of those who are not in receipt of FSME.

Whilst the attainment of pupils receiving FSME has improved over time, so too has those not in receipt of FSME meaning the gap has remained largely unchanged. This suggests a lower rate of enrolment in tertiary level education courses is likely amongst children who are socioeconomically deprived, relative to their more affluent peers.

Future attainment - Assuming current school participation and performance rates it is estimated that 11,600 children resident in West over the period 2017-2027 will leave the school system without achieving the minimum standard education expected by most employers i.e. 5+ GCSEs A*-C including English and maths.

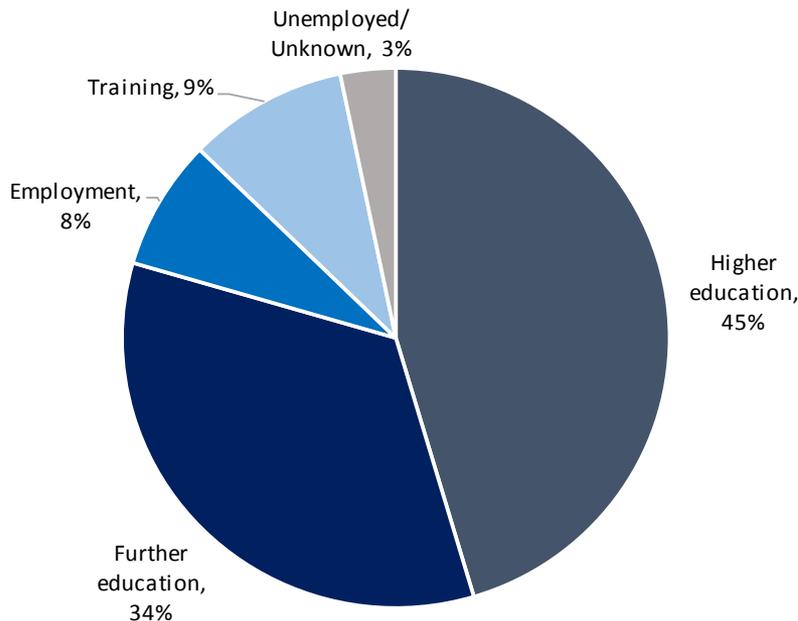
A high proportion of low achievers puts pressure on other parts of the education system. For example, high enrolment in low NQF level courses at FE which are publically funded, as well as participation in Government training courses Essential Skills and Training for Success (TfS).

Supply side – Destination of school leavers

Higher Education is the most common destination for school leavers in West

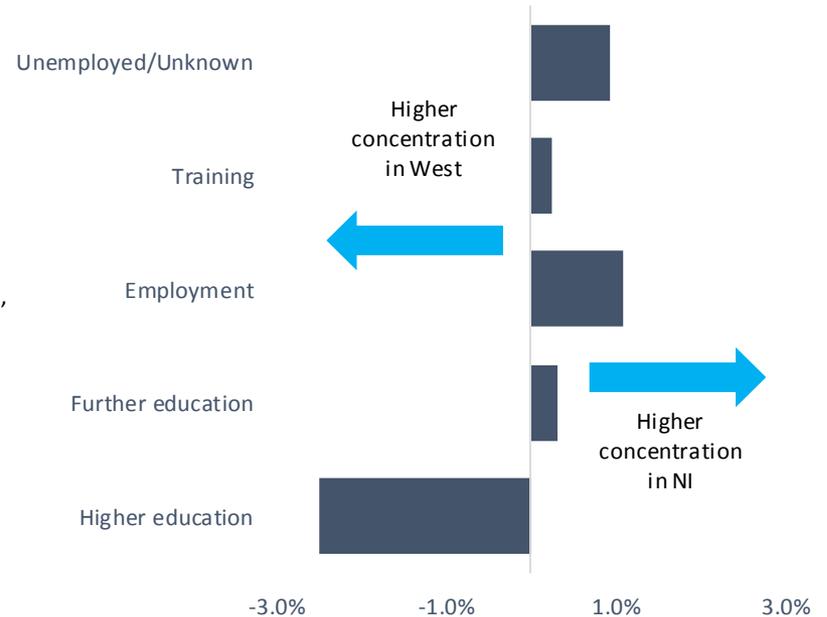
Destination of school leavers, West versus NI (2015/16)

Destination of school leavers, West (2015/16)



Source: NI school leavers survey

Percentage point difference in destination of school leavers, West versus NI (2015/16)

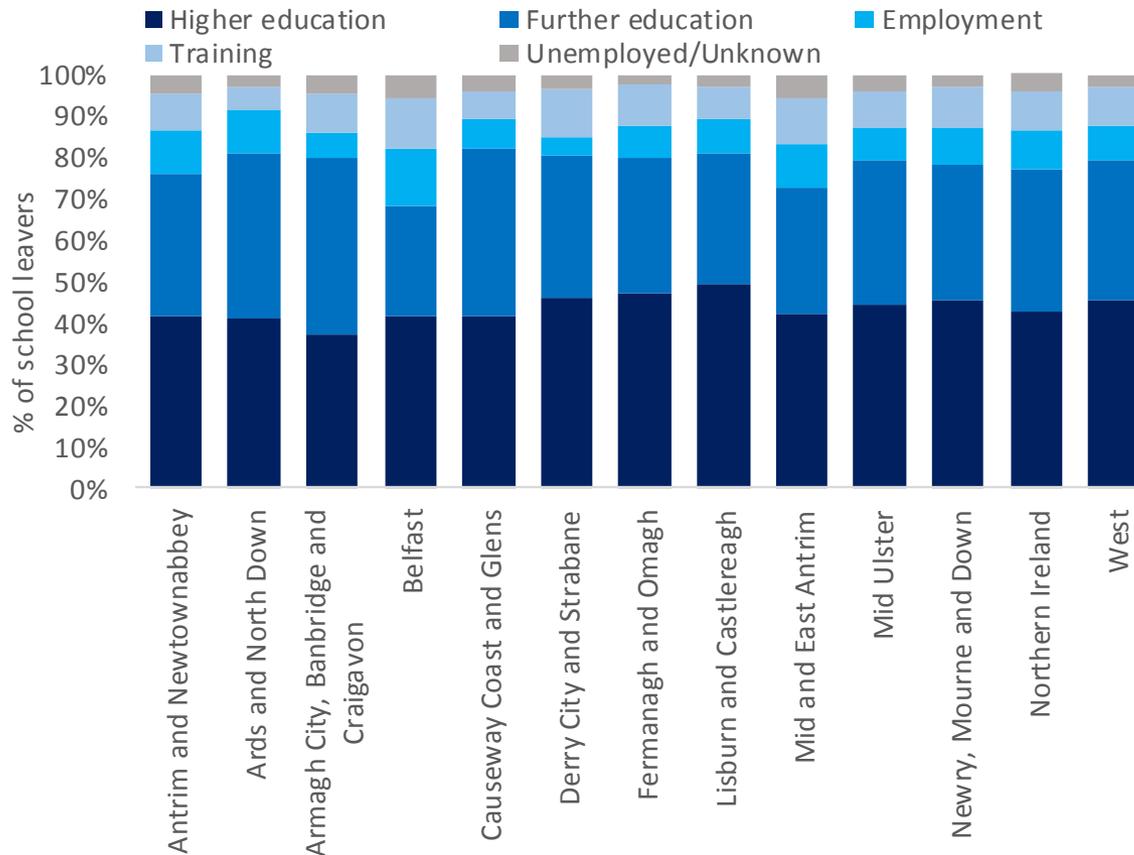


Source: NI school leavers survey

Amongst West's school leavers higher proportions of enter Higher Education (HE), and lower proportions enter employment, relative to the NI average.

HE is the most common destination for school leavers in West

Destination of school leavers, LGDs (2015/16)



Source: NI school leavers survey

Summary of destination of school leavers

Higher Education - The most common destination of school leavers is HE, accounting for 45% of total (marginally above the NI average). This is influenced by the school attainment across the region, where East's education outcomes are similar to the NI average.

Almost half (47%) of school leavers in Fermanagh and Omagh which is the second highest rate amongst LGD's. This LGD also constitutes the second highest proportion of school leavers achieving 2+ A-levels A*-E (62%) and third highest proportion achieving 5+ GCSEs A*-C including English and maths (70%).

Further Education (FE) - The second most common destination of school leavers is FE, accounting for 34% of West's school leavers, equal to the NI average. The levels are broadly similar across the LGD's which comprise West, 34% in Mid Ulster and 33% in Fermanagh and Omagh.

Employment - The proportion of school leavers moving into employment is slightly below the NI average, 8% and 9% respectively.

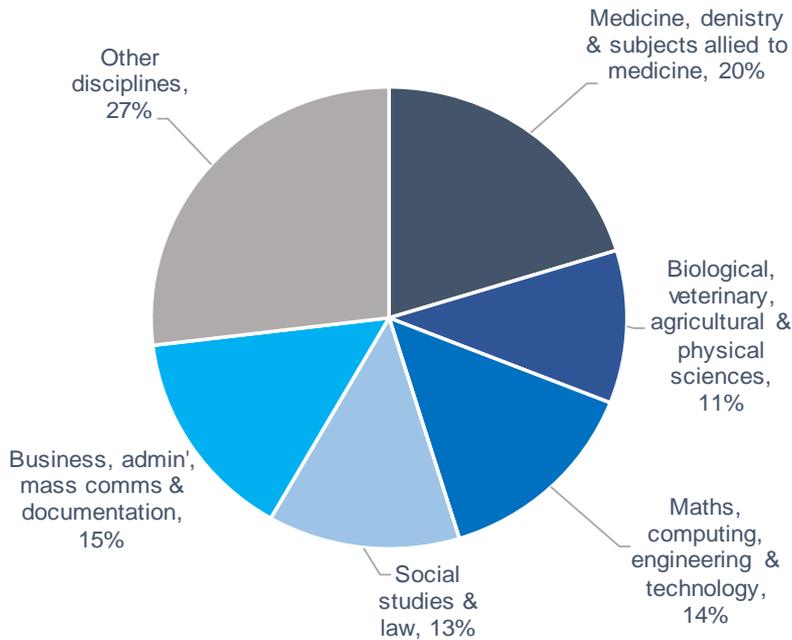
Training/unemployed/unknown - A combination of training, unemployed and unknown as destinations of leavers accounts for 12% of West's leavers compared to 14% for NI average. This ranges from 13% of school leavers in Mid Ulster to 12% in Fermanagh and Omagh.

Supply side – Post secondary education

Marginally higher concentration of maths and technology subjects studied relative to NI

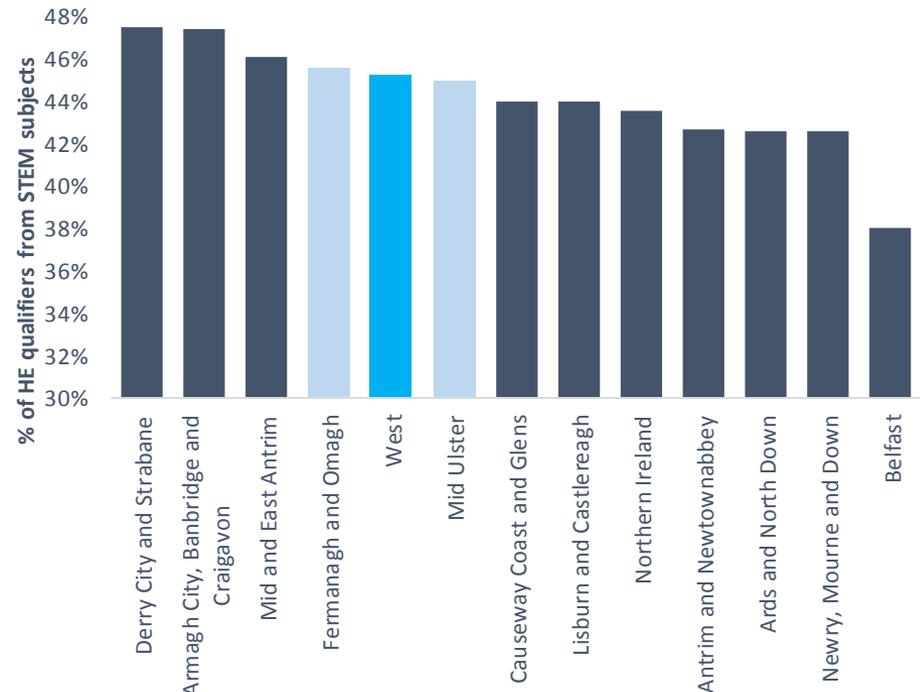
Subject studied at Higher Education, West versus NI (2015/16)

Subject studied at Higher Education, West (2015/16)



Source: NINIS

HE qualifiers from STEM related subjects, LGDs (2015)



Source: NINIS

In West 45% of students qualify from a broad STEM related subjects, marginally above the NI average (44%). The figure is driven by the rate in Fermanagh and Omagh where 46% of HE leavers qualify from broad STEM related subjects.

Despite relatively higher rates of STEM qualifiers, an undersupply still exists in STEM subject areas

Current versus future subject profile of NQF level 6+, West (2015, 2017-2027)*

	% distribution of qualifiers (2015)	% distribution of net requirement (2017 - 2027)	p.p. difference
Medicine, dentistry, subjects allied to medicine	20%	20%	1%
Biological, veterinary, agricultural & physical sciences	11%	12%	-2%
Maths, computing, engineering and technology	14%	20%	-5%
Social studies & law	13%	10%	3%
Business, administration, mass communication and documentation	15%	16%	-1%
All other disciplines	27%	22%	4%

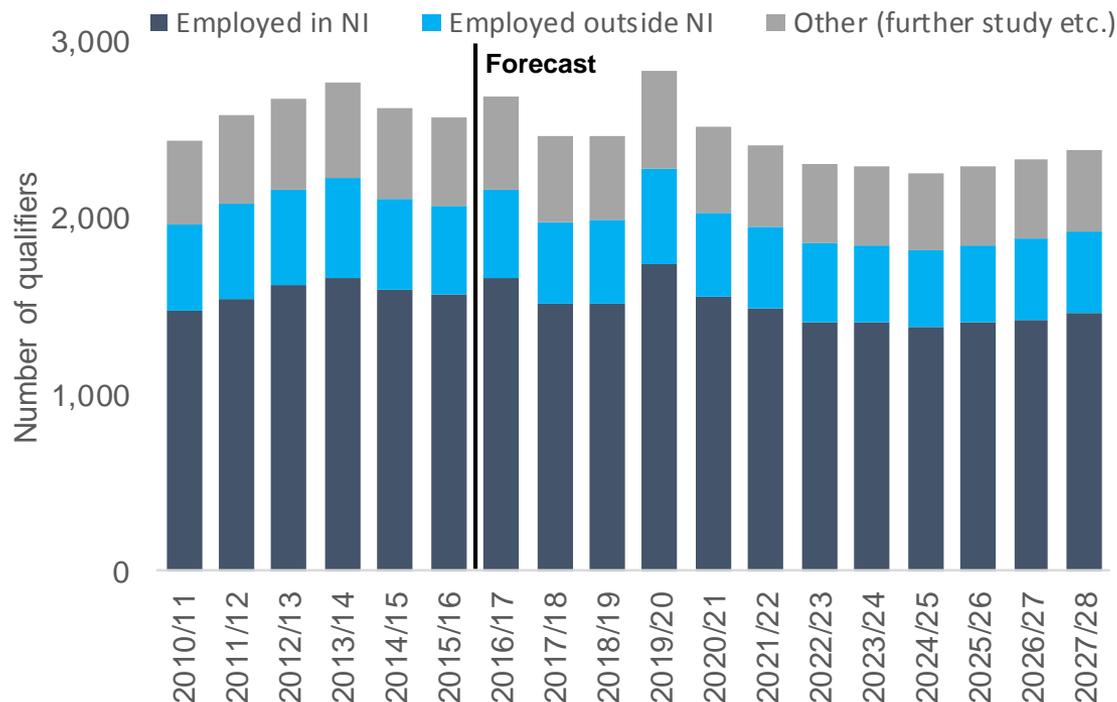
Source: NINIS

Considering the current subject profile of graduates against forecast net requirement identifies some imbalances. For example, currently 14% of graduates qualify from maths, computing, engineering and technology subjects. However, the net requirement of NQF level 6+ qualifications is forecast to demand 20% of graduates from subjects of maths, computing, engineering and technology.

*It should be noted, the subject groupings at LGD level are too broad to draw any firm conclusions from.

Over the coming decade 460 HE qualified West residents will work outside NI

Location of HE qualifiers 6 months after graduating, West (2010/11-2027/28)



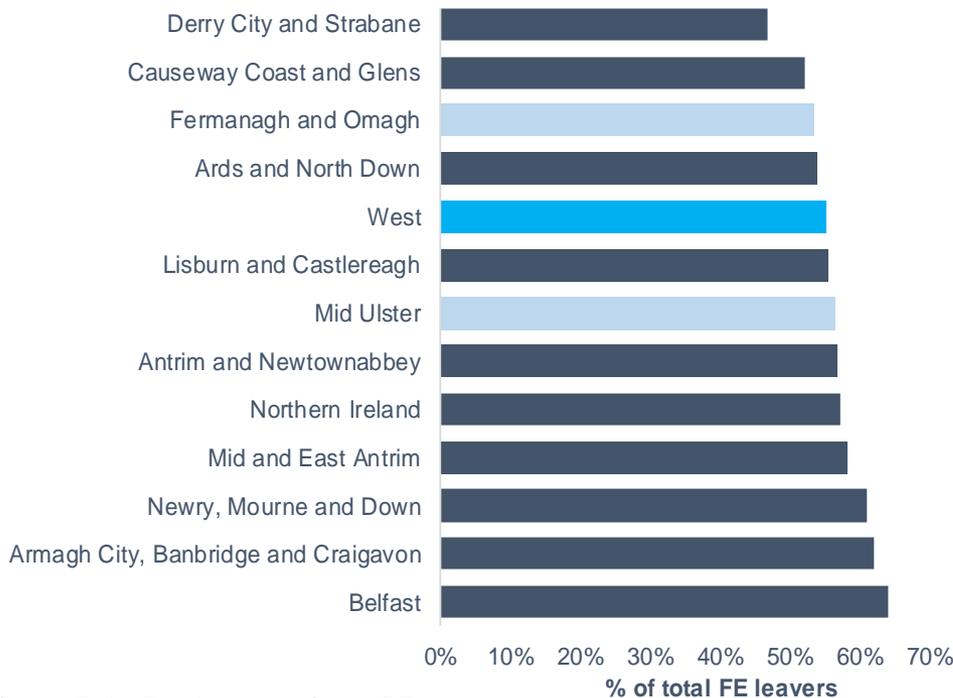
Source: DfE, NINIS

Approximately 65% of employed NI qualifiers who graduate from GB HE institutions have not returned home 6 months after graduating. Of employed NI domiciled qualifiers from NI HE institutions 11% are recorded outside NI 6 months after graduating. Assuming the same proportions apply to West residents, this would imply a brain drain of 460 highly skilled West residents in 2015.

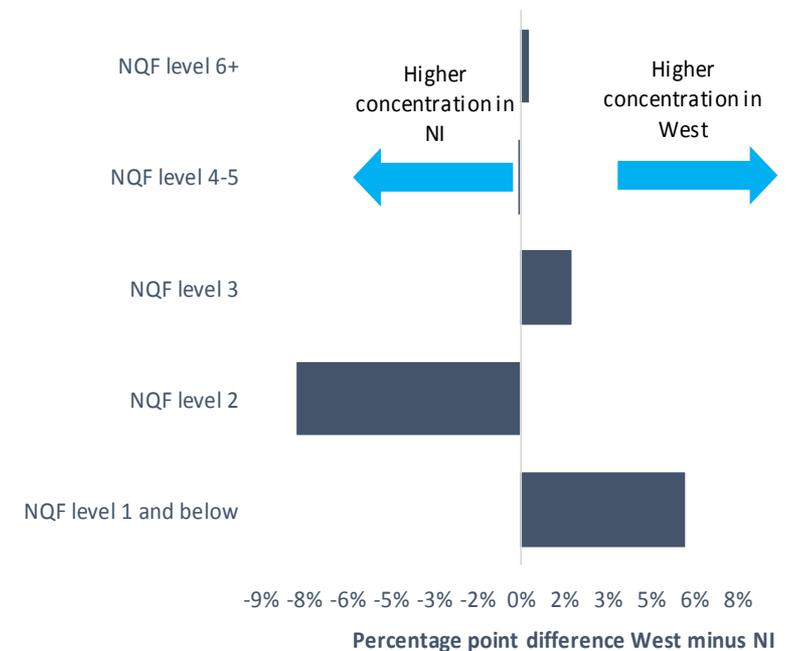
Higher concentration of NQF level 1 and below FE leavers in West

Qualification (NQF) profile of FE leavers, West versus NI (2016/17)

Further Education leavers (%) achieving NQF level 2 or below, LGDs (2016/17)



Percentage point difference in FE leavers achieving qualification level, West versus NI, LGDs (2016/17)



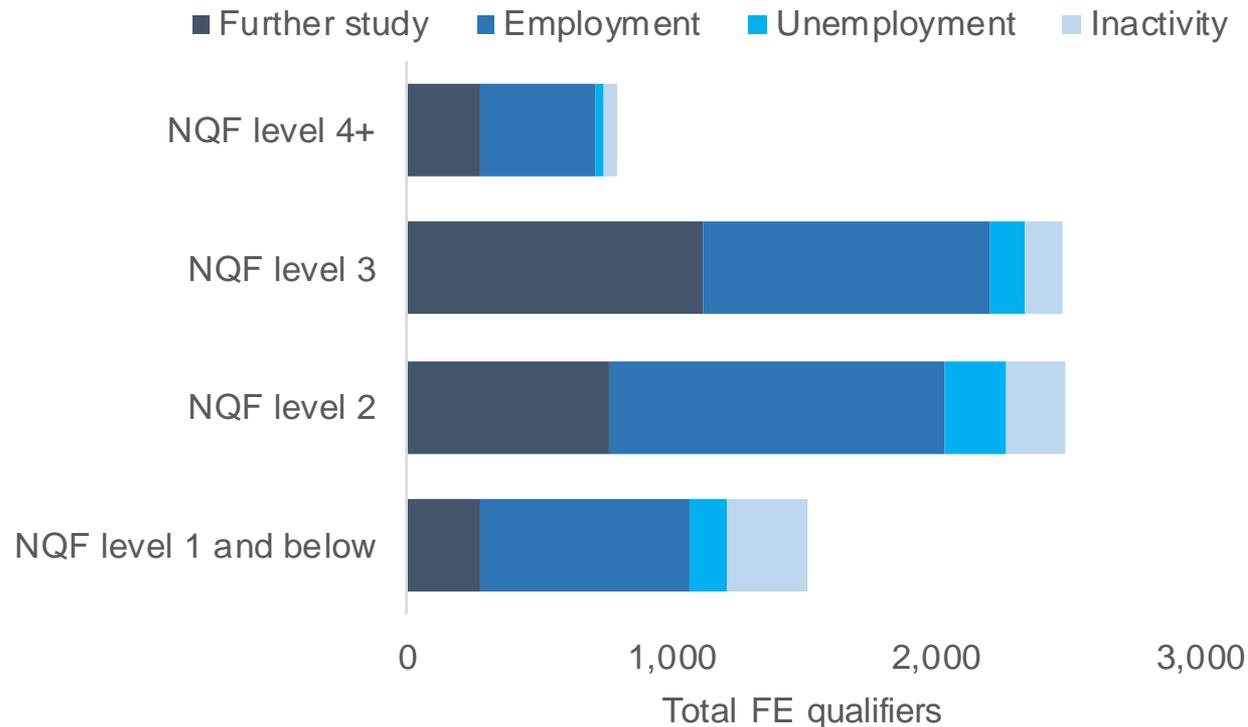
Source: Further Education Leavers Survey, DfE

Source: Further Education Leavers Survey, DfE

The majority of FE qualifiers tend to qualify from low-level courses. In 2016/17 7,300 West residents qualified from FE, 55% of which from courses at NQF level 2 or below which is 2 percentage points below the NI average 57%. A further 34% qualify from NQF level 3 courses, 2 percentage points above the NI average 32%.

