

Future Skills Needs: Belfast City Council



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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 Belfast City Council (BCC). 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 BCC and overall skill balances.

Acronyms and skills classification

Acronyms

Acronym	Full title
UUEPC	Ulster University Economic Policy Centre
BCC	Belfast City Council
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

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 BCC's geographical area defined?



Workplace labour market structure

Introduction to workplace labour market structure

Workplace labour market structure

It is important to outline BCC'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 BCC, not the jobs held by BCC residents. Therefore, jobs held by BCC residents which are located outside BCC are not included in the analysis which follows.

Data caveats

Data referring to 2017 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.

Health and administration are the largest employers in BCC

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



Source: UUEPC

The largest sector in BCC is health and social work employing 36,800 workers. This accounts for 14% of the BCC total and 28% of all jobs in this sector in NI.

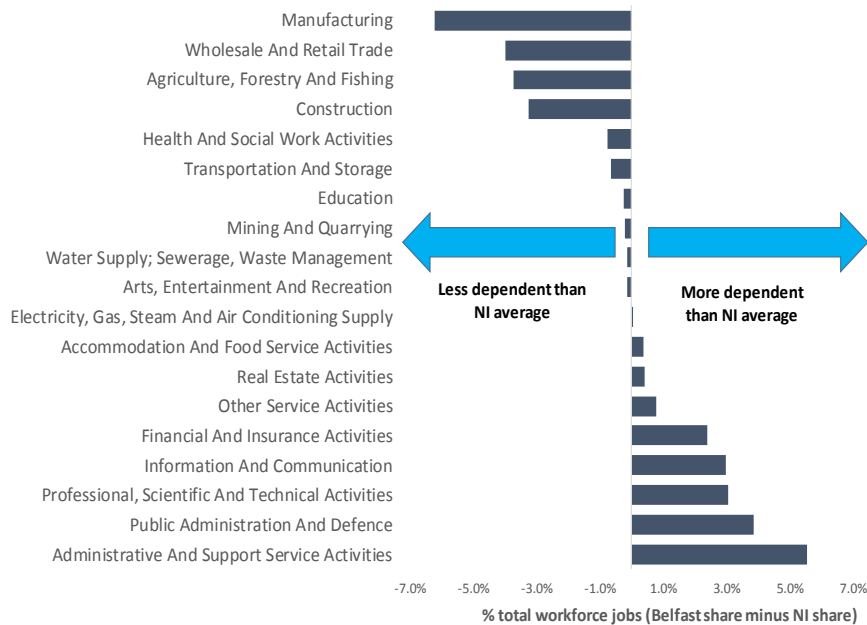
The second largest sector in BCC is administration and support services employing 32,000 workers. This translates to 13% of the BCC total and 52% of all jobs in this sector in NI.

Other large sectors include wholesale and retail (30,400 workers, 13% of BCC total), public administration and defence (25,600 workers, 10% of BCC total) and restaurants and education (21,000 workers, 8% of BCC total).

Higher job concentration in skill intensive sectors

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

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



Source: UUEPC

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



Source: UUEPC

Relative to the NI average, BCC has a higher concentration of jobs in a number of high value sectors including professional services, IT and finance and insurance. Workplace jobs in BCC account for over half the NI total in IT (64%), finance and insurance (61%) and administration and support (52%). This highlights BCC's role as a hub for high productivity employment sectors.

Public administration is the largest sub-sector employer

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



Source: UUEPC

The largest BCC workplace sub-sectors include public administration and defence (25,600 jobs) human health activities (21,500 jobs), retail trade (21,300 jobs) and education (20,900 jobs).

24,830 jobs created in BCC from 2012-2017

The number of jobs in BCC increased by 24,830 over the 5 year period 2012-2017. This accounted for 36% of total workforce job growth in NI.

In absolute terms the strongest sectoral growth over the period was in administration and support (9,700), professional, scientific and technical (3,800) and restaurants and hotels (3,580). The largest job losses occurred in public administration and defence (-1,690), real estate (-714) and finance and insurance (-380).

Total job growth in BCC was 2 percentage points above the NI average, 11% and 9% respectively over the 2012-2017 period.