One third of FE qualifiers in West return to further study

Destination of FE qualifiers by qualification (NQF), West (2016/17)

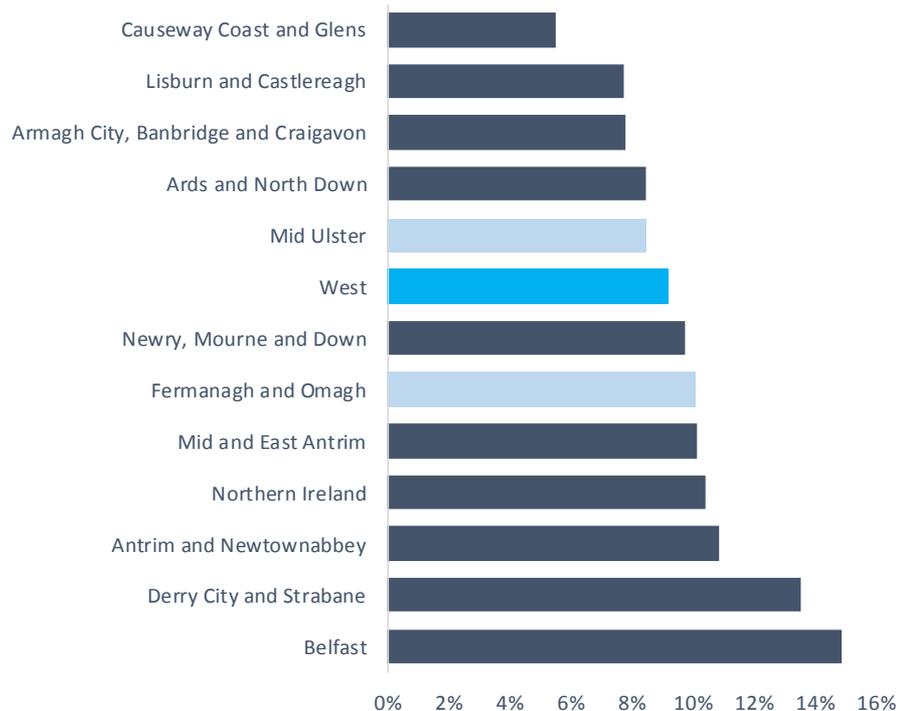


Source: DfE, NINIS

Although data at a sub-regional level for destinations of FE leavers is not available, it is possible to estimate by holding constant NI rates across LGDs. In West it is estimated that almost half (49%) of FE leavers will proceed to employment and one third (33%) to further study. The estimated destination of FE leavers however varies across the qualification profile.

Low achievement leads to high levels of participation in publically funded training schemes (1)

Training for Success participation (% of 16-17 population), LGDs (2016)



Source: DfE, NINS

% of 16-17 year olds participating in Training for Success

TfS is a government training scheme which provides 16-17 year old low achievers with 104 weeks of training to gain a formal qualification.

Although NQF level 3 is possible to achieve on the training course, most participants are working towards either NQF level 1 or NQF level 2.

In 2016, 660 West residents participated in TfS training. The participation rate varies slightly across the LGDs which comprise West, from 10% in Fermanagh and Omagh to 9% in Mid Ulster.

Low achievement leads to high levels of participation in publically funded training schemes (2)

Essential Skills enrolments (% of 15-24 population), LGDs (2016)

LGD	Number of enrolments	Essential skills
Northern Ireland	35,780	15%
Belfast	6,180	12%
West	5,640	17%
Derry City and Strabane	3,640	18%
Armagh City, Banbridge and Craigavon	3,550	14%
Mid Ulster	3,250	17%
Causeway Coast and Glens	3,050	16%
Newry, Mourne and Down	2,990	13%
Mid and East Antrim	2,780	17%
Antrim and Newtownabbey	2,590	15%
Ards and North Down	2,460	14%
Fermanagh and Omagh	2,390	17%
Lisburn and Castlereagh	2,180	13%

Source: DfE, NINIS

Essential Skills is a government training course designed to improve reading, writing, maths and/or ICT skills with the opportunity to gain accredited qualifications.

In 2016 5,640 residents participated within Essential Skills courses, accounting for 17% of the 15-24 year olds.

Both Mid Ulster and Fermanagh and Omagh, which constitute West, hold a participation rate of 17% of 15-24 year olds enrolled in Essential Skills courses, which is 2 percentage points above the NI average.

Low achievement leads to high levels of participation in publically funded training schemes (3)

Steps to Success participation (per 1000 16-64 population), LGDs (2016)

LGD	Total enrolments	Enrolments (per 1,000 16-64 population)
Derry City and Strabane	2,100	21.9
Belfast	2,830	21.4
Causeway Coast and Glens	1,050	11.7
Fermanagh and Omagh	660	9.1
Ards and North Down	860	8.9
Newry, Mourne and Down	960	8.7
Armagh City, Banbridge and Craigavon	1,020	7.7
Mid and East Antrim	660	7.6
West	1,230	7.5
Antrim and Newtownabbey	560	6.3
Mid Ulster	580	6.3
Lisburn and Castlereagh	530	5.9

Source: DfE, NINIS

Steps to Success (StS) is a government training course compulsory for those claiming unemployment benefit for over 6 months.

The training is designed to develop skills and experience required to gain and sustain employment.

In West 1,230 residents participated with StS, accounting for 7.5 in every 1,000 16-64 year olds.

The rate of enrolments varies across the LGDs which comprise West ranging from 9.1 residents in every 1,000 16-64 year olds within Fermanagh and Omagh to 6.3 in Mid Ulster.

It should be noted that numbers are inextricably linked to employability of local residents and therefore the rate is higher in areas where unemployment is higher.

Summary of post secondary leavers

Subject studied at HE - In West 45% of HE qualifiers have studied a STEM related subject, marginally higher than the NI average of 44%. This is driven by the rate in Fermanagh and Omagh where 46% of HE qualifiers are from STEM related subjects.

Current versus future subject profile - There are some imbalances between the current and projected subject mix required from NQF level 6+ qualifiers. For example, currently 14% of West HE leavers qualify in maths, computing, engineering or technology. This is 5 percentage points below the forecast requirement of 20% of NQF level 6+ qualifiers.

Destination of employed HE qualifiers - Assuming NI rates apply to West residents it is estimated 460 NI domiciled HE qualifiers per annum will be lost to working outside NI over the coming decade (2017-2027). This equates to a total loss of 5,100 HE qualifiers over the next decade.

Qualifications of FE leavers - In West FE leavers are less likely to be qualifying from lower level courses relative to the NI average. For example, FE leavers achieving NQF level 2 or below in West is lower than the NI average, 55% and 57% respectively. West qualifiers are also more likely to qualify from NQF level 3 relative to the NI average, 34% and 32% respectively.

Summary of post secondary leavers (continued)

Destination of FE leavers - Assuming NI rates apply to West residents it is estimated almost half (49%) of FE qualifiers proceed to employment and 33% to further study. However, the destination of FE leavers varies across qualification profiles. For example, over one fifth (23%) of NQF level 2 and below qualifiers are estimated to proceed to worklessness, whereas this figure drops to 11% for NQF level 3+ qualifiers. On the other hand 18% of NQF level 1 qualifiers are estimated to move into further study, this figure increases to 45% for NQF level 3 qualifiers.

TfS - In West 9% of 16-17 year olds participate within TfS government training scheme, this equates to 660 individuals. The rate of participation is marginally below the NI average of 10%. The rate also remains similar across LGDs in West with 9% in Mid Ulster and 10% in Fermanagh and Omagh.

Essential skills - Almost one in five (17%) of 15-24 year olds within West are enrolled on an essential skills course, 2 percentage points above the NI average. This figure remains constant across both Mid Ulster and Fermanagh and Omagh.

StS - This government training course accounts for 7.5 in every 1,000 individuals in West, a total of 1,230 individuals. This figure varies across LGDs with enrolments per 1,000 standing at 9.1 in Fermanagh and Omagh compared to 6.3 in mid Ulster.

Supply side – Causal factors

Over one in five children fail to achieve basic reading, writing and communication skills

Key Stage 2 assessment results, LGDs (2012)

	Communication in English			Using maths		
	Pupils achieving level 4 or above (%)	% of wards in lowest performing quartile	% of wards in lowest performing decile	Pupils achieving level 4 or above (%)	% of wards in lowest performing quartile	% of wards in lowest performing decile
Antrim and Newtownabbey	78%	10%	7%	79%	9%	9%
Armagh City, Banbridge and Craigavon	77%	9%	9%	79%	9%	6%
Belfast	72%	23%	33%	74%	19%	15%
Causeway Coast and Glens	77%	9%	9%	78%	10%	6%
Derry City and Strabane	79%	6%	2%	79%	9%	6%
Fermanagh and Omagh	79%	9%	7%	81%	8%	13%
Lisburn and Castlereagh	79%	9%	7%	80%	8%	17%
Mid and East Antrim	77%	9%	9%	78%	12%	6%
Mid Ulster	79%	4%	9%	81%	6%	4%
Newry, Mourne and Down	81%	3%	2%	81%	5%	11%
Ards and North Down	77%	10%	9%	78%	7%	4%
Northern Ireland	77%	100%	100%	79%	100%	100%
West	79%	13%	15%	81%	14%	9%

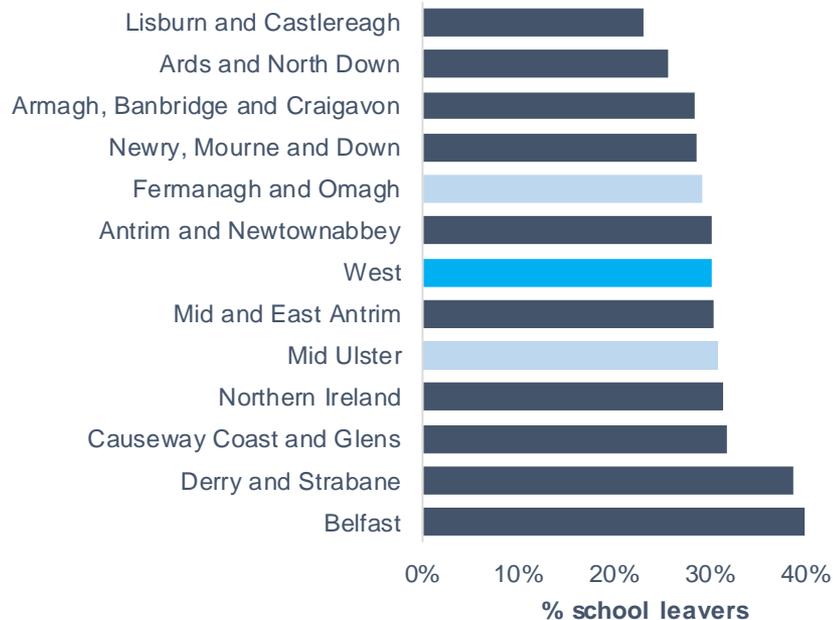
Source: Department of Education

Literature suggest communication (reading, writing, talking and listening) is an important skill in the early stages of a child's education. According to research families can arguably have a greater impact on children's development than the school system and that this influence contributes to gaps between children before they start school. In West 21% of school children do not achieve basic communication skills at Key Stage 2.

The level of education of parents has a more significant impact than income levels

Qualification profile of mothers (of children aged 7), LGDs (2011)

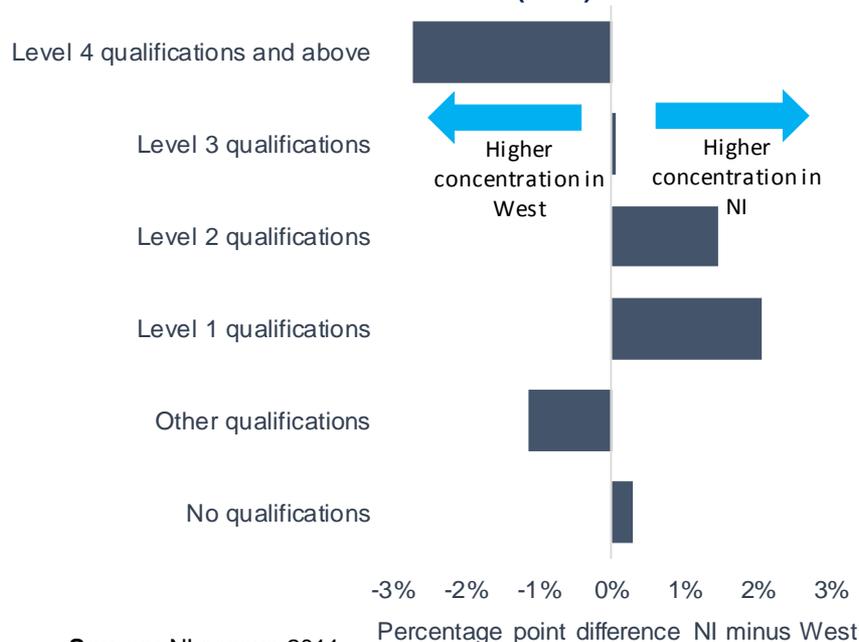
Female parents (of seven year old children) with highest qualification below NQF level 2, LGDs (2011)



Source: NI census 2011

Note: Below NQF level 2 includes 'other qualifications not included in the NQF framework, in addition to apprenticeships that are not defined by NQF level

Qualification profile of mothers (of seven year old children), West vs NI (2011)



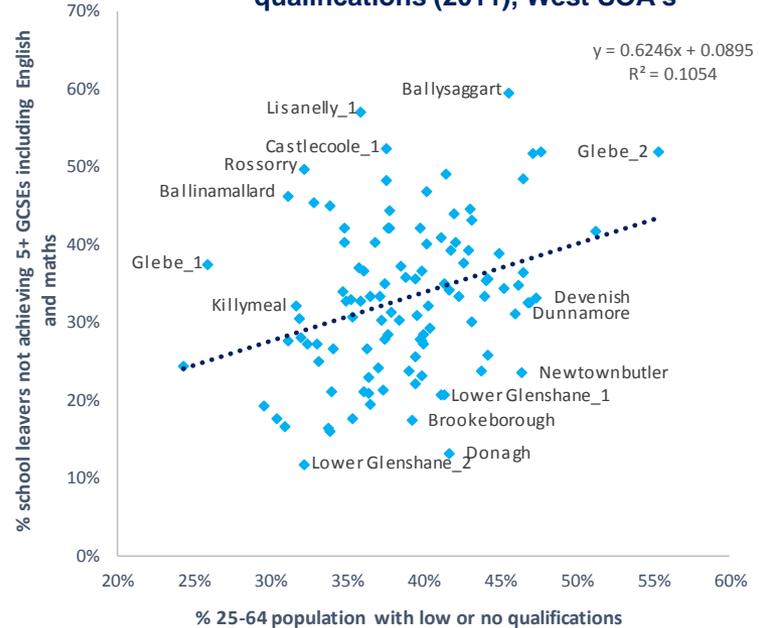
Source: NI census 2011

Longitudinal research undertaken in the US, UK, Australia and Canada by Bradley et al. (2015) estimates that parents with higher levels of educational attainment are 20%-25% more likely to read to their children everyday than those with low levels of education attainment. In West, 30% of mothers have a highest level of qualification equal to NQF level 2 or below, compared to 31% in NI as a whole.

Adult skills and parental aspiration is a significant factor in a young persons education journey

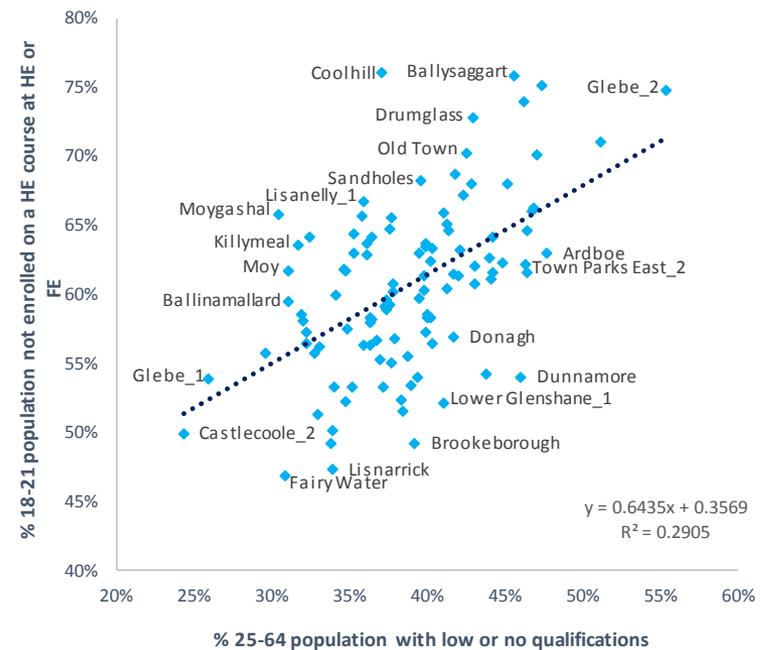
School attainment (2015/16), adult skills (2011) and HE participation (2015/16) West SOA's

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of 25-64 population with low or no qualifications (2011), West SOA's



Source: NI Multiple Deprivation Measure

% 18-21 population not enrolled in HE course at HE or FE (2015/16) versus % of 25-64 population with low or no qualifications (2011), West SOA's



Source: NI Multiple Deprivation Measure

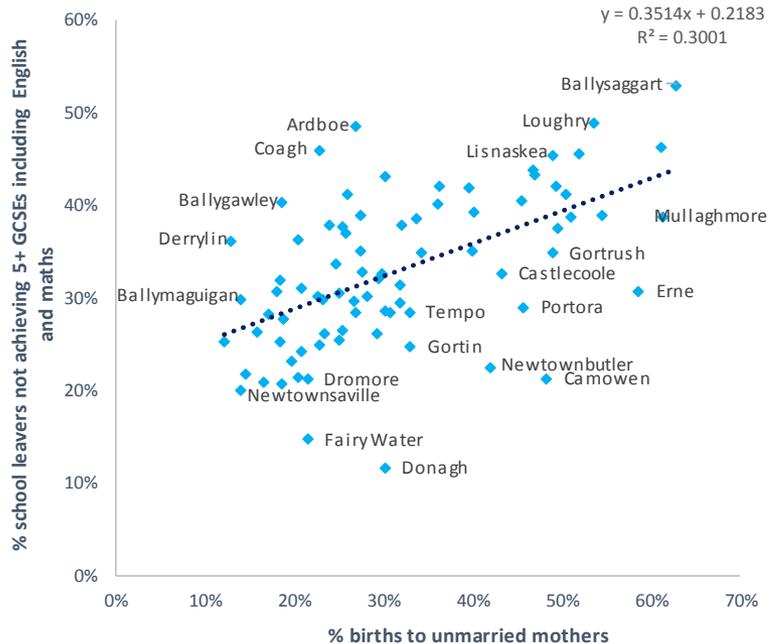
Research from Millennium Cohort Study (MCS) highlights 80% of the richest fifth of mothers expect their child to go to University but the figure falls to 40% for the poorest mothers. In West there is a strong correlation between the rate of young adults not enrolled in a HE level course and the rate of adults with low or no qualifications. In addition, there is a significant correlation between poor school attainment and low adult qualifications.



Lone parents are linked to factors which adversely affect childhood education

School attainment (2013/14-2015/16) and mothers characteristics (2016, LGDs) (2014-15, Wards) West

% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of births to unmarried mothers (2014-2015), West Wards



Source: NI School leavers survey

Birth rates mothers demography and household structure, LGDs (2016)

LGD	Birth rate per 1,000 female population aged 15-44	Births to teenage mothers (%)	Births to unmarried mothers (%)	Births to single parent homes (%)
Antrim and Newtownabbey	63.5	3.4%	43.2%	22.9%
Armagh City, Banbridge and Craigavon	72.3	2.7%	40.0%	19.8%
Belfast	61.8	5.3%	57.6%	41.1%
Causeway Coast and Glens	62.0	3.3%	47.2%	28.6%
Derry City and Strabane	66.3	3.3%	55.8%	44.3%
Fermanagh and Omagh	70.4	1.7%	30.3%	16.5%
Lisburn and Castlereagh	66.6	2.8%	34.7%	16.8%
Mid and East Antrim	62.6	3.6%	41.7%	23.8%
Mid Ulster	73.8	2.4%	31.1%	15.8%
Newry, Mourne and Down	73.1	2.1%	37.9%	22.3%
Ards and North Down	59.1	3.2%	39.6%	18.5%
Northern Ireland	66.2	3.3%	43.5%	26.4%
West	72.3	2.1%	30.8%	16.1%

Source: NISRA, ONS

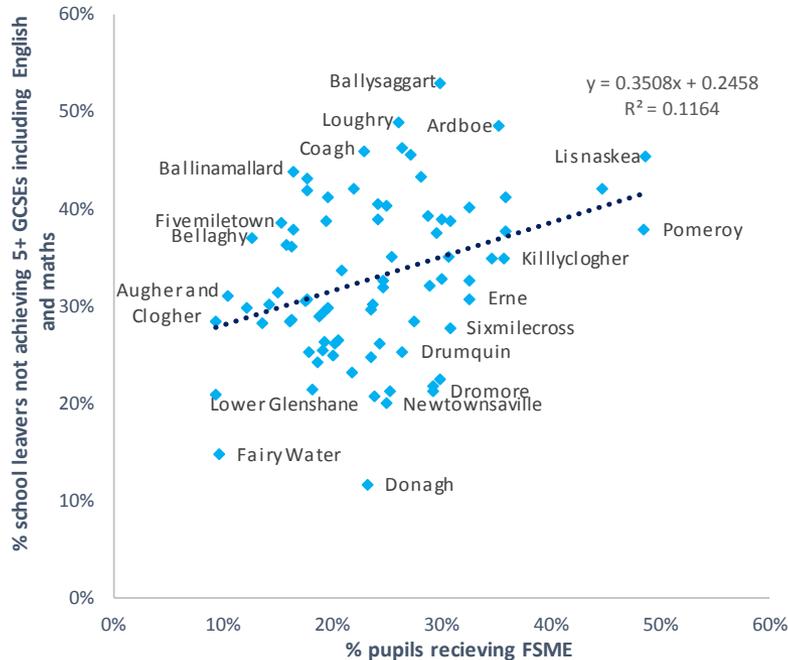
Note: Single parent homes are calculated through the aggregation of joint registrations at different address and sole registrations, divided by the total number of births.

Research highlights lower cognitive ability in children within lone parent households, relative to those where both parents live together. Further, lone parents are also more likely to be in relative income poverty (40%) and so are disproportionately affected by factors associated with households in poverty. West has a 10 percentage point difference with the NI average in relation to births to single mothers, 16% and 26% respectively.

Experiences of poverty linked to educational attainment from a young age

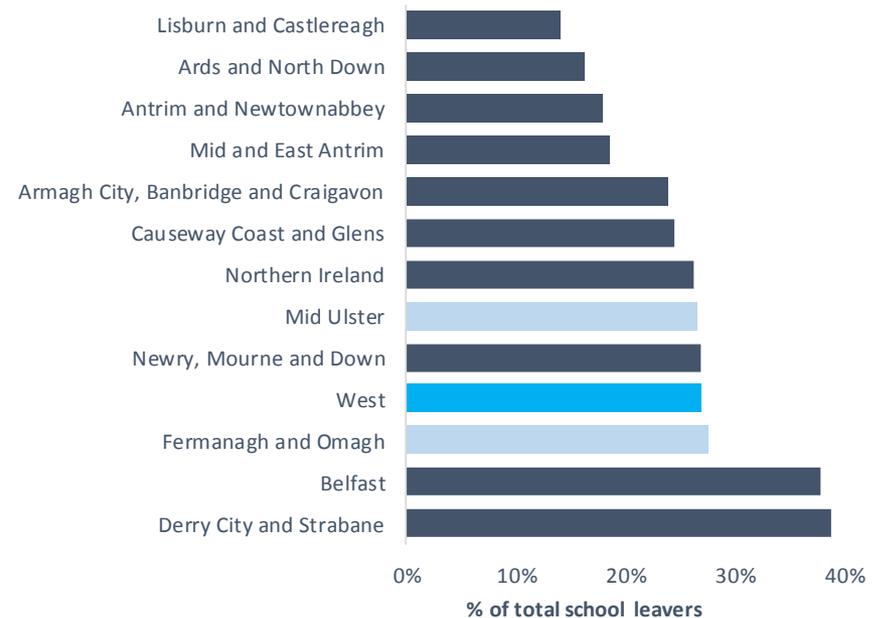
School attainment (2015/16) and FSME (2015/16), West Wards/LGDs

% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of pupils receiving FSME (2013/14-2015/16), West Wards



Source: NI School leavers survey

% of school leavers in receipt of FSM, LGDs (2015/16)



Source: NI school leavers survey

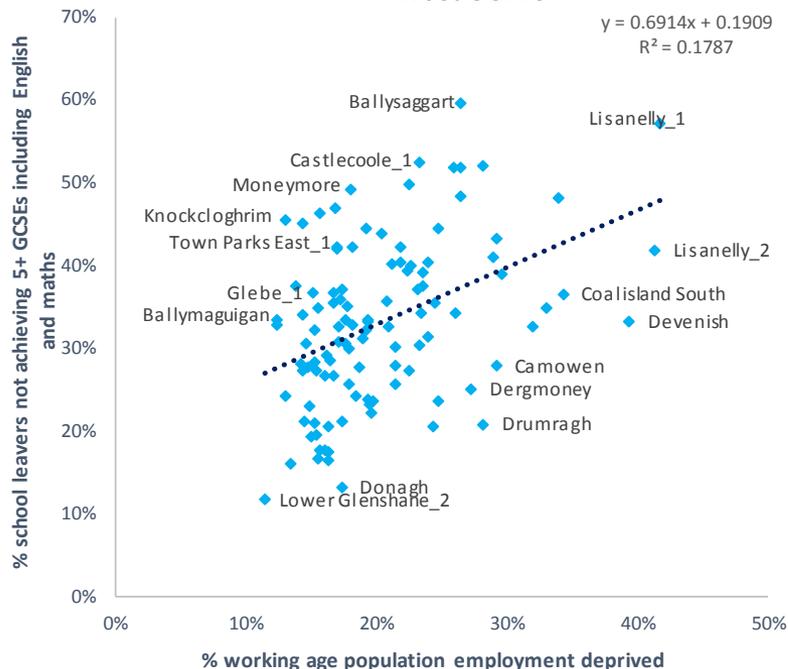
The MCS highlighted that 65% of children who experienced poverty persistently had a vocabulary level below the NI average at age five, compared to 38% of children who never experienced poverty. In West there is a marginally higher proportion of school leavers in receipt of FSME compared to NI, 27% and 26% respectively. This is driven by a relatively higher rate in Fermanagh and Omagh, 28%.

Parental worklessness is negatively associated with educational attainment

School attainment (2015/16) and employment deprivation (2015/16), West SOA's

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of working age population employment deprived (2015/16), West SOA's

Comparison between relative size of LGDs and the proportion of the working age population who are employment deprived (2015/16)



	% of total SOAs	% of SOAs in lowest performing quartile	% of SOAs in lowest performing decile
Antrim and Newtownabbey	8%	5%	2%
Armagh City, Banbridge and Craigavon	10%	6%	6%
Belfast	20%	37%	54%
Causeway Coast and Glens	8%	6%	2%
Derry City and Strabane	8%	17%	26%
Fermanagh and Omagh	6%	5%	3%
Lisburn and Castlereagh	8%	1%	0%
Mid and East Antrim	7%	5%	1%
Mid Ulster	7%	3%	0%
Newry, Mourne and Down	9%	9%	4%
Ards and North Down	10%	5%	1%
Northern Ireland	100%	100%	100%
West	12%	8%	3%

Source: NI multiple deprivation measure

The correlation between poor school attainment and high employment deprivation highlights worklessness in local communities as a factor holding back school achievements. In West there is a proportionally lower number of employment deprived SOA's as the region accounts for 12% of SOA's but only 8% in the lowest performing decile.

Source: NI Multiple Deprivation Measure

Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

Summary of causal supply side factors*

KS2 assessment results - Communication (reading, writing, talking and listening) is an important skill in the early years of a child's education.

Over one in five (21%) children that reside in West fail to achieve what is essentially basic reading writing and communication skills – 2 percentage points below the NI average of 23%. Proficiency in numeracy skills show a similar pattern, 19% of West residents do not achieve proficiency level 4 or above, which is also 2 percentage points below the NI average of 21%.

Influence of parents education - Research indicates the educational attainment of parents is a strong predictor in the educational performance of children. In West, 30% of female parents (of seven year old children) have a highest qualification level below NQF level 2 (GCSEs A*-C), that is marginally below the NI average. This corresponds to the relatively strong educational attainment of West school leavers.

At detailed geographies (SOA's) bivariate analysis highlights strong correlations between: low adult qualification levels and higher rates of poor school attainment; and low adult skill levels and higher rates of young adults not enrolled in a HE level course.

* A full set of correlations is provided in Annex C.

Household structure - Advanced countries have experienced increases in the rate of single parent households in recent decades. Research highlights characteristics of lone parent households are often linked to factors which negatively affect children's education performance, particularly in the early years (e.g. low income, low qualifications etc.).

In West however there is a relatively low proportion of births to single parent homes (16%) compared to 26% in NI as a whole. Similarly, only 31% are to unmarried mothers, compared to 44% in NI as a whole.

Summary of causal supply side factors (continued)

Parental worklessness - The strong correlation between poor school attainment and employment deprivation across detailed geographical boundaries highlights the impact of worklessness on educational achievements.

In West there is a disproportionate affect as the region hosts 12% of total NI wards but 8% in the lowest performing decile of employment deprivation.

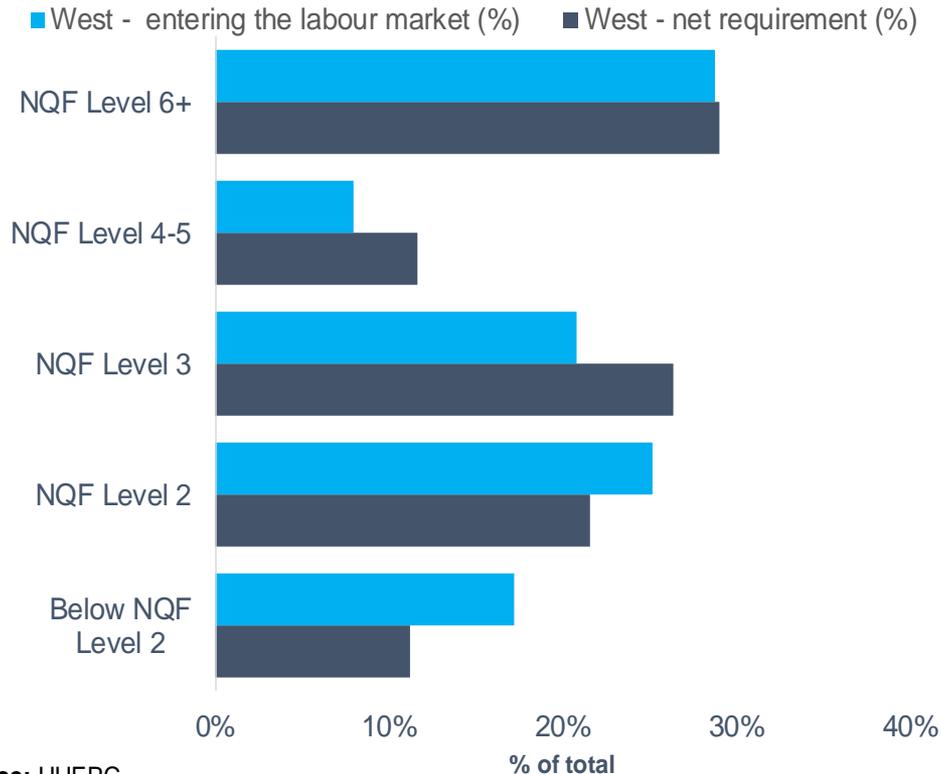
Poverty and education attainment - Research highlights experiencing poverty has a negative impact on children's vocabulary ability in early years (MCS). In West there is a disproportionately higher rate of disadvantaged pupils (as defined by FSME) and a strong association between FSME and poor educational achievement.

As skills represents the most effective route out of poverty it is important that tackling low performance in these 'left behind' areas is a priority for an economy with an aspiration of promoting inclusive growth.

**Can West's residents
service tomorrow's skills
needs?**

The missing middle

Net requirement vs qualification profile (NQF) of labour market entrants, West (2017-2027)



Source: UUEPC

In total 12,700 West residents per annum are forecast to gain qualifications over the coming decade and 6,700 of such are projected to enter the labour market.

Benchmarking the skills profile of net requirement against those entering the labour market outlines:

- A general alignment at high-level skills (NQF level 6+) suggesting the subject mix may be more of an issue here.
- A shortage of mid-level skills (NQF level 3-5) driven by fewer people studying qualifications at this level and then entering labour market (rather they proceed to further study).
- An over supply of low-level skills (NQF level 2 and below) as 42% of qualifiers entering the labour market at this level, compared to a net requirement of 33%.

Labour market supply by qualification level (NQF), West (2017-2027, annual average)

	School leavers		FE leavers		HE leavers		Total	
	Total leavers	Entering labour market	Total leavers	Entering labour market	Total leavers	Entering labour market	Total leavers	Entering labour market
Below NQF level 2	530	230	1,470	910	*	*	2,000	1,140
NQF level 2	780	220	2,420	1,460	*	*	3,200	1,680
NQF level 3	1,940	200	2,410	1,190	*	*	4,350	1,390
NQF level 4 - 5	*	*	710	410	190	140	900	550
NQF level 6	*	*	30	20	1,730	1,420	1,760	1,440
NQF level 7 - 8	*	*	0	0	500	470	500	470

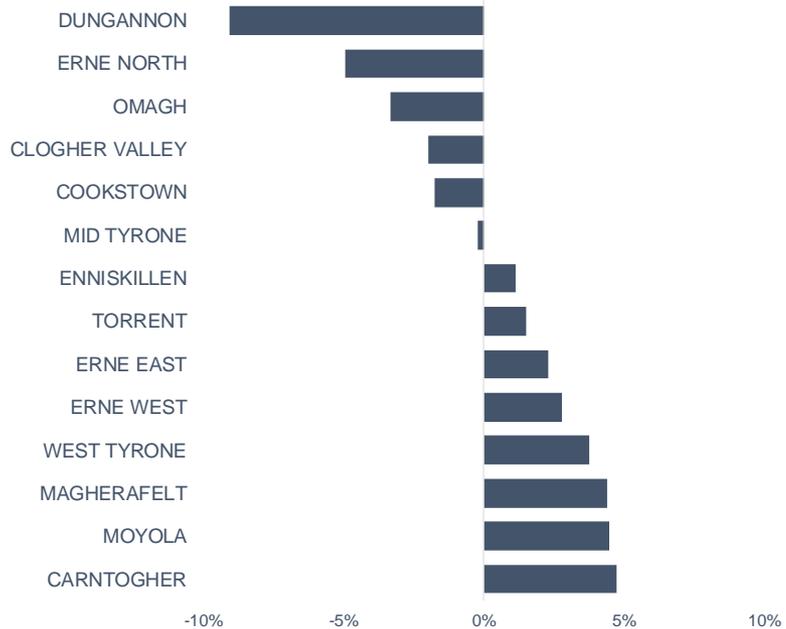
Source: UUEPC

Note: * refers to not applicable

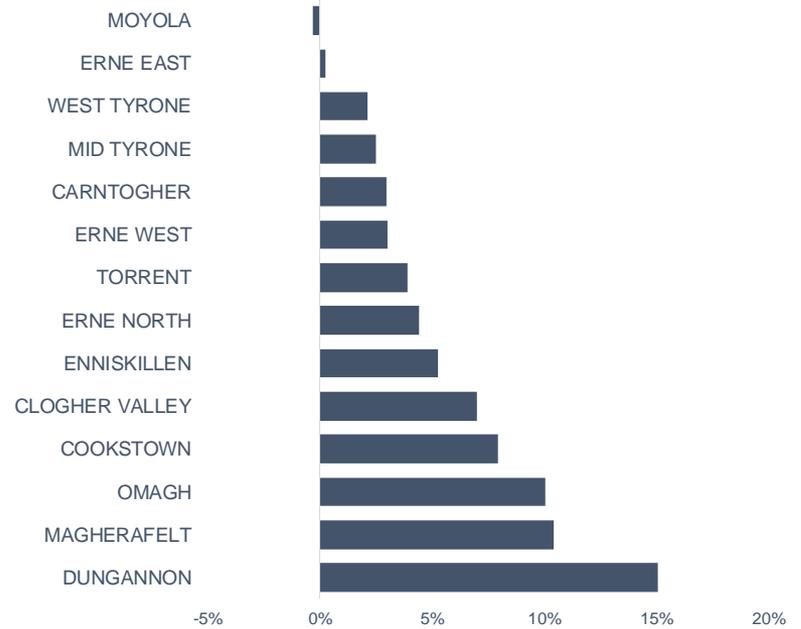
The skill balance varies across the West

Net requirement versus supply, West DEA's (2017-2027)

Percentage point difference in demand and supply by NQF level 6+, West DEA's (2017-2027)



Percentage point difference in demand and supply by below NQF level 2, West DEA's (2017-2027)



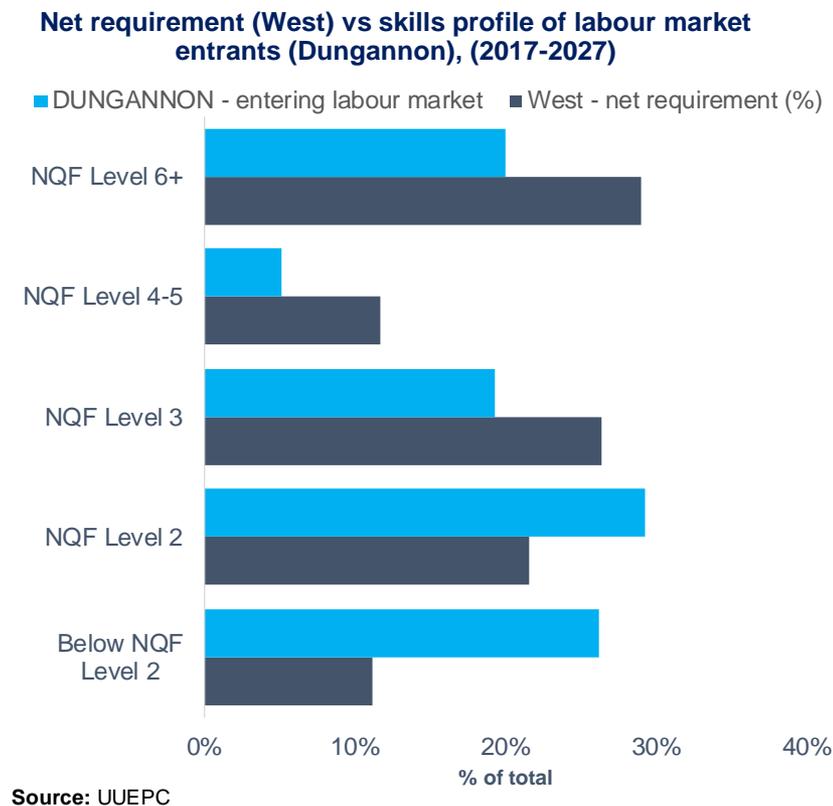
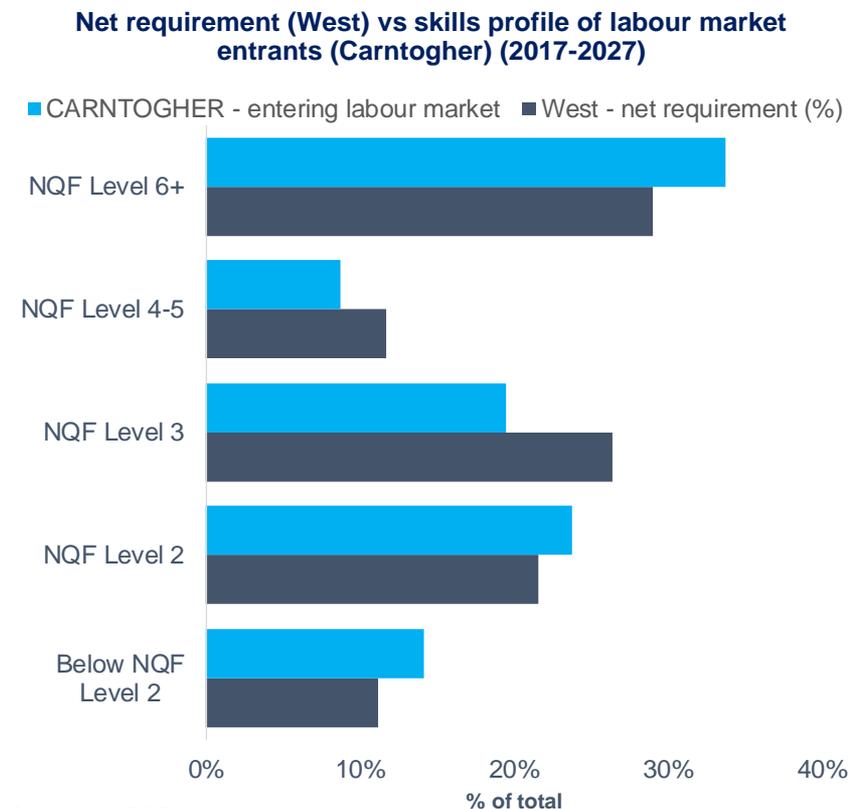
Source: UUEPC

Source: UUEPC

The largest gap between supply and demand at NQF level 6+ is in Dungannon where supply is 9 percentage points below the net requirement. This compares to Carntogher where supply of high level qualifications is 5 percentage points above the net requirement. It is evident such gaps are indicative of large differences in HE participation across West.

Diverse labour markets operate within West

Net requirement versus qualification profile of labour market entrants, Carntogher and Dungannon, (2017-2027)



In Carntogher 14% of individuals due to enter the labour market over the coming decade have below NQF level 2 qualifications, compared to 26% in Dungannon. On the other hand, in Dungannon 20% of individuals due to enter the labour market over the coming decade are expected to have NQF level 6+ qualifications, compared to 34% in The Glens.

Economic and social challenges must be overcome to improve the skills flow and skills stock

Scorecard (1= top performing in NI, 80= bottom performing in NI), Fermanagh and Omagh DEA's

Fermanagh and Omagh		Erne North	Erne West	Mid Tyrone	Erne East	Omagh	Enniskillen	West Tyrone
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	73	43	26	16	68	56	4
	% of school enrolments entitled to FSM	42	32	47	60	69	53	33
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	33	42	48	71	62	53	56
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	39	22	33	6	61	17	21
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	49	55	50	36	74	61	60
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	55	5	4	25	32	14	7
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	80	72	38	74	29	66	75
% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	47	37	18	35	12	43	20	
Skills stock	% of 16-64 population with low qualifications (Below level 2)	61	50	34	70	65	47	49
	% of 16-64 population with high qualifications (NQF level 4+)	59	40	27	67	46	32	37
	% of 16-34 population with low qualifications (Below NQF level 2)	53	42	25	55	68	62	31
	% of 16-34 population with high qualifications (NQF level 4+)	37	21	19	40	45	44	22
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	46	15	50	36	73	53	44
	Social security clients (client group analysis) as a % of the population (16-34)	49	14	31	33	61	59	25
	Housing benefit claimants as a % of the population (16-64)	41	10	17	34	69	55	28
	Housing benefit claimants as a % of the population (16-34)	46	11	14	30	62	58	17
	% of households with no adults in employment	43	15	14	34	72	42	25
	% of households with no adults in employment with dependent children	33	13	51	41	64	38	36
	% of households with lone parents with dependent children	24	1	8	17	59	45	5
	% of people employed who are either managers/senior officials or professionals	27	51	64	67	61	39	58
	Employment rate (% , 16-74 population)	44	18	45	49	70	37	40
Unemployed who have never worked (% of unemployed)	51	34	57	48	70	41	56	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI
 Ranked in the bottom 10 performing DEA's in NI

There are few metrics where DEA's within Fermanagh and Omagh perform amongst NI's lowest performing areas. Further, there are few DEA's within Fermanagh and Omagh that perform among the top ten performing DEA's across more than one metric. Therefore there are economic and social challenges to overcome that will ultimately help improve the skills stock of Fermanagh and Omagh.

Economic and social challenges must be overcome to improve the skills flow and skills stock

Scorecard (1= top performing in NI, 80= bottom performing in NI), Mid Ulster DEA's

Mid Ulster		Torrent	Clogher Valley	Moyola	Dungannon	Cookstown	Magherafelt	Carntogher
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	43	33	55	42	65	78	12
	% of school enrolments entitled to FSM	61	25	17	48	62	27	24
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	65	54	43	51	64	11	37
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	18	44	13	71	42	50	30
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	56	71	48	79	72	77	65
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	44	23	53	67	74	31	38
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	59	34	14	64	71	33	47
% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	6	3	48	20	45	15	1	
Skills stock	% of 16-64 population with low qualifications (Below level 2)	58	52	38	74	71	51	42
	% of 16-64 population with high qualifications (NQF level 4+)	60	47	42	54	73	50	51
	% of 16-34 population with low qualifications (Below NQF level 2)	47	35	19	79	63	49	23
	% of 16-34 population with high qualifications (NQF level 4+)	42	23	26	63	64	50	31
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	51	22	19	35	49	31	23
	Social security clients (client group analysis) as a % of the population (16-34)	39	12	5	36	38	27	8
	Housing benefit claimants as a % of the population (16-64)	32	11	14	39	36	29	18
	Housing benefit claimants as a % of the population (16-34)	26	10	8	36	31	19	2
	% of households with no adults in employment	39	13	6	29	41	16	10
	% of households with no adults in employment with dependent children	69	25	31	43	49	52	39
	% of households with lone parents with dependent children	54	9	7	46	41	36	12
	% of people employed who are either managers/senior officials or professionals	50	65	57	60	54	46	74
Employment rate (% , 16-74 population)	65	19	23	32	57	33	39	
Unemployed who have never worked (% of unemployed)	52	61	25	73	68	27	16	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI
 Ranked in the bottom 10 performing DEA's in NI

There are metrics where DEA's within Mid Ulster perform amongst NI's lowest performing areas. Further, there are DEA's within Mid Ulster that perform among the top ten performing DEA's across more than one metric. This highlights the level of skills stock and the flow of skills varies considerably across Mid Ulster. By implication the poor performing areas are likely to be falling behind more affluent parts of the region. These are economic and social challenges to overcome that will ultimately help improve the skills stock of Mid Ulster.

Summary of skill balances

West skills balance - The number of high skilled (NQF level 6+) individuals supplied is largely in alignment with the number demanded. However, it is important to recognise the subject mix of such qualifiers is likely to cause issue as opposed to the overall volume.

At mid level (NQF level 3-5) there is a shortage of skills driven by fewer people studying these qualifications and subsequently moving into the labour market. Instead it is more likely individuals who study at this level proceed into further study.

There is an oversupply of low-level (below NQF level 2) skills as 42% of qualifiers entering the labour market enter at this level, compared to 33% required through net requirement.

Diverse labour market - There are significant differences in the skill profile across West. Therefore, it is important for economic policy to ensure job opportunities are available across the qualification spectrum, enabling inclusive growth. In addition, misalignments between demand and supply across West's DEA's* highlights a need to upskill individuals in order to meet demand where required.

Understanding what works - There are metrics where DEA's within West perform amongst NI's lowest performing areas. However, there are also instances of DEA's in West that perform among the top ten performing DEA's across a range of metrics. This highlights the level of skills stock and the flow of skills varies considerably across West. Therefore there are economic and social challenges that policy should priorities to ultimately help improve the skills stock of West.

* A scorecard for each DEA in West is provided in Annex E.

Conclusions

Demand side of the West economy

The commuting patterns reviewed in this research emphasised a high volume workers commute out of the West region to secure employment and relatively few workers commute to the region to for employment.

West out-commuters: West residents that work within West account for 90% of total resident employment, suggesting 10% of residents commute elsewhere. According to the Census 2011 this translated to around 14,000 workers commuting out of West to other LGD's within NI for employment. These workers typically commute out of the region for jobs within the manufacturing sector and of a relatively higher skilled nature, compared to the West workplace.

West in-commuters: West residents account for 90% of total workplace employment, suggesting 10% of workers commute to the region. According to the Census 2011 this translated to around 9,600 workers commuting to West from other LGD's within NI for employment.

The net commuting flow is an outflow of workers from West, most predominantly to Belfast and Antrim and Newtownabbey. A continually high volume of West residents leaving the region for employment opportunities (particularly in Belfast) could have implications for future infrastructure planning and over the longer term it will be important that such labour market opportunities are available in the West region.

Demand side growth of the West economy

Recent performance: The number of jobs in West increased by 10,480 over the 2012-2017 period, accounting for 15% of job growth in NI. In absolute terms, the largest quantum of job growth was in manufacturing, construction and restaurants and hotels.

Future growth: Under a high growth scenario, future job growth (expansion demand) over the coming decade in West will be driven by high skill sectors such as health and social work professional services. This translates to high growth in science and technology occupations, which highlights the importance of education performance in STEM subject areas.

When focusing on skills forecasting it is prudent to plan for skills needs in an aspirational nature based on the ambitions of economic policy. There is a risk of oversupplying skills if the aims of economic policy are not achieved. This would involve a personal cost to individual's investing in their skills development who are unable to find suitable employment opportunities. However, this potential cost is relatively lower when considered alongside the potential cost of undersupplying skills. If businesses are unable to find the skilled labour required to expand their businesses it depresses competitiveness, productive capacity and holds back future job growth.