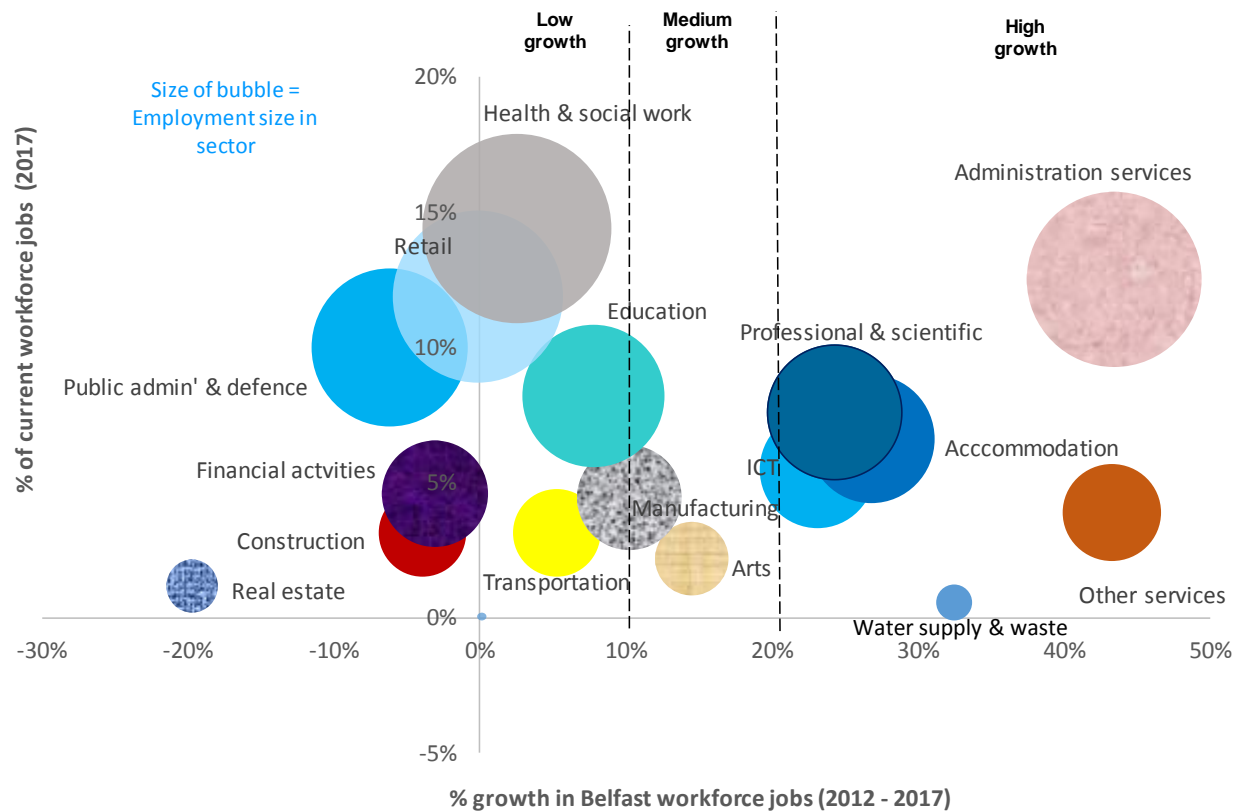
Workforce jobs growth by sector (1-digit), BCC versus NI (2012-2017)

Sector	Belfast		NI
	Job growth 2012-17	% change	% change
Agriculture	0	0%	-6%
Mining	-50	-64%	-11%
Manufacturing	1,050	10%	20%
Elect' & gas	410	88%	100%
Water supply & waste	350	33%	14%
Construction	-330	-4%	8%
Wholesale & retail	-50	0%	1%
Transportation & storage	400	5%	8%
Restaurants & hotels	3,580	27%	22%
Information & communication	2,630	23%	17%
Finance & insurance	-380	-3%	-6%
Real estate	-710	-20%	-19%
Professional, scientific & technical	3,790	24%	20%
Admin & support services	9,700	43%	33%
Public admin & defence	-1,690	-6%	-9%
Education	1,510	8%	3%
Health & social work	910	3%	5%
Arts & entertainment	710	15%	14%
Other service activities	3,000	43%	45%
Total	24,830	11%	9%

Source:UUEPC

High growth in medium sized sectors

Workforce jobs growth by sector (1-digit) and number of jobs (workplace based), BCC (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 strong growth but remain smaller in size (e.g. other services). Whereas, other sectors may have experienced low growth but as they are larger sectors contributed a significant number of absolute jobs (e.g. education).