Forecasting in any context is never a precise science. While it is prudent to plan for high growth, it is important to undertake **contingency planning** in the event that the ambitions of economic policy are not achieved. The skills requirements based on a more conservative baseline scenario are provided in Annex A.

Labour market flows generate job opportunities

Replacement demand: West is forecast to experience employment growth (i.e. expansion demand) in the UUEPC high growth scenario, however net replacement demand is expected to account for a much larger quantum of opportunities (e.g. replacing workers who have retired, moved to another position etc.).

Sector distribution of replacement demand: The largest sectors tend to be associated with the highest levels of replacement demand. Therefore, sectors such as manufacturing, construction and health and social will have relatively large levels of replacement demand in the West economy. This is an important point with regard to careers advice, as sectors do not necessarily have to be growing rapidly in order to provide job opportunities.

Transitions within the labour market: A significant proportion of job vacancies are filled by people already working in the labour market (i.e. job-to-job movements). Many of the vacancies requiring lower levels of qualification are filled within the labour market rather than recruitment from the education system (net requirement).

Qualifications versus skills: Although there remains a significant proportion of people working in the labour market with low-level qualifications, they have work experience and are not necessarily low skilled. There is an insider-outsider element to the end of the labour market characterised by low qualifications. Individuals inside the labour market have some mobility to move between jobs. However, once a person with low levels of qualifications is out of work it is difficult for them to find suitable opportunities to re-engage in the labour market.

Qualifications are increasingly important for labour market access

The net requirement from education and migration is the total number of job opportunities (expansion and replacement) which require labour from either the education system or from migration (i.e. that the demand cannot be filled from inside the existing labour market).

Sector outlook: Manufacturing is forecast to provide the most job opportunities in West. This is a useful example relating to the importance of replacement demand. As an expanding industry, manufacturing is expected to create jobs through hiring additional workers and replacement demand.

Labour demand is increasingly qualifications hungry: Of the net requirement from education and migration over the coming decade, 29% of job opportunities will require a degree level qualification (NQF level 6+). Only 11% of the net requirement from education and migration will require qualifications below NQF level 2. This suggests that it is imperative that the number of young people with low-level qualifications is minimised. Education and labour market policies that support the most vulnerable groups can bolster inclusive economic growth by equipping individuals of all backgrounds with the skills to obtain 'good' jobs.

Subject demand: The most in-demand degree subjects (NQF level 6+) are medical related subjects; business and finance; and maths and computer science. At sub-degree level (NQF level 4-5) the most in-demand subjects are health, public services and care; business administration and finance and law, engineering and manufacturing technologies.

Educational attainment in schools

School leaver attainment: In West 67.5% of school leavers achieved at least five GCSE's A*-C (including English and maths), marginally below NI average (67.8%). This figure has improved by 7 percentage points over the last 8 years, the strongest improvement across each region. However, school leavers achieving 2+ A-levels A*-E (59.7%) is above the NI average (57.4%).

Tackling low achievement is a significant spatial challenge: Low education achievement is geographically concentrated, and West contains a proportionately lower number of low achieving areas. For example, 17% of the wards in NI are in West, yet 12% of the wards in the lowest performing quartile are in West.

Children in deprived households face significant challenges: Children in deprived households are identified by their FSME. Almost half (49%) of FSME children achieve 5 GCSE's A*-C (including English and maths), compared to almost four fifths (74%) of non-FSME pupils. Although the outcomes for FSME pupils has improved, the outcomes for non-FSME pupils has improved at a marginally faster rate, meaning the gap has widened in the most recent year.

Literacy and numeracy: Given the importance that employers put on literacy and numeracy skills the mix of GCSE subjects is worth consideration. In West 83.7% of school leavers achieve at least five GCSE's, yet only 67.5% achieve at least five GCSE's including English and maths. In other words, there is a significant number of school leavers who achieve NQF level 2; however, they have not achieved the key subjects of English and maths. This will cause labour market challenges as many jobs, education courses and employment programmes require English and maths for access. Many school leavers who fail to achieve English and maths will end up re-sitting these qualifications in another setting such as FE institutions.

The determinants of education performance transcend across a range

Early intervention initiatives have the most significant influence. This is because gaps between children have already emerged prior to starting school. These gaps are influenced by multifarious economic and social factors outside the school environment.

- **Intergenerational transfer of low skills:** There is a high correlation between areas where a high proportion of school leavers are failing to achieve at least 5 GCSE's including English and maths, and the skills of the 25-64 population. This suggests that there is an increased probability of low achievement at school where parents' highest level of qualification is relatively low.
- **Socioeconomic status:** There is a strong correlation between school performance and socioeconomic indicators such as poverty (free school meal entitlement) and employment deprivation .
- **Aspiration in high deprivation areas:** The participation of young people in HE in small areas also correlates significantly with the qualifications of the 25-64 year old population. This data highlights a lower participation rate in areas where adult skills are low, suggesting that low adult skills in an area can negatively affect the education aspiration of young people in that area.
- **Family structure:** There is a statistically significant relationship between the proportion of births to lone parents and school performance, with lone parents likely to be low achievers relative to other family types. Lone parents are a particularly vulnerable group and areas with a high proportion of lone parents tend to correlate significantly with a number of indicators relating to poverty.

These factors reinforce each other, which contributes to geographic concentrations of low achievement in discrete areas. Although this is most predominantly an issue in more urban areas, sub-regional areas must be conscious of these implications. There is no single policy initiative that will solve the spatial concentration of skills deficits. Therefore, a multi-agency locally focused response is required. Without a recognised panacea to address this issue there is scope to test pilot initiatives. With high concentrations of underachievement in relatively small spatial units new approaches can be tested and rolled out to other locations if there is evidence of a demonstrable positive impact.

Skills balances

Graduates (NQF level 6+) balances: In West the demand and supply of graduates are aligned. Approximately 29% of West residents enter the labour market with an NQF level 6+ qualification compared to 29% of the net requirement. However, it should be noted there may still be a mismatch of subject requirements at this level.

Mid-level skills (NQF level 3-5): There is some misalignment between the profile of demand and supply for mid-level skills. Relatively fewer people enter the labour market with this level of qualification. In West 38% of the net requirement is related to NQF level 3-5, yet only 29% of West residents entering the labour market are qualified to NQF level 3-5.

Low-level skills (NQF level 2 and below): There is an oversupply of qualifications associated with low NQF level qualifications. That is, 42% of those entering the labour market hold NQF level 2 or below qualifications, compared to a 33% net requirement. With employers becoming increasingly 'qualifications hungry' there are limited job opportunities that will be available to this group without further study.

Wider considerations

Lifelong learning: The modern labour force is currently undergoing a period of transformational change, with some occupations being vulnerable to skills biased technological change. This change highlights the importance of lifelong learning to enable greater occupational mobility in the labour market.

Skills versus qualifications: There are many people in the labour market who have a low level of qualification, yet are highly skilled. In other words, people who have accumulated skills on the job but do not have a qualification on the NQF framework to recognise their skill level. Validating formal and non-formal learning strengthens an individual's incentive to invest in training, and improves the signalling power of those who are highly skilled but poorly qualified.

Applied work skills: Employer surveys consistently report a lack of basic employability skills amongst graduates. Improving the soft skills of graduates should be a shared responsibility between education providers and employers. Education providers contribute to employability skills through curriculum design, and, where possible, simulation a work environment in teaching methods. Employers enhance employability skills via effective training. The provision of work placements is one method which has proved to be very effective in improving the employability skills of graduates. However, the number of available placements provided by employers has not expanded at the same pace as higher education participation in recent years.

The cost of the long tail of underachievement: Low achievers are likely to become tied up in the education and training system for a number of years at a significant public cost. In the long run they are also more likely to become workless and generate a fiscal cost via out of work benefits. The analysis in this report has highlighted the link between socio-economic indicators and education underperformance, and the concentration of underachievement in relatively deprived small areas. As skills represents the most effective route out of poverty, tackling low performance in these 'left behind areas' must be a priority to ensure future economic growth is inclusive for all.

Annex A: Baseline scenario

Expansion and replacement demand under the baseline scenario

UUEPC's baseline scenario directly links to UUEPC forecasting model and is considered to be the most likely economic trajectory for the local economy.

The employment outlook in the baseline scenario is considerably lower than the high growth scenario previously presented.

Under baseline conditions there is a lower expansion demand and a larger component of labour demand comes from replacing workers who have left their position. Therefore the net replacement demand over the coming decade is forecast to be 2,400 compared to an expansion demand of 190. On average over the 2017-2027 period annual the annual net requirement from education and migration is forecast to be 600 lower compared to the high growth scenario.

Expansion demand and replacement demand (baseline scenario), West (2017-2027)

Demand category	2012-2017 (annual)	2017-2027 (annual)
(A) Gross demand	10,090	9,290
(B) Expansion demand	900	190
(C) Replacement demand	9,200	9,100
(D) Filled from within the existing labour market	6,860	6,700
(E) Net replacement demand	2,340	2,400
(F) Net requirement from education and migration	3,240	2,590

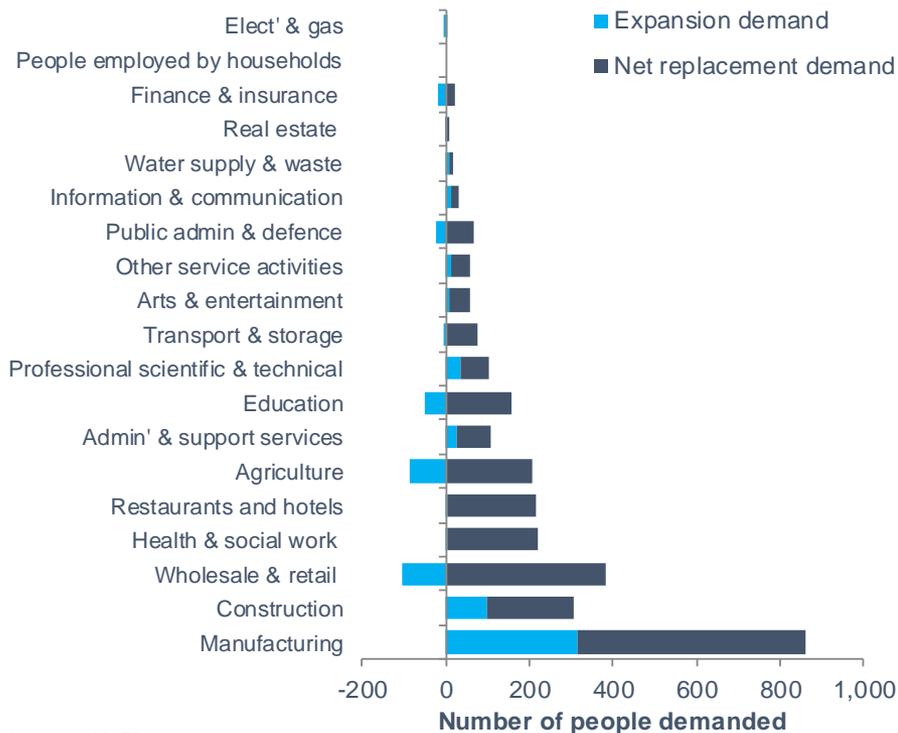
Source: UUEPC

Relationship between rows: $A=B+C$, $E=C-D$, $F=E+B$

Differences between the baseline and high growth scenarios are largest in forecast high growth sectors

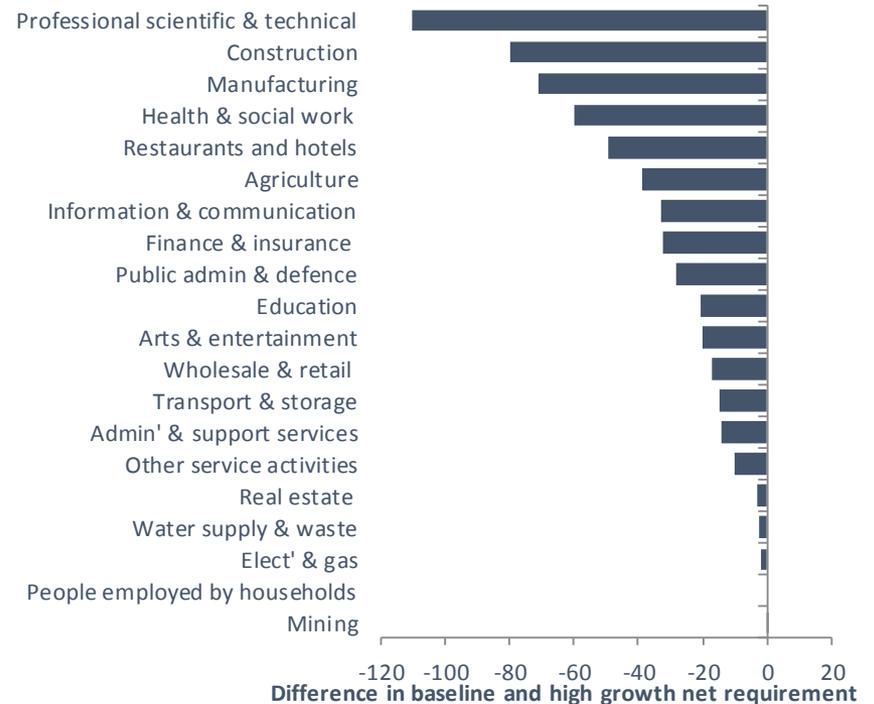
Expansion demand and replacement demand by sector (1-digit), baseline versus high growth scenarios, West (2017-2027)

Net requirement (expansion and replacement) by sector (1-digit), West (2017-2027)



Source: UUEPC

Difference between baseline and high growth scenario's by sector (1-digit), West (2017-2027)



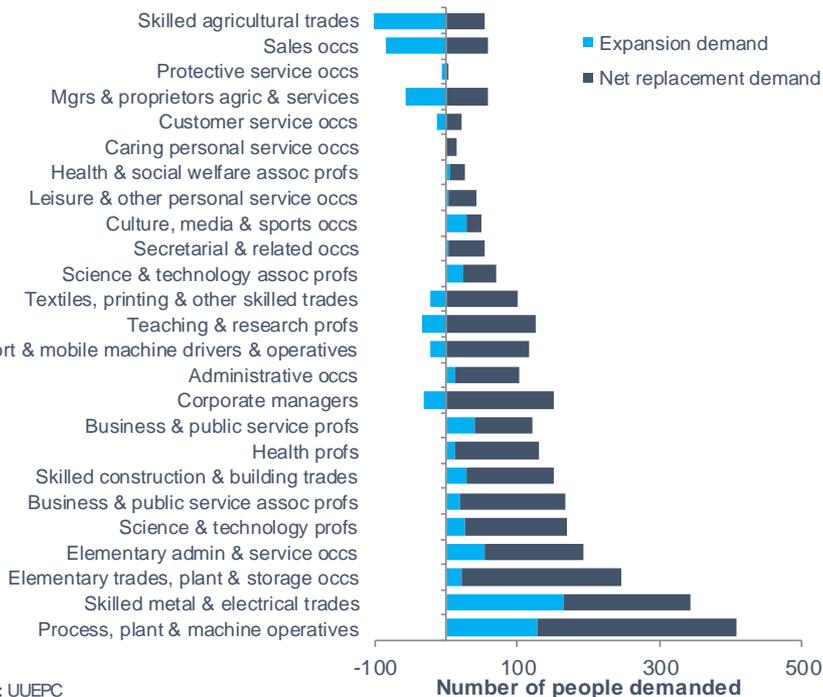
Source: UUEPC

Under the baseline scenario the sectors with the largest net requirement from education and migration is manufacturing (860 per annum) and construction (300 per annum). The largest differences between the two scenarios are in professional services (110 less net requirement per annum under the baseline scenario) and construction (80 less net requirement per annum under the baseline scenario).

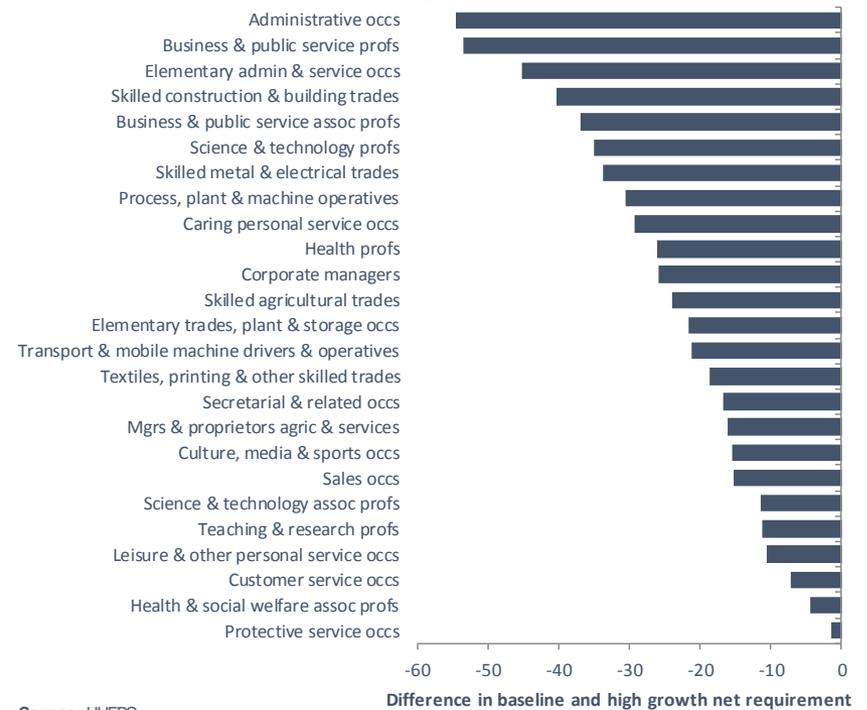
Replacement demand represents a higher proportion of labour demand the baseline scenario

Expansion demand and replacement demand by occupation (2-digit), baseline versus high growth scenarios, West (2017-2027)

Net requirement (expansion and replacement) by occupation (2-digit), West (2017-2027)



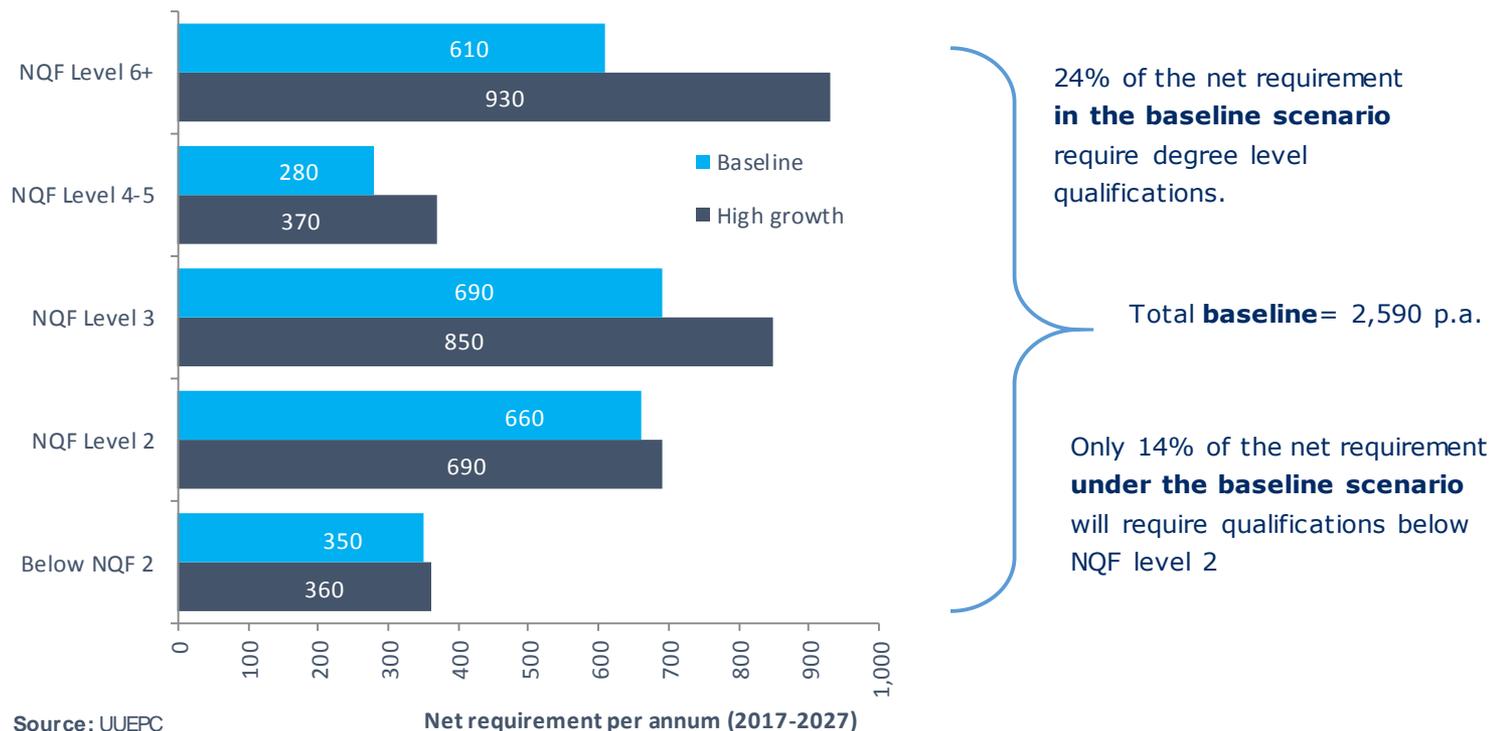
Difference between baseline and high growth scenarios by occupation (2 digit), West (2017-2027)



Under the baseline scenario the occupations with the largest net requirement over the coming decade are process plant and machine operatives (400) and skilled metal and electrical trades (340). The largest differences between the two scenarios are in administrative occupations (55 less net requirement per annum under the baseline scenario) and business and public service professionals (50 less net requirement per annum under the baseline scenario).

The percentage distribution of the net requirement is similar in both scenarios but absolute numbers vary significantly

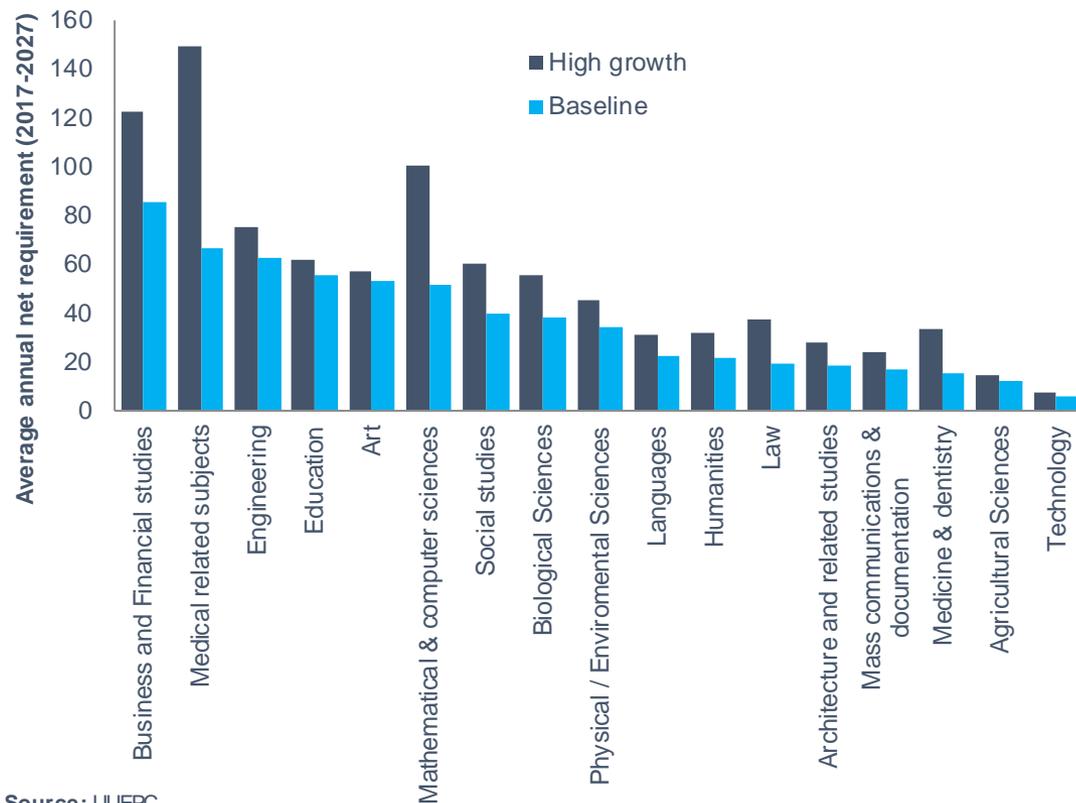
Average annual net requirement by qualification (NQF) baseline versus high growth scenario, West (2017-2027)



Under the baseline scenario 24% of the net requirement is associated with qualifications at NQF level 6+ compared to 29% in the high growth scenario. However, in absolute terms there are 320 fewer people per annum demanded at NQF level 6+ under the baseline scenario. Similarly, the proportions of people demanded below NQF level 2 are relatively similar under both scenarios (14% and 11% respectively).

The largest NQF level 6+ subject in demand under baseline conditions is business and financial studies

Average annual net requirement by NQF level 6+, baseline versus high growth scenario, West (2017-2027)

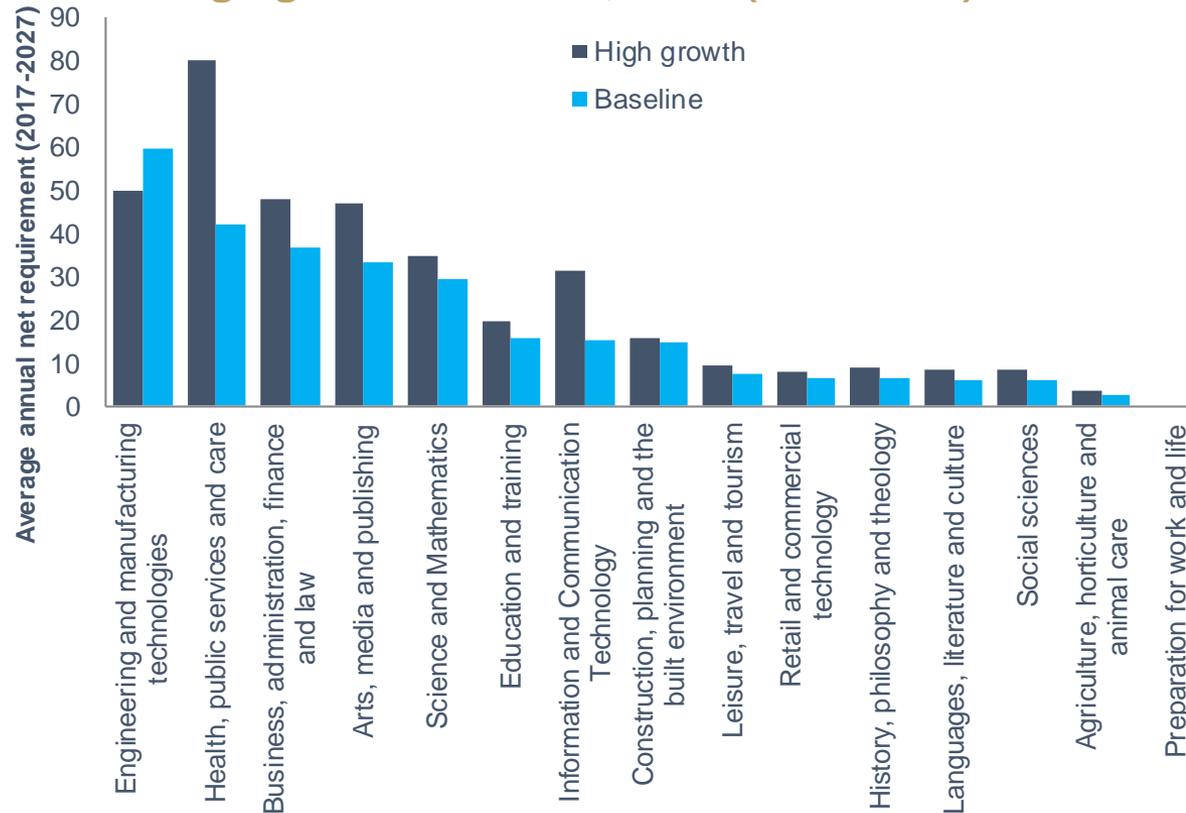


Source: UUEPC

Under baseline conditions, over the next decade the largest subject in demand for NQF level 6+ degree programmes and above is business and financial studies representing 14% of the NQF level 6+ demand. The absolute number of people demanded in the high growth scenario for business and financial studies is 44% above the baseline scenario.

Engineering and manufacturing is the most in-demand subject at NQF level 4-5 under baseline conditions

Average annual net requirement by NQF level 4-5, baseline versus high growth scenario, West (2017-2027)

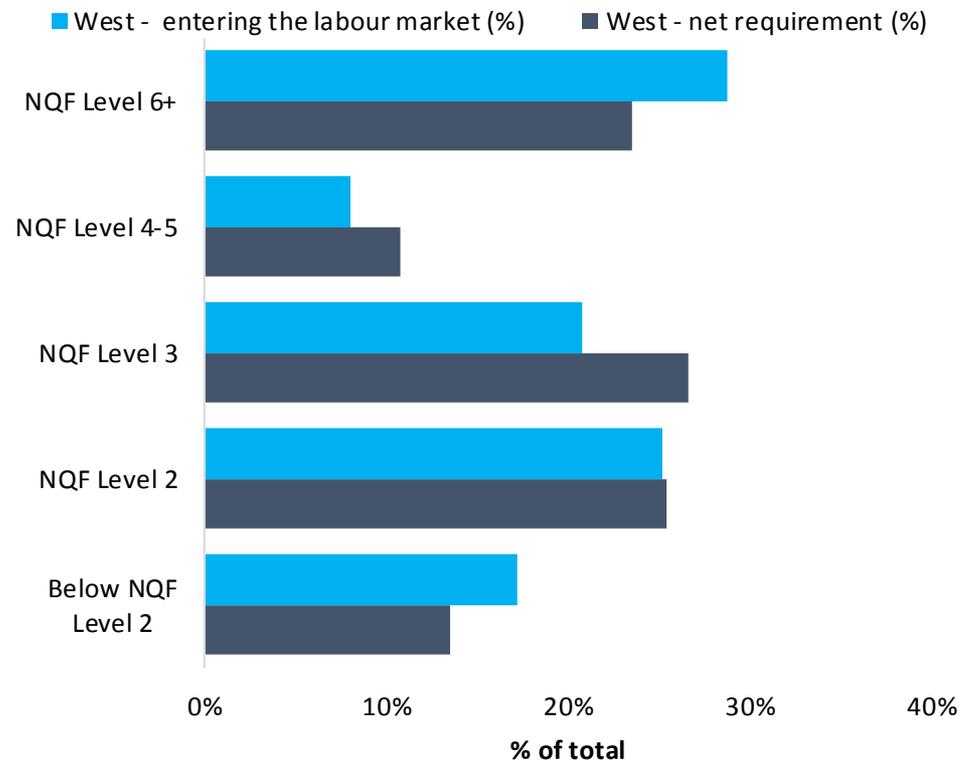


Source: UUEPC

Under baseline conditions, over the next decade the largest subject in demand for sub-degree programmes at NQF level 4-5 is engineering and manufacturing technologies at 60 persons per annum, representing 21% of the NQF level 4-5 demand. This is followed by health public services and care (40 qualifiers per annum) and business administration, finance and law (40 qualifiers per annum).

An oversupply of degree level and low qualifications but a shortage of sub-degree tertiary level qualifications

Net requirement versus qualification profile, West (2017-2027)



Source: UUEPC

Proportionately there is a marginal oversupply of degree level and above qualifiers entering into the labour market relative to the net requirement under baseline conditions, 29% and 24% respectively. There is also an undersupply of NQF level 3-5 qualifications entering the labour market, relative to the forecast demand, 29% and 37% respectively.

The largest subject gap in current and future skills is in maths, computing, engineering and technology

The largest gaps in current and future skills exist in maths, computing, engineering and technology (-5 percentage points). This suggests that the current subject mix is currently out of sync with the subject demand for high-level skills under the baseline scenario.

It is important to remember that this analysis simply compares the percentage distribution of the demand and supply of skills.

Under baseline conditions, despite there being a clear difference in the subject distribution between the demand and supply, with a lower number of graduates demanded overall under baseline conditions there is unlikely to be a skills shortage in this area.

Distribution of current versus net requirement by NQF level 6+ and subject, West (2017-2027)

	% distribution of qualifiers (2015)	% distribution of net requirement (2017 - 2027)	p.p. difference
Medicine, dentistry, subjects allied to medicine	20%	13%	7%
Biological, veterinary, agricultural & physical sciences	11%	14%	-3%
Maths, computing, engineering and technology	14%	19%	-5%
Social studies & law	13%	10%	4%
Business, administration, mass communication and documentation	15%	17%	-2%
All other disciplines	27%	28%	-1%

Source: NINIS

Annex B: Maps

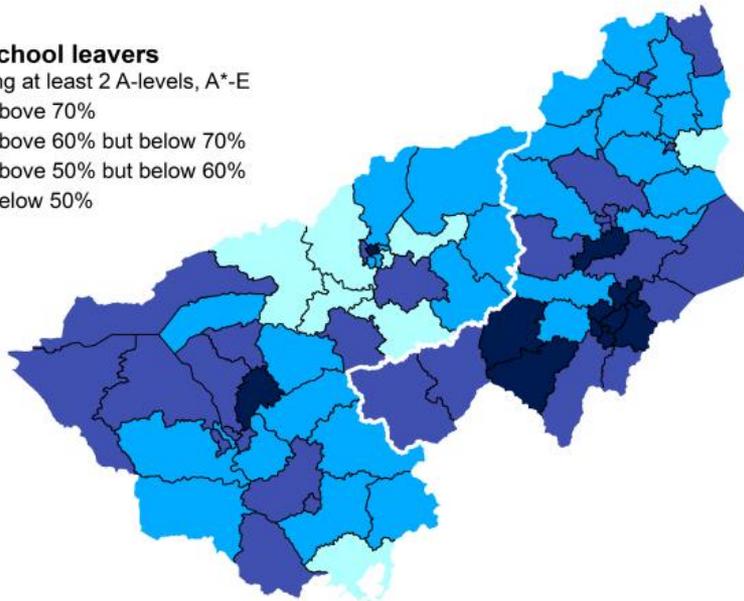
Annex B1: School leaver attainment by West wards (2013/14-2015/16)

School leaver attainment by West wards (2013/14-2015/16)

School leavers (%) achieving 2+ A-levels A*-E, West wards (2013/14-2015/16)

% of school leavers
Achieving at least 2 A-levels, A*-E

- Above 70%
- Above 60% but below 70%
- Above 50% but below 60%
- Below 50%

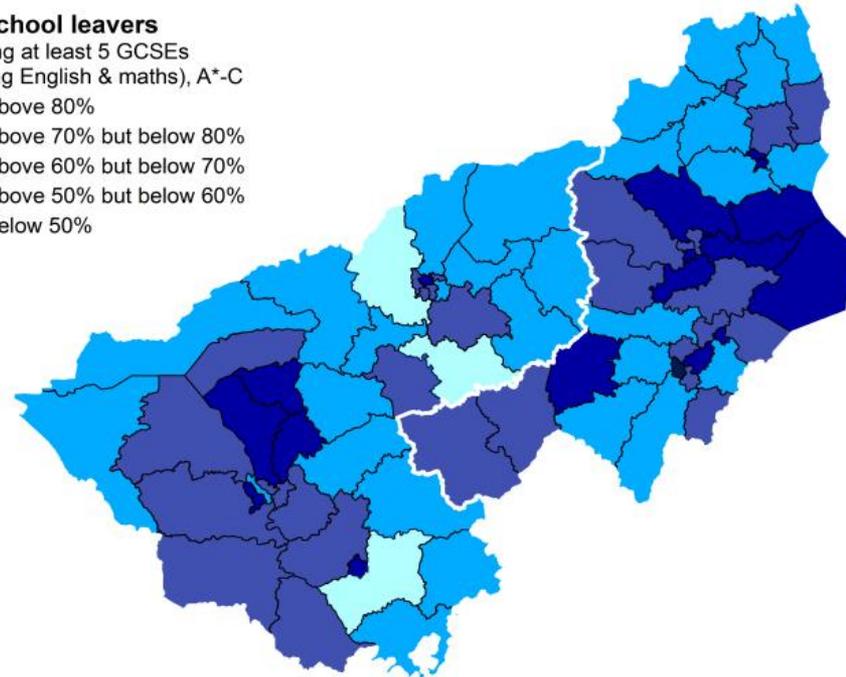


Source: NI School Leavers Survey

School leavers (%) achieving 5+ GCSEs A*-C including English & maths, West wards (2013/14-2015/16)

% of school leavers
Achieving at least 5 GCSEs (including English & maths), A*-C

- Above 80%
- Above 70% but below 80%
- Above 60% but below 70%
- Above 50% but below 60%
- Below 50%



Source: NI School Leavers Survey

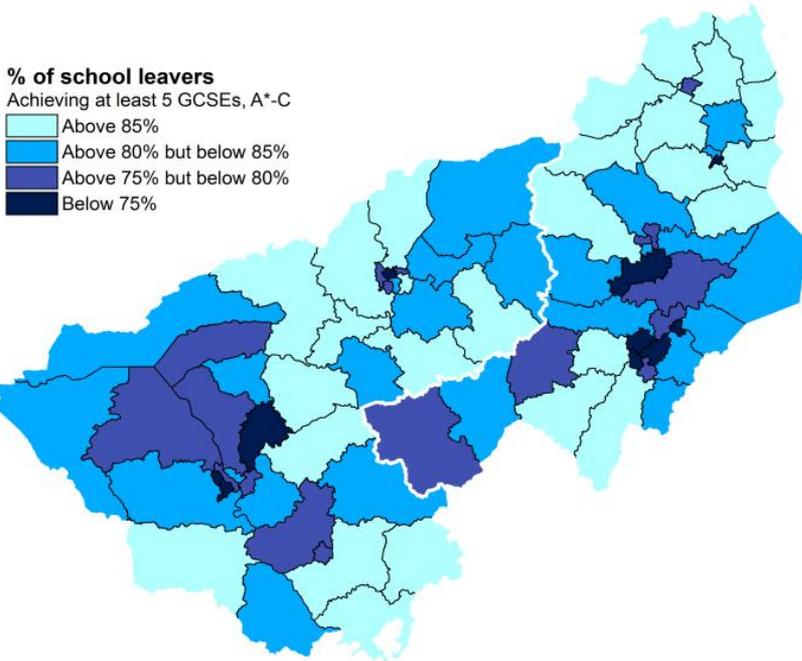
Annex B2: School leaver attainment by West wards (2013/14-2015/16)

School leaver attainment by West wards (2013/14-2015/16)

School leavers (%) achieving 5+ GCSEs A*-C, West wards (2013/14-2015/16)

% of school leavers
Achieving at least 5 GCSEs, A*-C

- Above 85%
- Above 80% but below 85%
- Above 75% but below 80%
- Below 75%

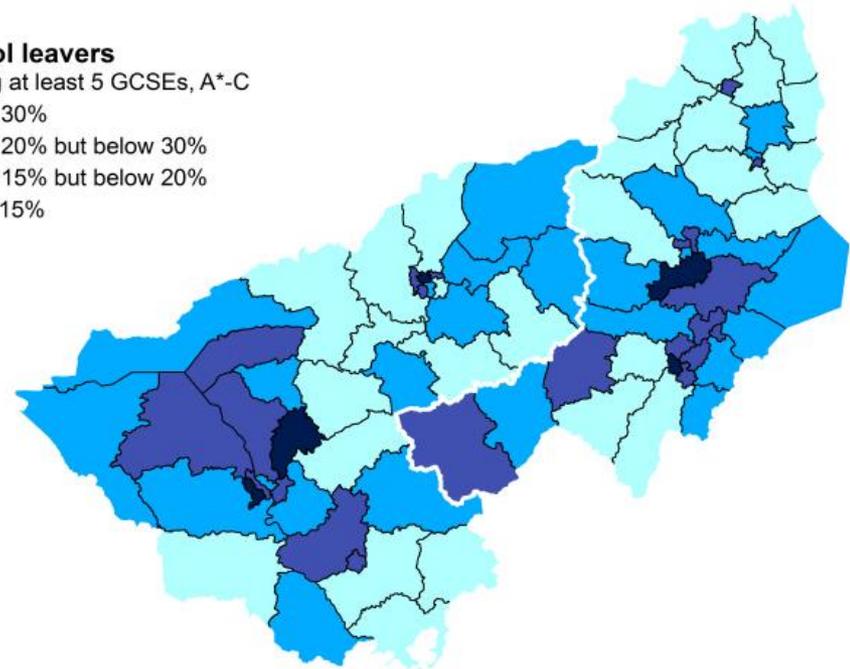


Source: NI School Leavers Survey

School leavers (%) not achieving 5+ GCSEs A*-C, West wards (2013/14-2015/16)

% of school leavers
Not achieving at least 5 GCSEs, A*-C

- Above 30%
- Above 20% but below 30%
- Above 15% but below 20%
- Below 15%



Source: NI School Leavers Survey

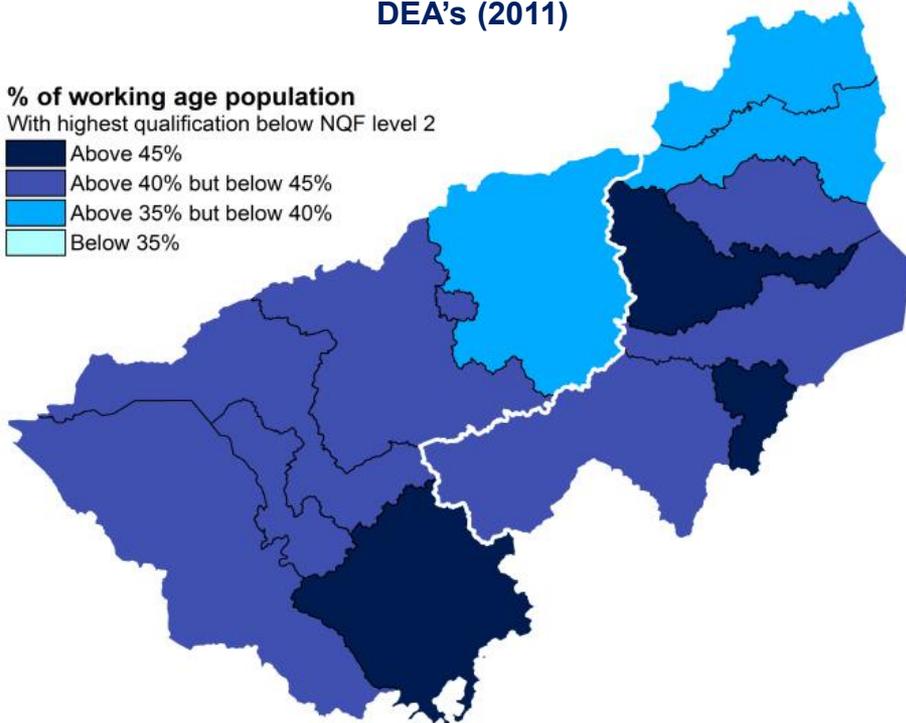
Annex B3: Highest qualification below NQF level 2 (2011) versus school leavers not entering education, employment or training (2013/14 to 2014/15), West DEA's/SOA's

Highest qualification below NQF level 2 (2011) versus school leavers not entering education, employment or training (2013/14 to 2014/15), West DEA's/SOA's

Working age population (%) with NQF level 2 or below, West DEA's (2011)

% of working age population
With highest qualification below NQF level 2

- Above 45%
- Above 40% but below 45%
- Above 35% but below 40%
- Below 35%

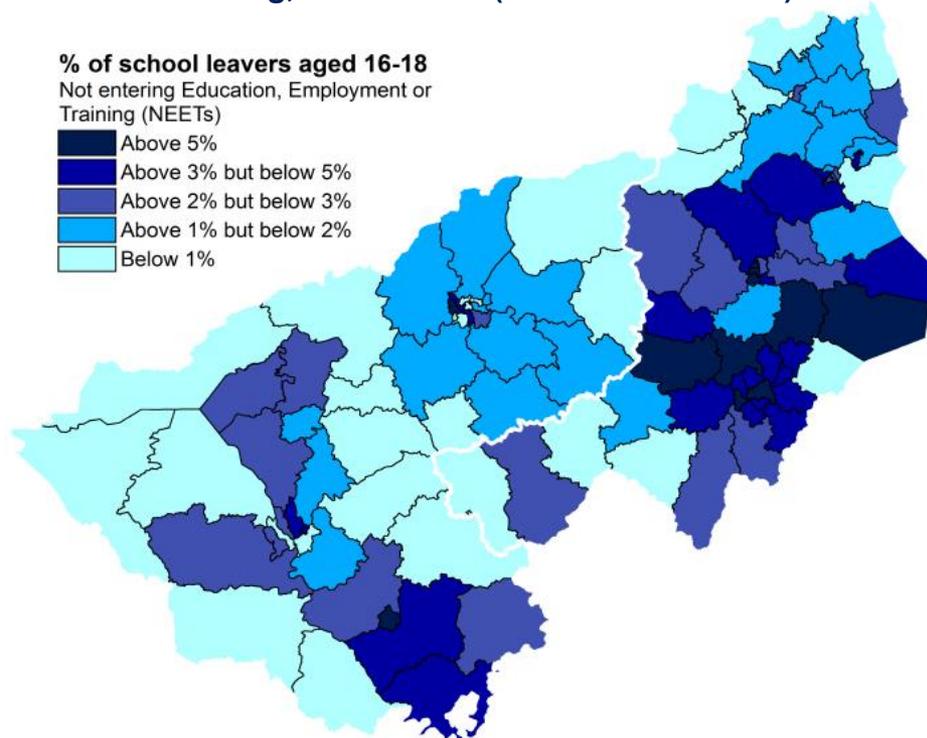


Source: NISRA, Census 2011

School leavers (%) not entering education, employment or training, West SOA's (2013/14 to 2014/15)

% of school leavers aged 16-18
Not entering Education, Employment or Training (NEETs)

- Above 5%
- Above 3% but below 5%
- Above 2% but below 3%
- Above 1% but below 2%
- Below 1%

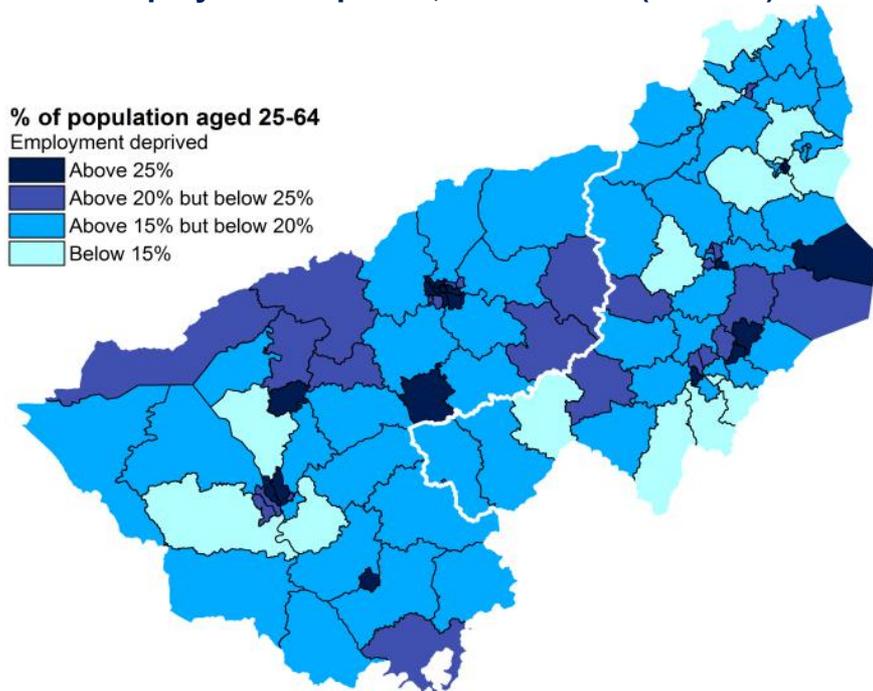


Source: NI Multiple Deprivation Measure

Annex B4: Employment deprivation (2015/16) versus population aged 18-21 not enrolled in a HE course at HE or FE, West SOA's (2012/13-2014/15)

Employment deprivation (2015/16) versus population aged 18-21 not enrolled in a HE course at HE or FE, West SOA's (2012/13-2014/15)

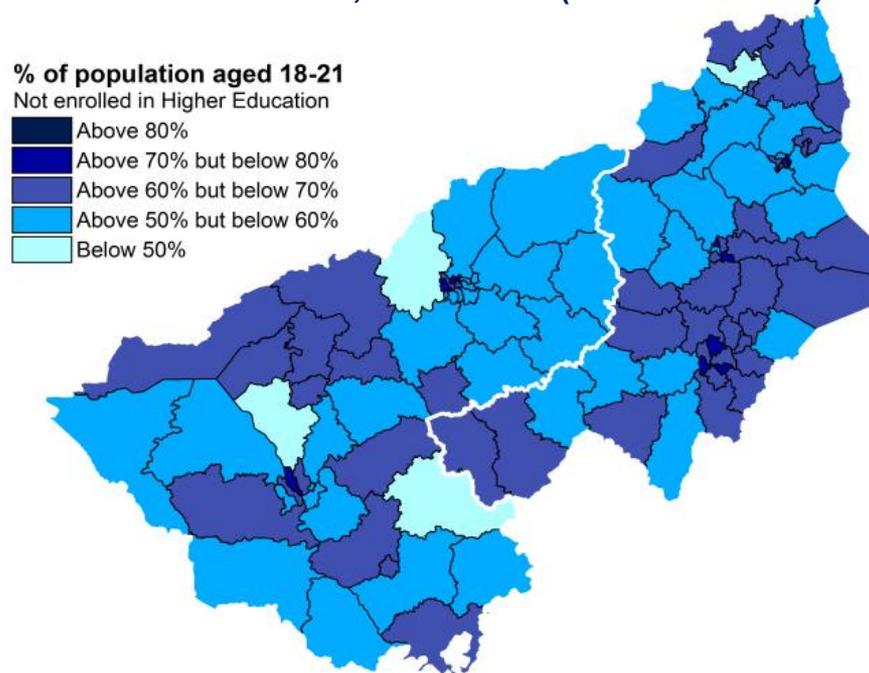
Proportion (%) of population aged 25-64 who are employment deprived, West SOA's (2015/16)



Source: NI Multiple Deprivation Measure

Note: Employment deprived is defined as the proportion of working age population who are in receipt of at least one employment benefit and individuals who are not in receipt of the selected benefits, nor have received income from employment.

Proportion (%) of population aged 18-21 not enrolled in a HE course at HE or FE, West SOA's (2012/13-2015/16)



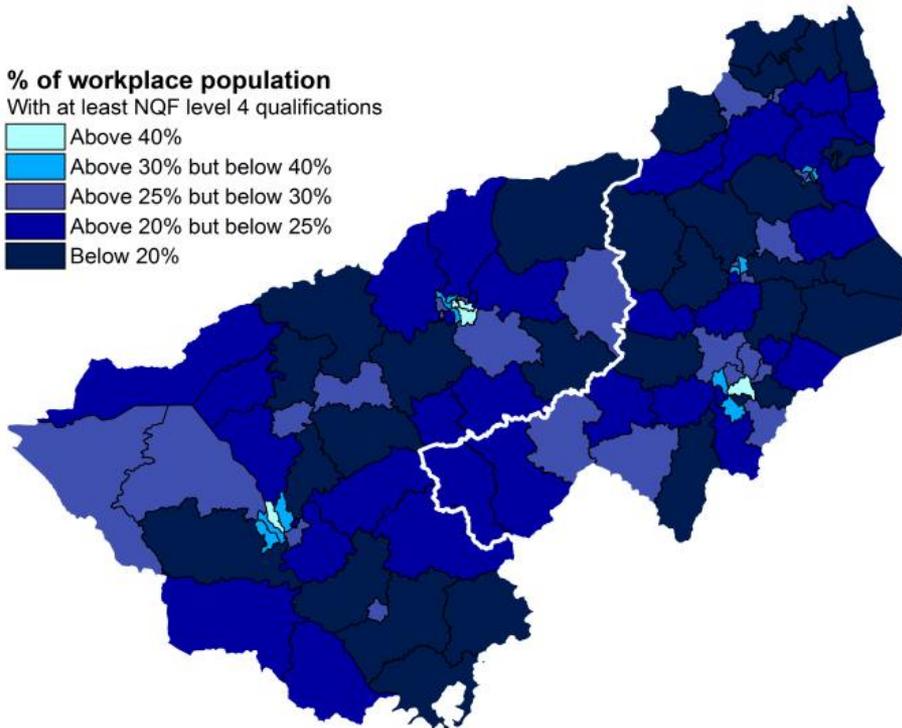
Source: NI Multiple Deprivation Measure

Note: Not enrolled in higher education course in a higher or further education institution

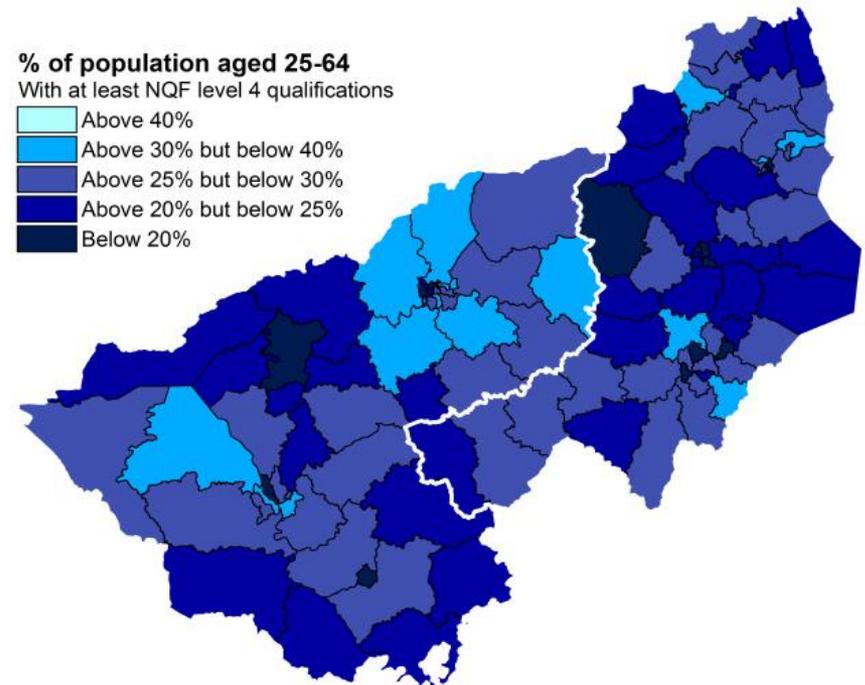
Annex B5: NQF level 4+ qualifications, workplace versus resident, West SOA's (2011)

NQF level 4+ qualifications, workplace versus resident, West SOA's (2011)

Proportion (%) of 16-74 population with NQF level 4+ qualifications (workplace based), West SOA's (2011)



Proportion (%) of 25-64 population with NQF level 4+ qualifications (resident based), West SOA's (2011)



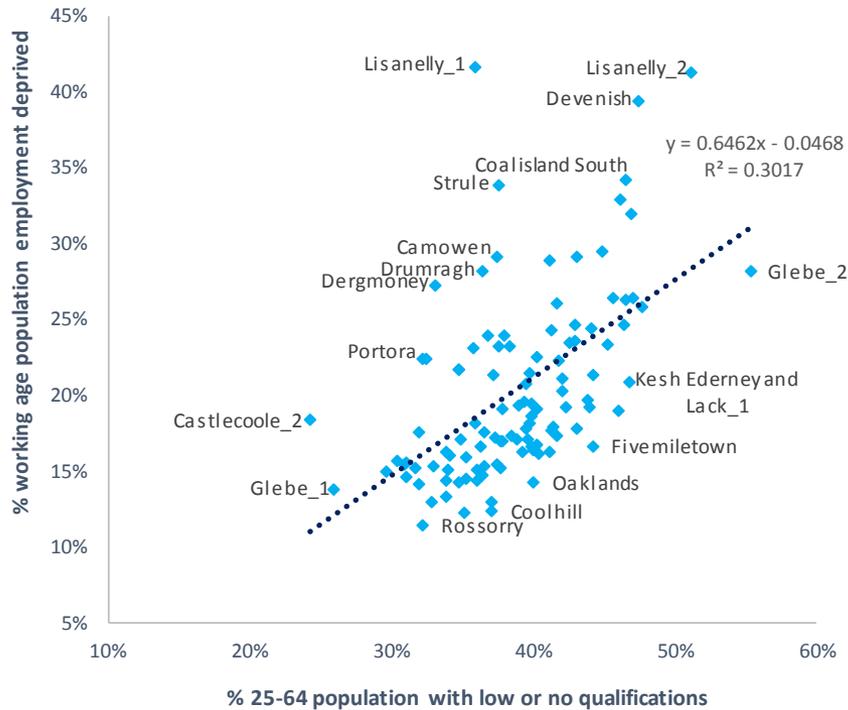
Source: NISRA, Census 2011

Source: NISRA, Census 2011

Annex C: Scatters

Annex C1: Employment deprivation (2015/16) versus low or no qualifications (2011), West and NI SOA's

% working age population employment deprived (2015/16) versus % of 25-64 population with low or no qualifications (2011), West SOA's



Source: NI Multiple Deprivation Measure

Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

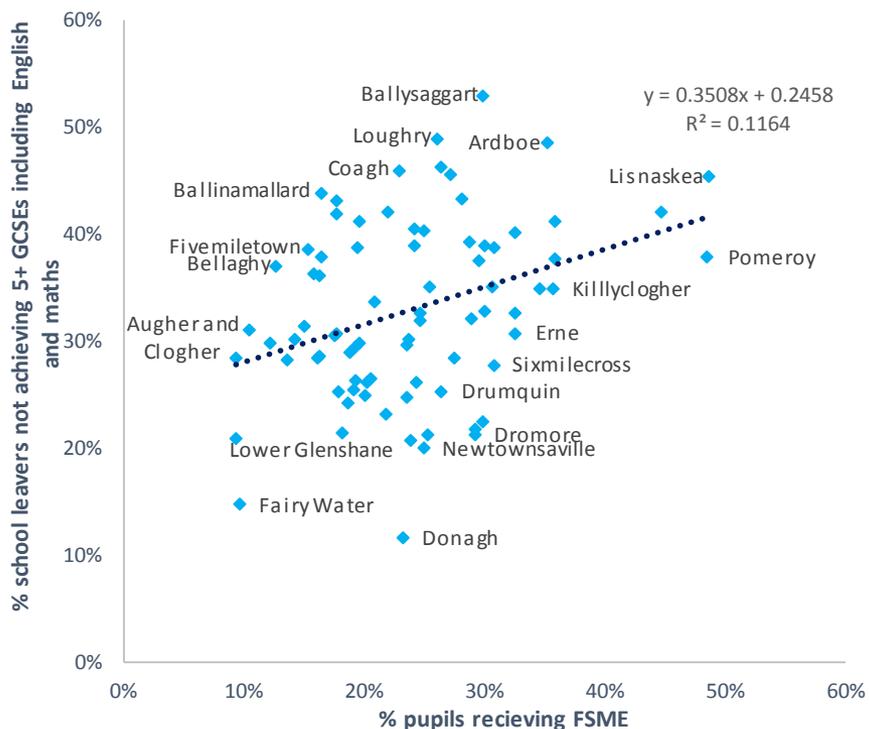
% working age population employment deprived (2015/16) versus % of 25-64 population with low or no qualifications (2011), NI SOA's



Source: NI Multiple Deprivation Measure

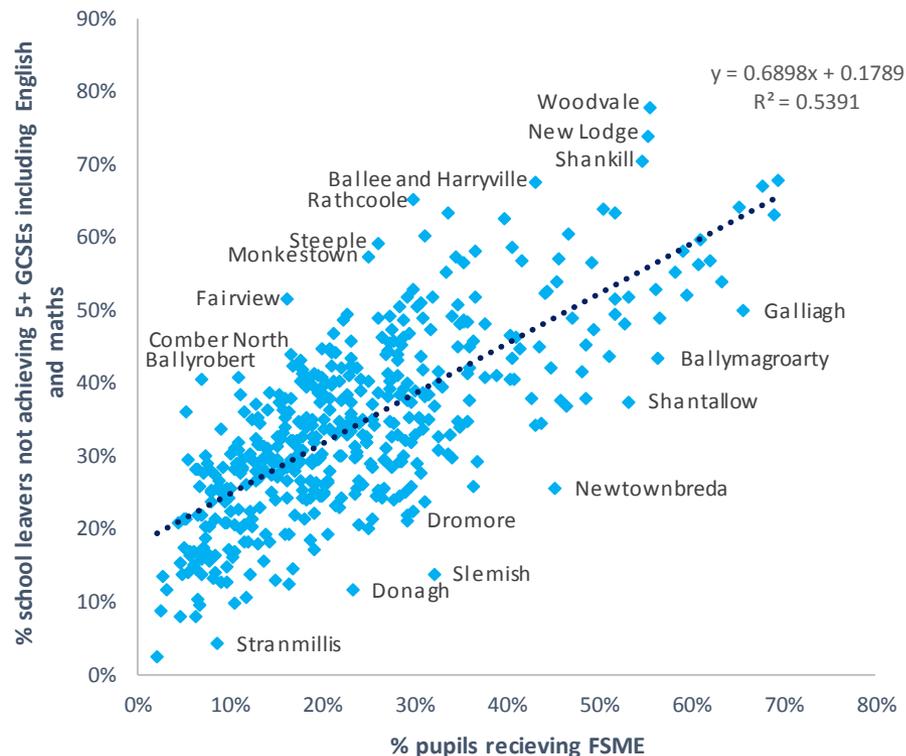
Annex C2: Educational attainment (2013/14-2015-16) versus proportion of pupils entitles to free school meals (2013/14-2015/16), West and NI wards

% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of pupils receiving FSME (2013/14-2015/16), West Wards



Source: NI School leavers survey

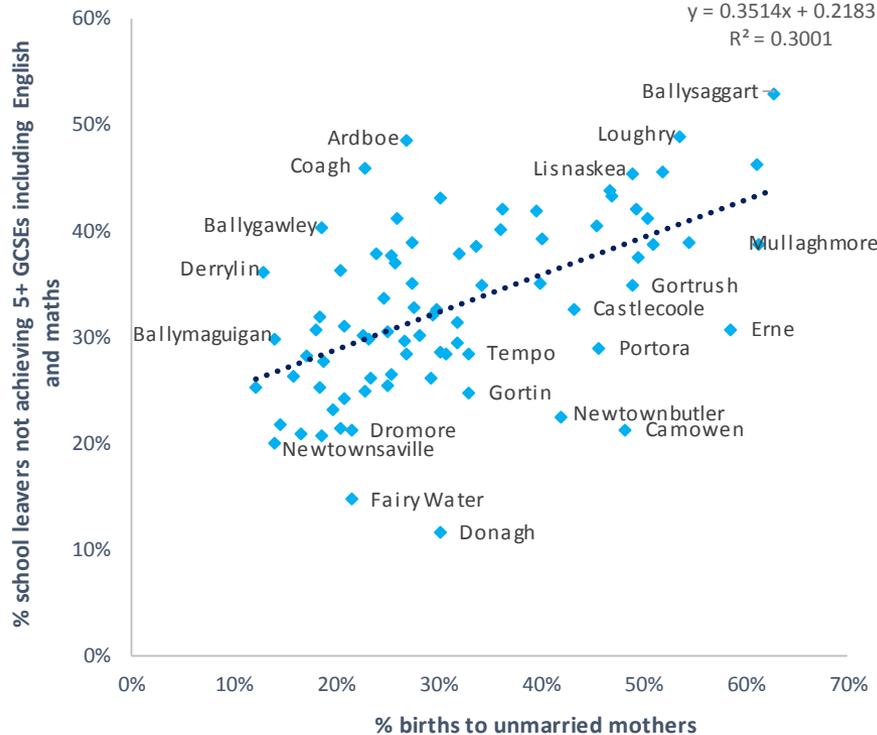
% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of pupils receiving FSME (2013/14-2015/16), NI Wards



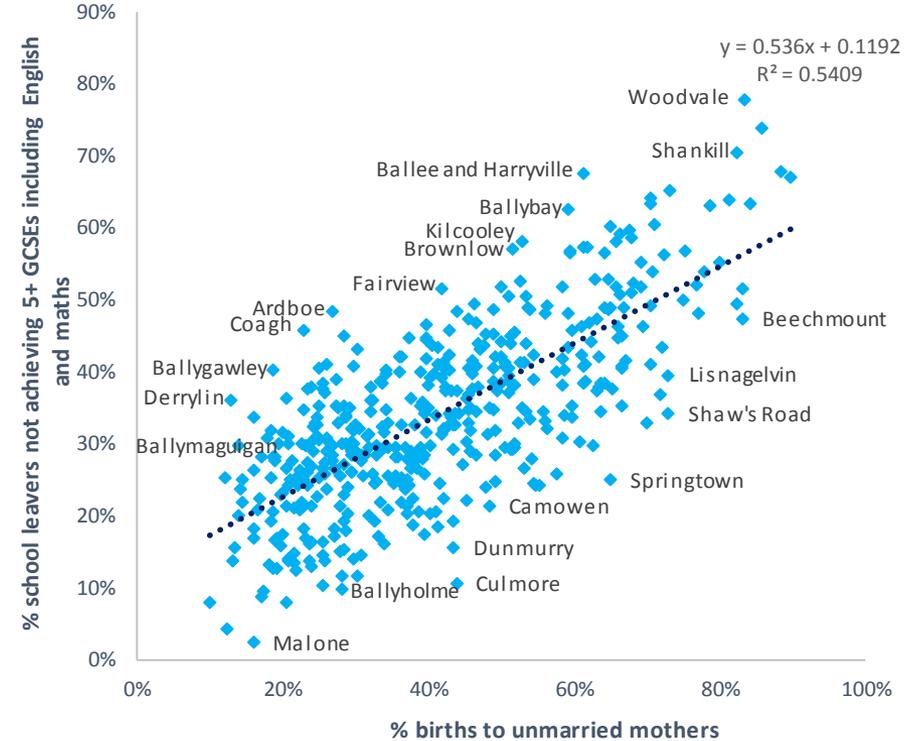
Source: NI School leavers survey

Annex C3: Educational attainment (2013/14-2015/16) versus proportion of births to unmarried mothers (2014-15), West and NI wards

% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of births to unmarried mothers (2014-2015), West Wards



% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of births to unmarried mothers (2014-2015), NI Wards

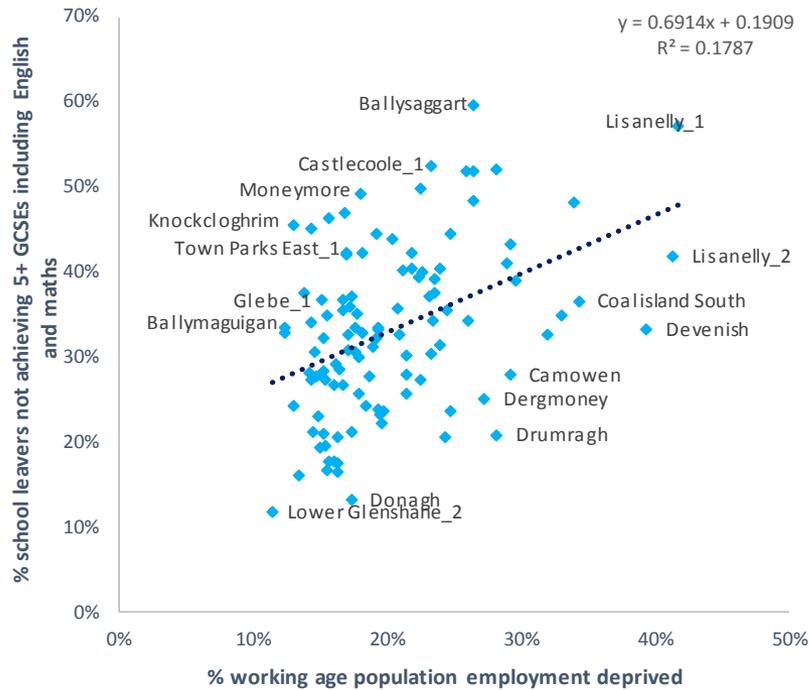


Source: NI School leavers survey

Source: NI School leavers survey

Annex C4: Educational attainment (2015/16) versus employment deprivation (2015-16), West and NI SOA's

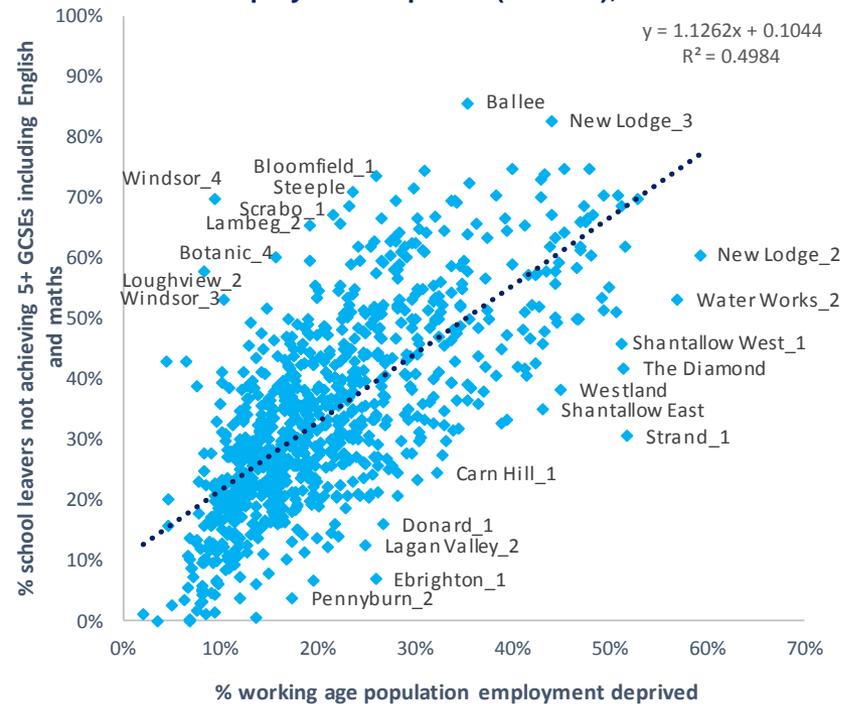
% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of working age population employment deprived (2015/16), West SOA's



Source: NI Multiple Deprivation Measure

Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of working age population employment deprived (2015/16), NI SOA's

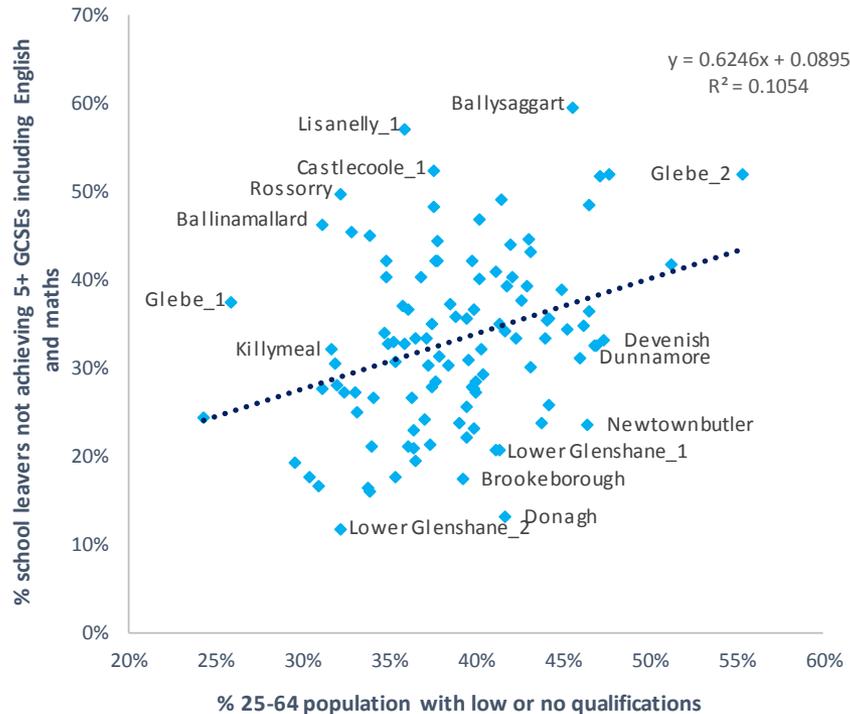


Source: NI Multiple Deprivation Measure

Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

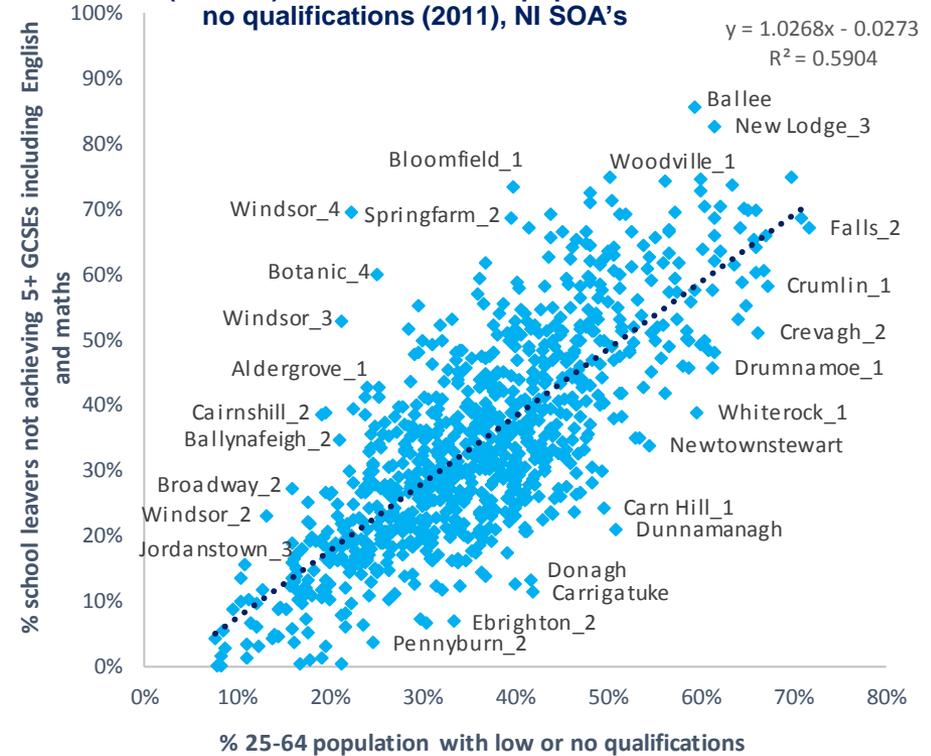
Annex C5: Educational attainment (2015/16) and adult population with low or no qualifications (2011), West and NI SOA's C: Scatters

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of 25-64 population with low or no qualifications (2011), West SOA's



Source: NI Multiple Deprivation Measure

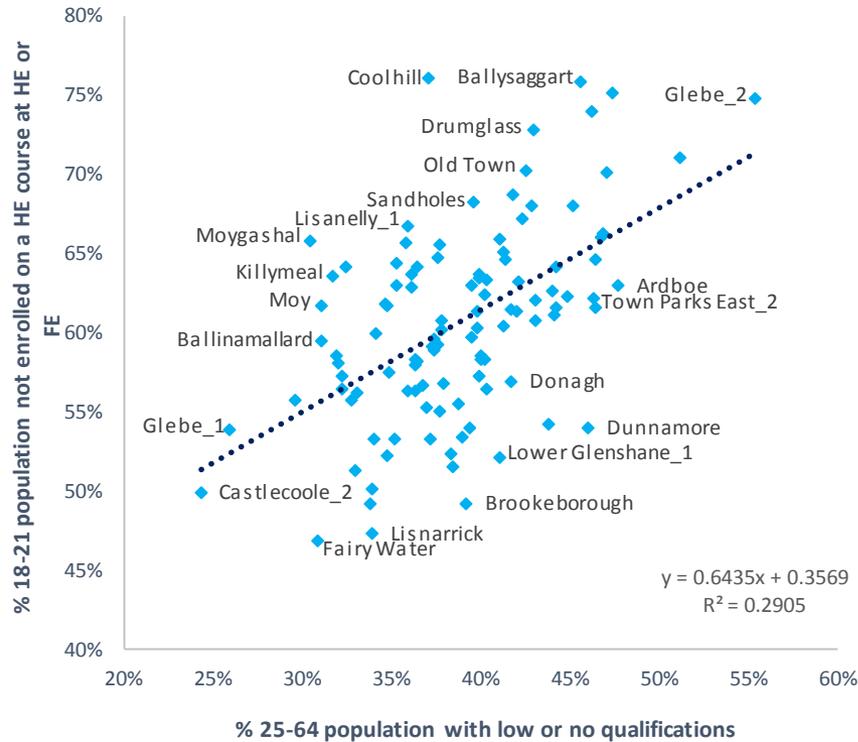
% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of 25-64 population with low or no qualifications (2011), NI SOA's



Source: NI Multiple Deprivation Measure

Annex C6: Tertiary education participation (2015/16) versus adult population with low or no skills (2011), West and NI SOA's

% 18-21 population not enrolled in HE course at HE or FE (2015/16) versus % of 25-64 population with low or no qualifications (2011), West SOA's



% 18-21 population not enrolled in HE course at HE or FE (2015/16) versus % of 25-64 population with low or no qualifications (2011), NI SOA's



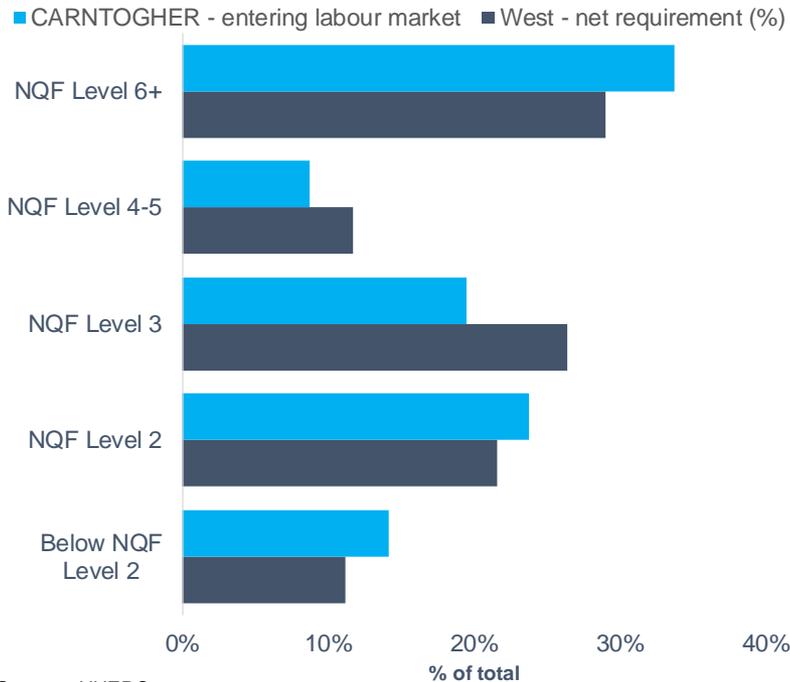
Source: NI Multiple Deprivation Measure

Source: NI Multiple Deprivation Measure

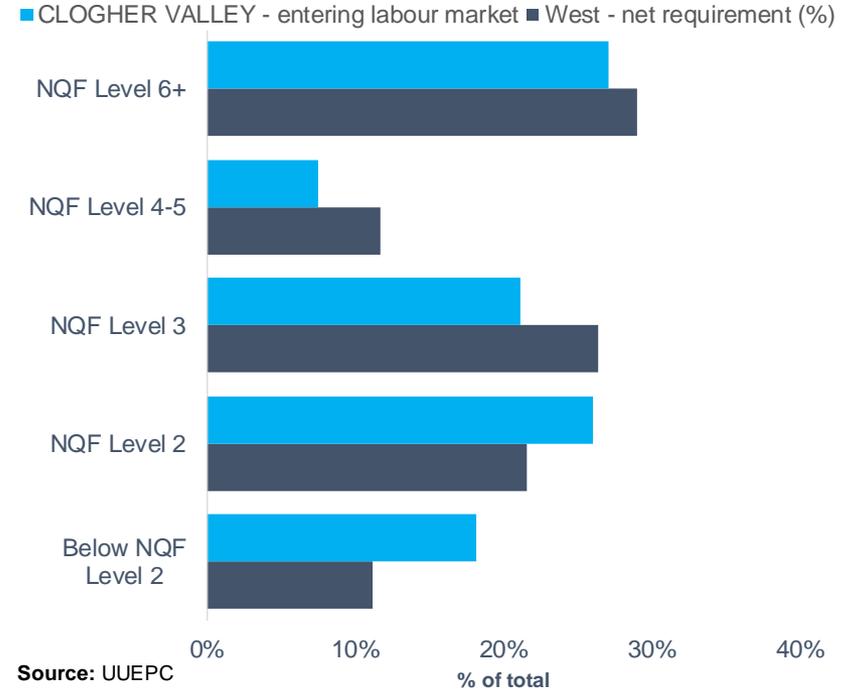
Annex D: DEA Net requirement

Annex D1: DEA Net Requirement (Carntogher and Clougher Valley)

Net requirement (West) vs skills profile of labour market entrants (Carntogher) (2017-2027)

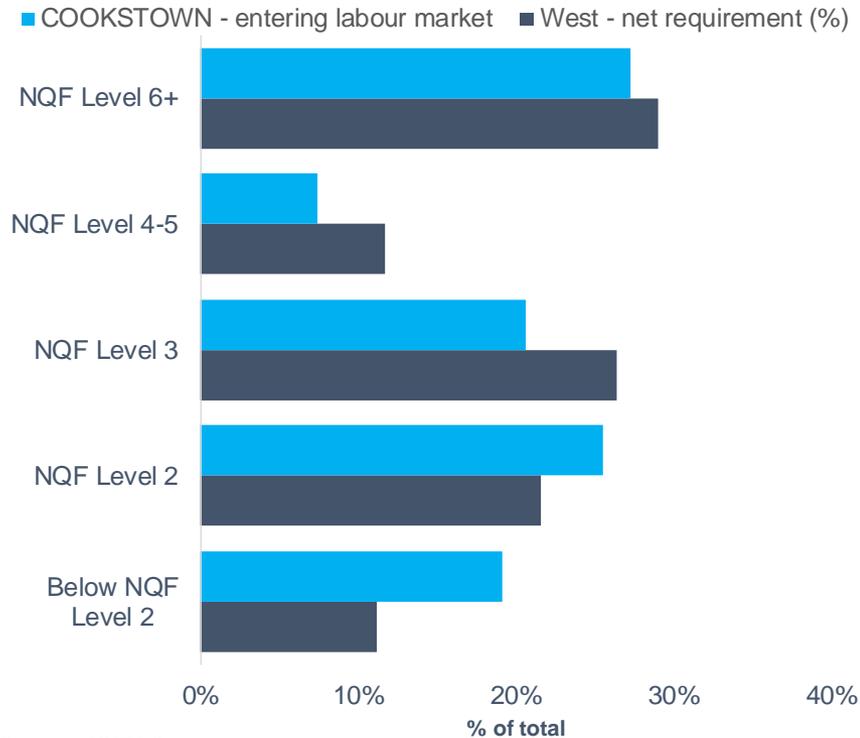


Net requirement (West) vs skills profile of labour market entrants (Clougher Valley) (2017-2027)

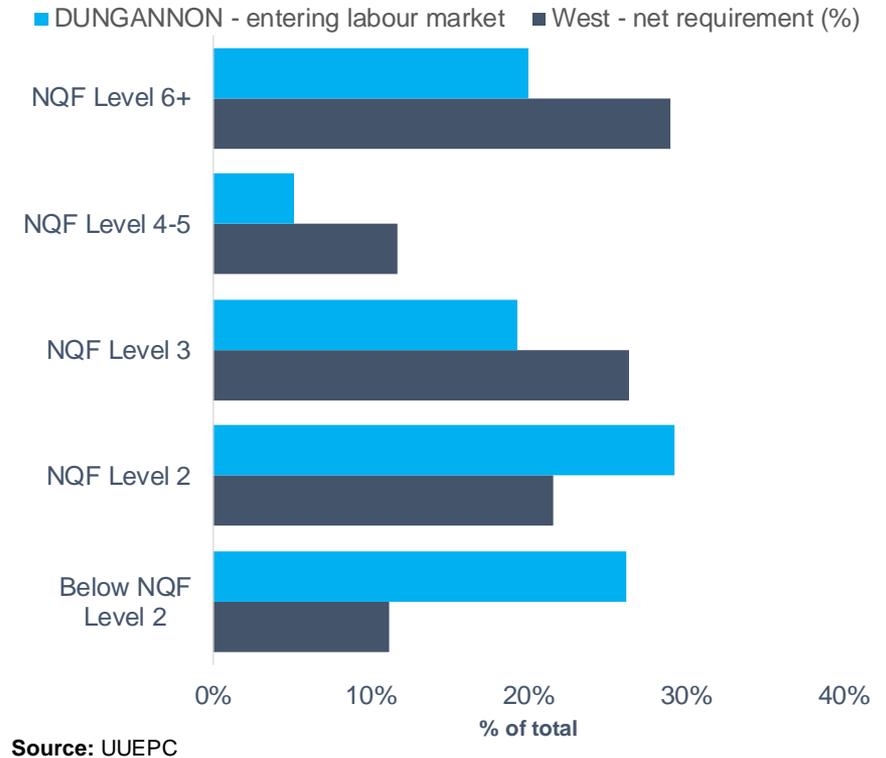


Annex D2: DEA Net Requirement (Cookstown and Dungannon)

Net requirement (West) vs skills profile of labour market entrants (Cookstown) (2017-2027)

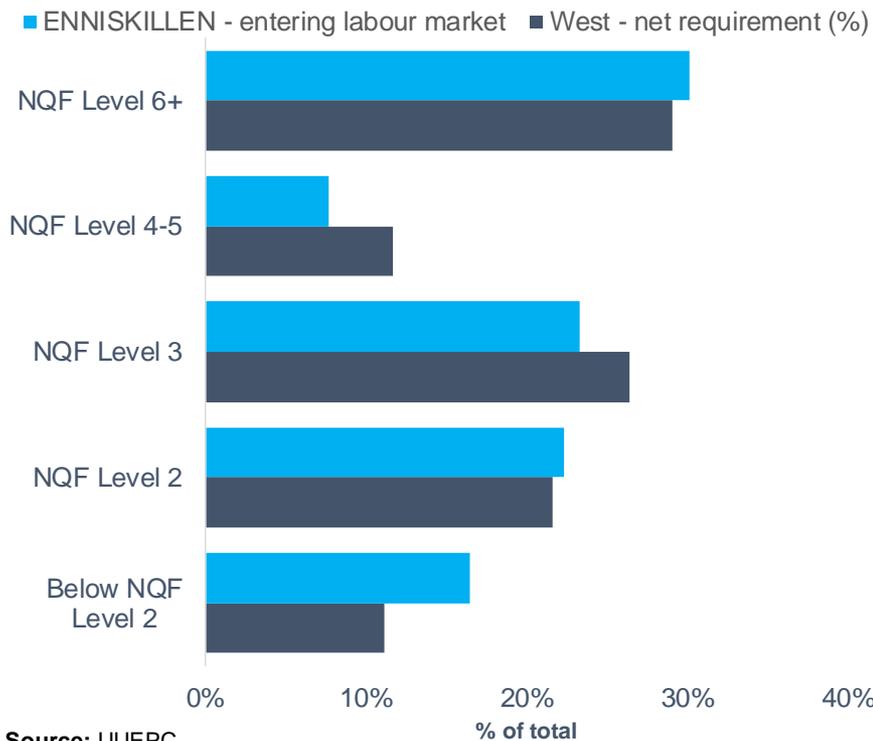


Net requirement (West) vs skills profile of labour market entrants (Dungannon) (2017-2027)

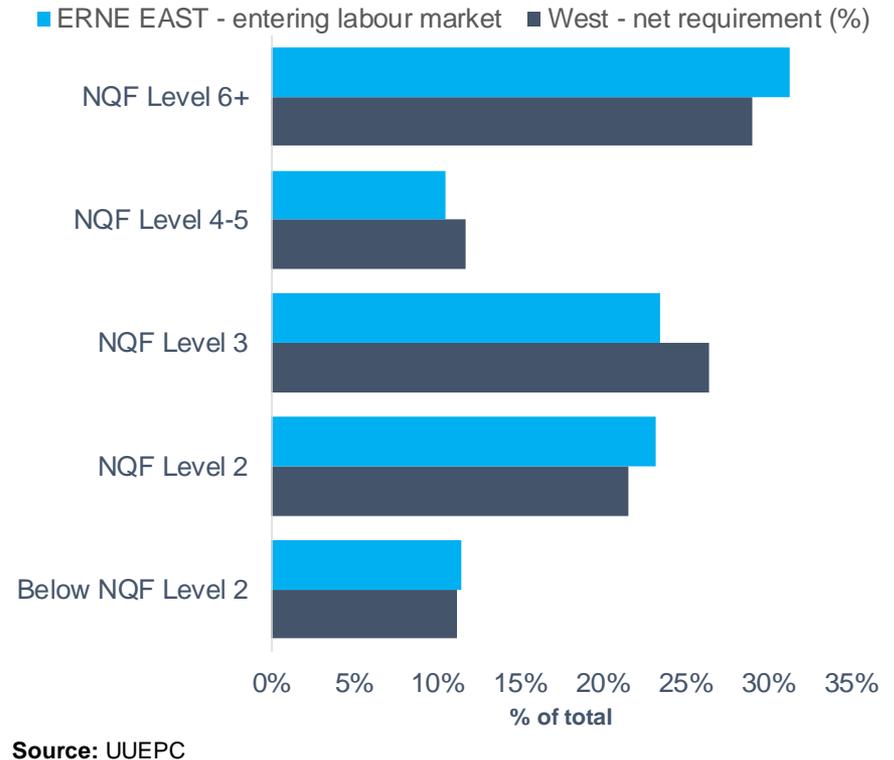


Annex D3: DEA Net Requirement (Enniskillen and Erne East)

Net requirement (West) vs skills profile of labour market entrants (Enniskillen) (2017-2027)

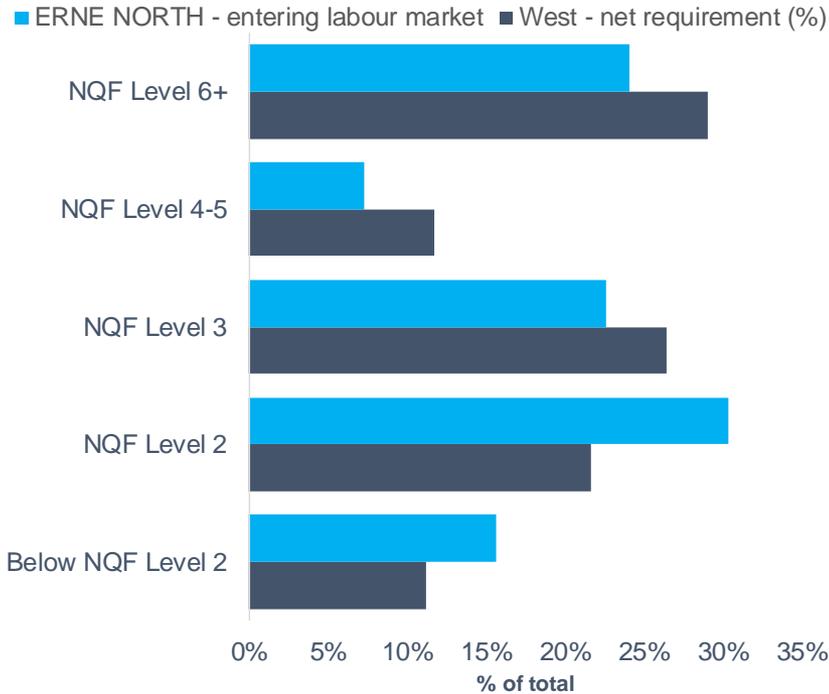


Net requirement (West) vs skills profile of labour market entrants (Erne East) (2017-2027)



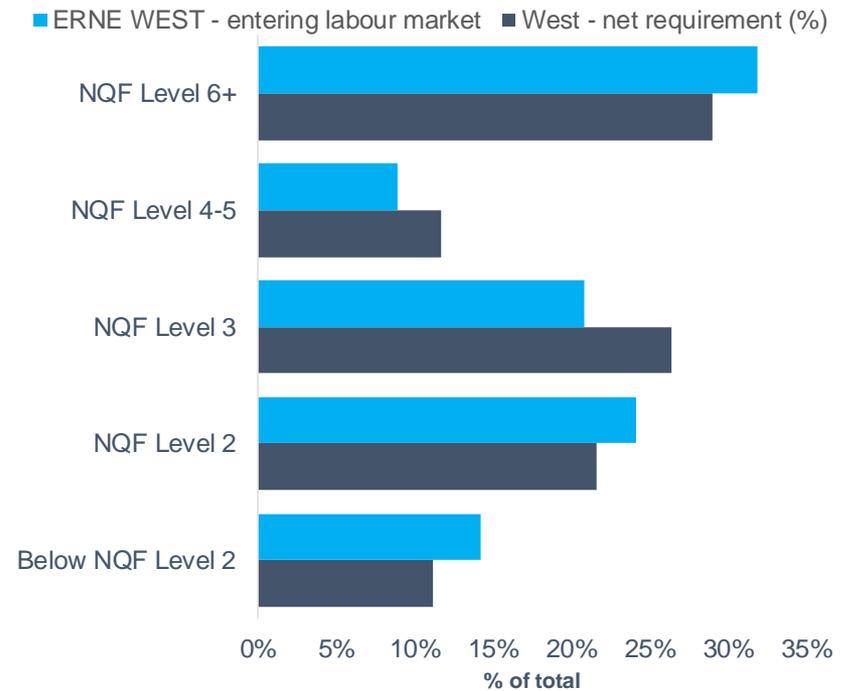
Annex D4: DEA Net Requirement (Erne North and Erne West)

Net requirement (West) vs skills profile of labour market entrants (Erne North) (2017-2027)



Source: UUEPC

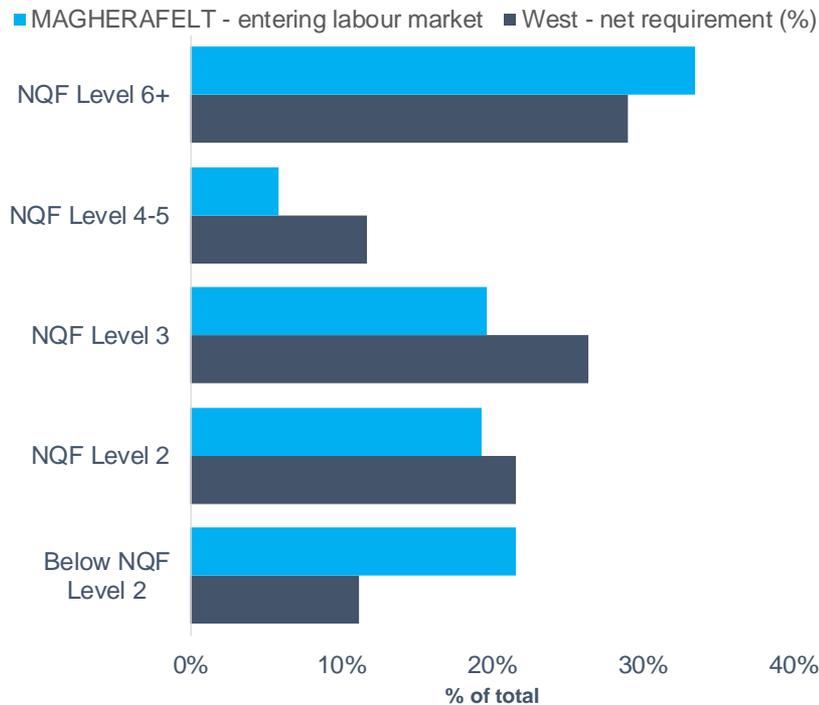
Net requirement (West) vs skills profile of labour market entrants (Erne West) (2017-2027)



Source: UUEPC

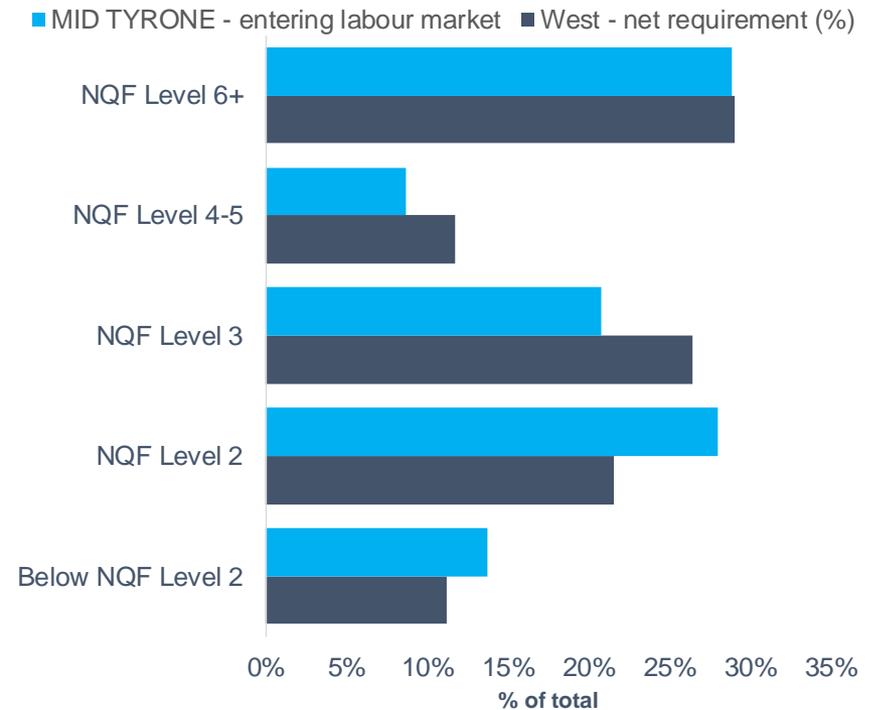
Annex D5: DEA Net Requirement (Magherafelt and Mid Tyrone)

Net requirement (West) vs skills profile of labour market entrants (Magherafelt) (2017-2027)



Source: UUEPC

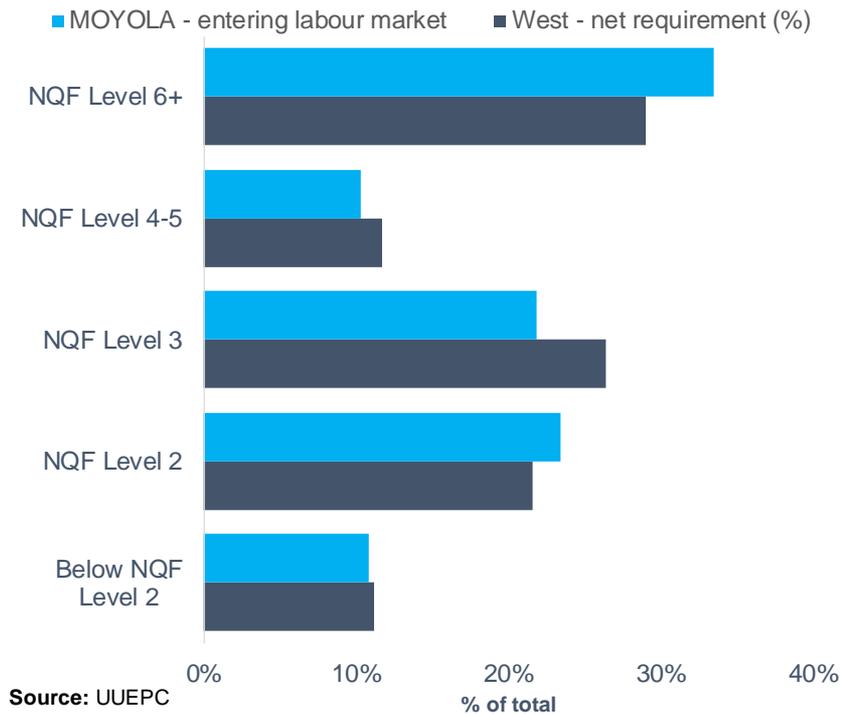
Net requirement (West) vs skills profile of labour market entrants (Mid Tyrone) (2017-2027)



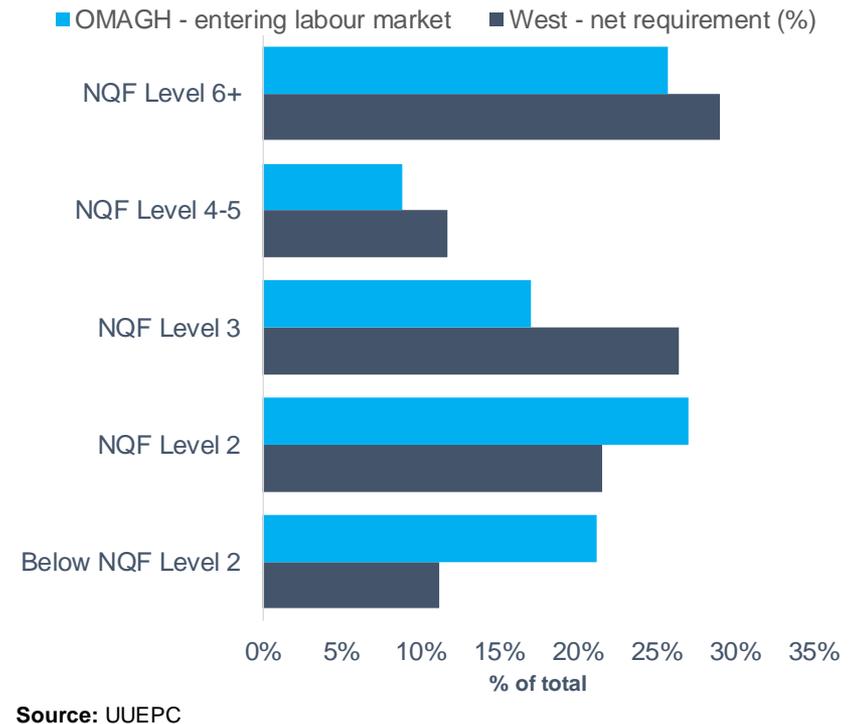
Source: UUEPC

Annex D6: DEA Net Requirement (Moyola and Omagh)

Net requirement (West) vs skills profile of labour market entrants (Moyola) (2017-2027)

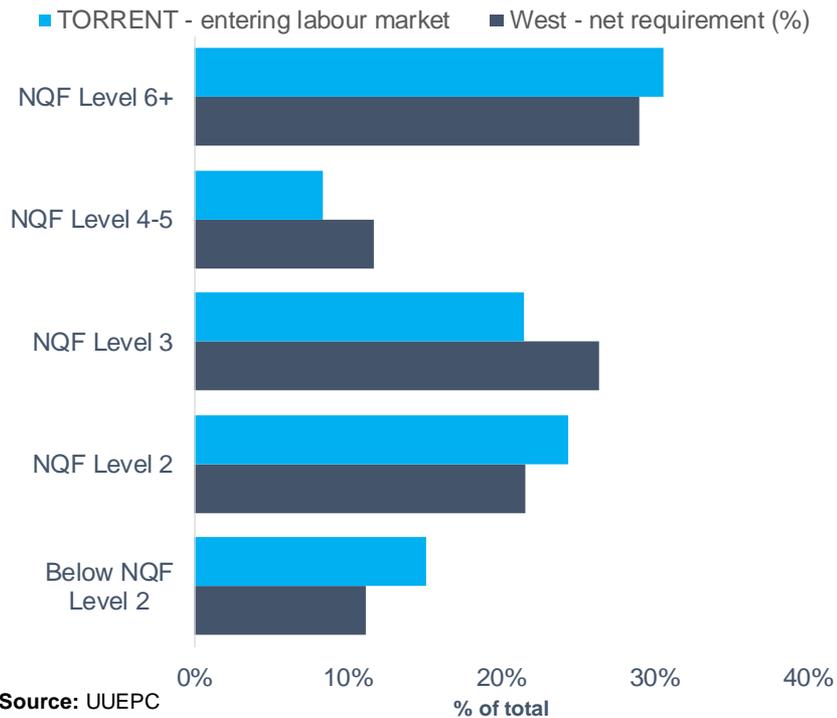


Net requirement (West) vs skills profile of labour market entrants (Omagh) (2017-2027)

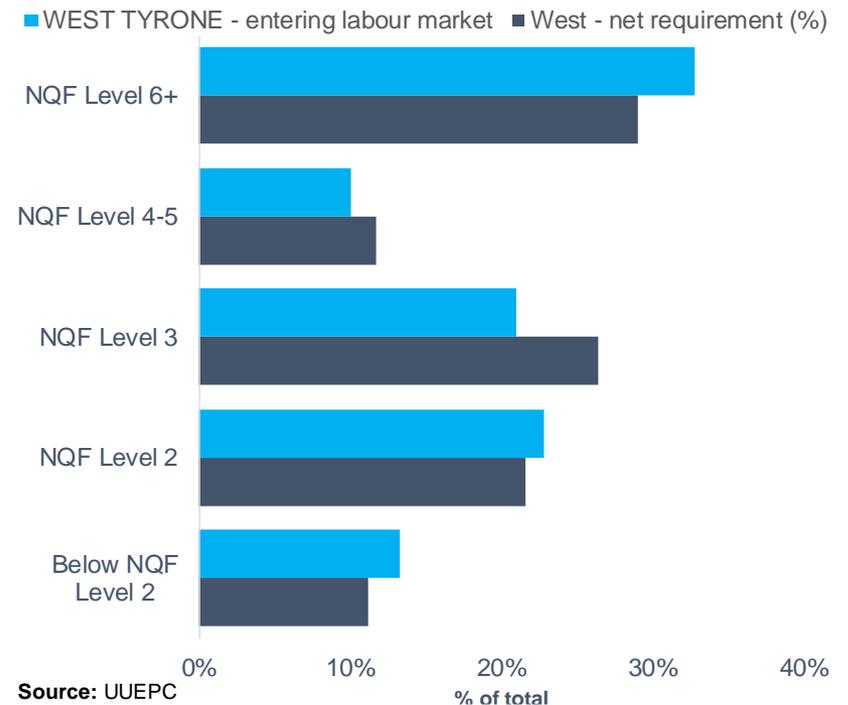


Annex D7: DEA Net Requirement (Torrent and West Tyrone)

Net requirement (West) vs skills profile of labour market entrants (Torrent) (2017-2027)



Net requirement (West) vs skills profile of labour market entrants (West Tyrone) (2017-2027)



Annex E: DEA Score cards

Annex E1: Enniskillen Scorecard (Fermanagh and Omagh)

	Enniskillen	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	65%	56
	% of school enrolments entitled to FSM	30%	53
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	14%	53
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	51%	17
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	19%	61
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	20%	14
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	18%	66
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	12%	43
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	41%	47
	% of 16-64 population with high qualifications (NQF level 4+)	26%	32
	% of 16-34 population with low qualifications (below NQF level 2)	33%	62
	% of 16-34 population with high qualifications (NQF level 4+)	23%	44
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	23%	53
	Social security clients (client group analysis) as a % of the population (16-34)	18%	59
	Housing benefit claimants as a % of the population (16-64)	11%	55
	Housing benefit claimants as a % of the population (16-34)	10%	58
	% of households with no adults in employment	35%	42
	% of households with no adults in employment with dependent children	5%	38
	% of households with lone parents with dependent children	9%	45
	% of people employed who are either managers/senior officials or professionals	8%	39
	Employment rate (% , 16-74 population)	62%	37
Unemployed who have never worked (% of unemployed)	15%	41	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

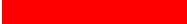
 Ranked in the top 10 performing DEA's in NI

 Ranked in the bottom 10 performing DEA's in NI

Annex E2: Erne East (Fermanagh and Omagh)

	Erne East	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	75%	16
	% of school enrolments entitled to FSM	33%	60
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	20%	71
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	45%	6
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	12%	36
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	17%	25
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	16%	74
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	13%	35
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	45%	70
	% of 16-64 population with high qualifications (NQF level 4+)	21%	67
	% of 16-34 population with low qualifications (below NQF level 2)	31%	55
	% of 16-34 population with high qualifications (NQF level 4+)	24%	40
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	20%	36
	Social security clients (client group analysis) as a % of the population (16-34)	13%	33
	Housing benefit claimants as a % of the population (16-64)	8%	34
	Housing benefit claimants as a % of the population (16-34)	6%	30
	% of households with no adults in employment	33%	34
	% of households with no adults in employment with dependent children	5%	41
	% of households with lone parents with dependent children	6%	17
	% of people employed who are either managers/senior officials or professionals	7%	67
	Employment rate (% , 16-74 population)	60%	49
Unemployed who have never worked (% of unemployed)	16%	48	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI
 Ranked in the bottom 10 performing DEA's in NI

Annex E3: Erne North (Fermanagh and Omagh)

	Erne North	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	58%	73
	% of school enrolments entitled to FSM	26%	42
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	9%	33
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	55%	39
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	15%	49
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	14%	55
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	7%	80
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	12%	47
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	43%	61
	% of 16-64 population with high qualifications (NQF level 4+)	22%	59
	% of 16-34 population with low qualifications (below NQF level 2)	31%	53
	% of 16-34 population with high qualifications (NQF level 4+)	24%	37
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	22%	46
	Social security clients (client group analysis) as a % of the population (16-34)	15%	49
	Housing benefit claimants as a % of the population (16-64)	9%	41
	Housing benefit claimants as a % of the population (16-34)	7%	46
	% of households with no adults in employment	35%	43
	% of households with no adults in employment with dependent children	5%	33
	% of households with lone parents with dependent children	6%	24
	% of people employed who are either managers/senior officials or professionals	8%	27
	Employment rate (% , 16-74 population)	61%	44
Unemployed who have never worked (% of unemployed)	16%	51	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

 Ranked in the bottom 10 performing DEA's in NI

Annex E4: Erne West (Fermanagh and Omagh)

	Erne West	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	67%	43
	% of school enrolments entitled to FSM	22%	32
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	11%	42
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	52%	22
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	17%	55
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	22%	5
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	17%	72
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	13%	37
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	41%	50
	% of 16-64 population with high qualifications (NQF level 4+)	25%	40
	% of 16-34 population with low qualifications (below NQF level 2)	29%	42
	% of 16-34 population with high qualifications (NQF level 4+)	27%	21
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	16%	15
	Social security clients (client group analysis) as a % of the population (16-34)	10%	14
	Housing benefit claimants as a % of the population (16-64)	5%	10
	Housing benefit claimants as a % of the population (16-34)	4%	11
	% of households with no adults in employment	30%	15
	% of households with no adults in employment with dependent children	3%	13
	% of households with lone parents with dependent children	4%	1
	% of people employed who are either managers/senior officials or professionals	7%	51
	Employment rate (% , 16-74 population)	65%	18
Unemployed who have never worked (% of unemployed)	14%	34	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

 Ranked in the bottom 10 performing DEA's in NI

Annex E5: Mid Tyrone (Fermanagh and Omagh)

	Mid Tyrone	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	72%	26
	% of school enrolments entitled to FSM	28%	47
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	13%	48
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	55%	33
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	15%	50
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	23%	4
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	24%	38
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	18
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	38%	34
	% of 16-64 population with high qualifications (NQF level 4+)	27%	27
	% of 16-34 population with low qualifications (below NQF level 2)	26%	25
	% of 16-34 population with high qualifications (NQF level 4+)	28%	19
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	22%	50
	Social security clients (client group analysis) as a % of the population (16-34)	13%	31
	Housing benefit claimants as a % of the population (16-64)	5%	17
	Housing benefit claimants as a % of the population (16-34)	4%	14
	% of households with no adults in employment	30%	14
	% of households with no adults in employment with dependent children	6%	51
	% of households with lone parents with dependent children	5%	8
	% of people employed who are either managers/senior officials or professionals	7%	64
	Employment rate (% , 16-74 population)	61%	45
Unemployed who have never worked (% of unemployed)	18%	57	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

 Ranked in the bottom 10 performing DEA's in NI

Annex E6: Omagh (Fermanagh and Omagh)

	Omagh	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	61%	68
	% of school enrolments entitled to FSM	39%	69
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	16%	62
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	61%	61
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	24%	74
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	17%	32
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	26%	29
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	15%	12
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	44%	65
	% of 16-64 population with high qualifications (NQF level 4+)	24%	46
	% of 16-34 population with low qualifications (below NQF level 2)	35%	68
	% of 16-34 population with high qualifications (NQF level 4+)	23%	45
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	30%	73
	Social security clients (client group analysis) as a % of the population (16-34)	20%	61
	Housing benefit claimants as a % of the population (16-64)	16%	69
	Housing benefit claimants as a % of the population (16-34)	11%	62
	% of households with no adults in employment	41%	72
	% of households with no adults in employment with dependent children	7%	64
	% of households with lone parents with dependent children	10%	59
	% of people employed who are either managers/senior officials or professionals	7%	61
	Employment rate (% , 16-74 population)	55%	70
Unemployed who have never worked (% of unemployed)	20%	70	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC



Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

Annex E6: West Tyrone (Fermanagh and Omagh)

	West Tyrone	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	83%	4
	% of school enrolments entitled to FSM	22%	33
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	14%	56
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	52%	21
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	18%	60
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	22%	7
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	15%	75
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	20
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	41%	49
	% of 16-64 population with high qualifications (NQF level 4+)	25%	37
	% of 16-34 population with low qualifications (below NQF level 2)	27%	31
	% of 16-34 population with high qualifications (NQF level 4+)	27%	22
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	21%	44
	Social security clients (client group analysis) as a % of the population (16-34)	12%	25
	Housing benefit claimants as a % of the population (16-64)	7%	28
	Housing benefit claimants as a % of the population (16-34)	4%	17
	% of households with no adults in employment	32%	25
	% of households with no adults in employment with dependent children	5%	36
	% of households with lone parents with dependent children	5%	5
	% of people employed who are either managers/senior officials or professionals	7%	58
	Employment rate (% , 16-74 population)	62%	40
Unemployed who have never worked (% of unemployed)	17%	56	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

 Ranked in the bottom 10 performing DEA's in NI

Annex E7: Carntogher (Mid Ulster)

	Carntogher	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	77%	12
	% of school enrolments entitled to FSM	20%	24
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	10%	37
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	54%	30
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	20%	65
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	16%	38
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	23%	47
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	21%	1
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	40%	42
	% of 16-64 population with high qualifications (NQF level 4+)	23%	51
	% of 16-34 population with low qualifications (below NQF level 2)	26%	23
	% of 16-34 population with high qualifications (NQF level 4+)	25%	31
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	18%	23
	Social security clients (client group analysis) as a % of the population (16-34)	8%	8
	Housing benefit claimants as a % of the population (16-64)	5%	18
	Housing benefit claimants as a % of the population (16-34)	3%	2
	% of households with no adults in employment	29%	10
	% of households with no adults in employment with dependent children	5%	39
	% of households with lone parents with dependent children	6%	12
	% of people employed who are either managers/senior officials or professionals	6%	74
	Employment rate (% , 16-74 population)	62%	39
	Unemployed who have never worked (% of unemployed)	12%	16

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

 Ranked in the bottom 10 performing DEA's in NI

Annex E8: Clogher Valley (Mid Ulster)

	Clogher Valley	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	69%	33
	% of school enrolments entitled to FSM	21%	25
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	14%	54
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	56%	44
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	23%	71
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	18%	23
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	25%	34
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	19%	3
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	41%	52
	% of 16-64 population with high qualifications (NQF level 4+)	23%	47
	% of 16-34 population with low qualifications (below NQF level 2)	28%	35
	% of 16-34 population with high qualifications (NQF level 4+)	27%	23
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	17%	22
	Social security clients (client group analysis) as a % of the population (16-34)	10%	12
	Housing benefit claimants as a % of the population (16-64)	5%	11
	Housing benefit claimants as a % of the population (16-34)	3%	10
	% of households with no adults in employment	30%	13
	% of households with no adults in employment with dependent children	4%	25
	% of households with lone parents with dependent children	5%	9
	% of people employed who are either managers/senior officials or professionals	7%	65
	Employment rate (% , 16-74 population)	65%	19
Unemployed who have never worked (% of unemployed)	18%	61	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC



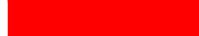
Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

Annex E9: Cookstown (Mid Ulster)

	Cookstown	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	62%	65
	% of school enrolments entitled to FSM	35%	62
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	16%	64
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	56%	42
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	23%	72
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	11%	74
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	17%	71
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	12%	45
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	46%	71
	% of 16-64 population with high qualifications (NQF level 4+)	20%	73
	% of 16-34 population with low qualifications (below NQF level 2)	34%	63
	% of 16-34 population with high qualifications (NQF level 4+)	21%	64
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	22%	49
	Social security clients (client group analysis) as a % of the population (16-34)	13%	38
	Housing benefit claimants as a % of the population (16-64)	8%	36
	Housing benefit claimants as a % of the population (16-34)	6%	31
	% of households with no adults in employment	34%	41
	% of households with no adults in employment with dependent children	6%	49
	% of households with lone parents with dependent children	8%	41
	% of people employed who are either managers/senior officials or professionals	7%	54
	Employment rate (% , 16-74 population)	59%	57
Unemployed who have never worked (% of unemployed)	19%	68	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI
 Ranked in the bottom 10 performing DEA's in NI

Annex E10: Dungannon (Mid Ulster)

	Dungannon	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	67%	42
	% of school enrolments entitled to FSM	28%	48
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	14%	51
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	65%	71
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	30%	79
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	13%	67
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	19%	64
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	20
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	46%	74
	% of 16-64 population with high qualifications (NQF level 4+)	23%	54
	% of 16-34 population with low qualifications (below NQF level 2)	42%	79
	% of 16-34 population with high qualifications (NQF level 4+)	21%	63
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	20%	35
	Social security clients (client group analysis) as a % of the population (16-34)	13%	36
	Housing benefit claimants as a % of the population (16-64)	8%	39
	Housing benefit claimants as a % of the population (16-34)	6%	36
	% of households with no adults in employment	33%	29
	% of households with no adults in employment with dependent children	5%	43
	% of households with lone parents with dependent children	9%	46
	% of people employed who are either managers/senior officials or professionals	7%	60
	Employment rate (% , 16-74 population)	63%	32
Unemployed who have never worked (% of unemployed)	22%	73	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

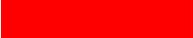
 Ranked in the bottom 10 performing DEA's in NI

Annex E11: Magherafelt (Mid Ulster)

	Magherafelt	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	53%	78
	% of school enrolments entitled to FSM	21%	27
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	6%	11
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	58%	50
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	30%	77
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	17%	31
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	26%	33
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	15%	15
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	41%	51
	% of 16-64 population with high qualifications (NQF level 4+)	23%	50
	% of 16-34 population with low qualifications (below NQF level 2)	30%	49
	% of 16-34 population with high qualifications (NQF level 4+)	23%	50
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	19%	31
	Social security clients (client group analysis) as a % of the population (16-34)	12%	27
	Housing benefit claimants as a % of the population (16-64)	7%	29
	Housing benefit claimants as a % of the population (16-34)	5%	19
	% of households with no adults in employment	30%	16
	% of households with no adults in employment with dependent children	6%	52
	% of households with lone parents with dependent children	7%	36
	% of people employed who are either managers/senior officials or professionals	8%	46
	Employment rate (% , 16-74 population)	63%	33
Unemployed who have never worked (% of unemployed)	13%	27	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

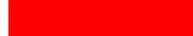
 Ranked in the bottom 10 performing DEA's in NI

Annex E12: Moyola (Mid Ulster)

	Moyola	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	65%	55
	% of school enrolments entitled to FSM	18%	17
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	11%	43
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	49%	13
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	15%	48
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	14%	53
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	30%	14
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	11%	48
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	39%	38
	% of 16-64 population with high qualifications (NQF level 4+)	25%	42
	% of 16-34 population with low qualifications (below NQF level 2)	25%	19
	% of 16-34 population with high qualifications (NQF level 4+)	26%	26
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	17%	19
	Social security clients (client group analysis) as a % of the population (16-34)	8%	5
	Housing benefit claimants as a % of the population (16-64)	5%	14
	Housing benefit claimants as a % of the population (16-34)	3%	8
	% of households with no adults in employment	27%	6
	% of households with no adults in employment with dependent children	4%	31
	% of households with lone parents with dependent children	5%	7
	% of people employed who are either managers/senior officials or professionals	7%	57
	Employment rate (% , 16-74 population)	64%	23
	Unemployed who have never worked (% of unemployed)	13%	25

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

 Ranked in the bottom 10 performing DEA's in NI

Annex E13: Torrent (Mid Ulster)

	Torrent	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	67%	43
	% of school enrolments entitled to FSM	35%	61
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	17%	65
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	51%	18
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	17%	56
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	15%	44
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	20%	59
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	17%	6
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	42%	58
	% of 16-64 population with high qualifications (NQF level 4+)	22%	60
	% of 16-34 population with low qualifications (below NQF level 2)	30%	47
	% of 16-34 population with high qualifications (NQF level 4+)	24%	42
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	22%	51
	Social security clients (client group analysis) as a % of the population (16-34)	13%	39
	Housing benefit claimants as a % of the population (16-64)	7%	32
	Housing benefit claimants as a % of the population (16-34)	5%	26
	% of households with no adults in employment	34%	39
	% of households with no adults in employment with dependent children	8%	69
	% of households with lone parents with dependent children	10%	54
	% of people employed who are either managers/senior officials or professionals	7%	50
	Employment rate (% , 16-74 population)	57%	65
Unemployed who have never worked (% of unemployed)	16%	52	

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

 Ranked in the top 10 performing DEA's in NI

 Ranked in the bottom 10 performing DEA's in NI

End

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