A mix of services driving job growth in BCC

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



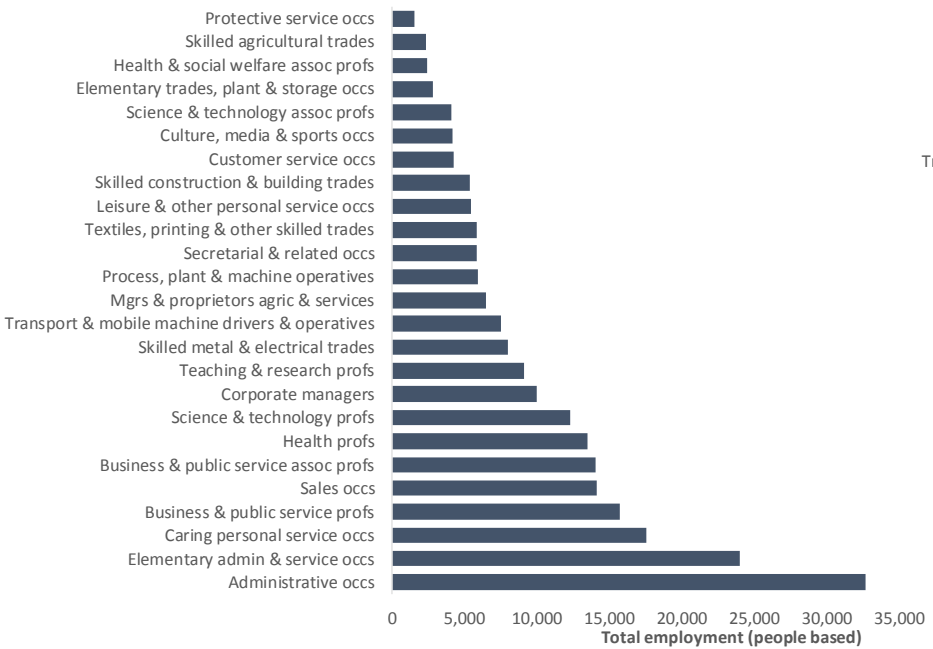
Source: UUEPC

The largest quantum of sub-sectoral job growth was recorded in employment activities increasing by 4,300 jobs over the period 2012-2017. This was followed by office administration and support activities (3,700 jobs) and food and beverage activities (3,300 jobs).

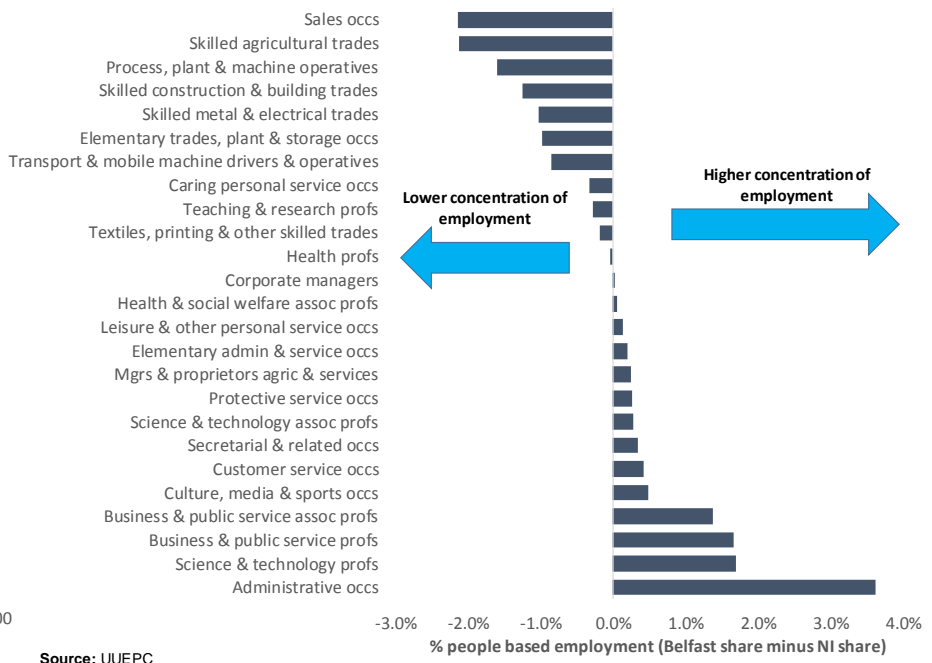
Higher concentration of administrative occupations and science and technology professionals in BCC, relative to NI

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

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



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

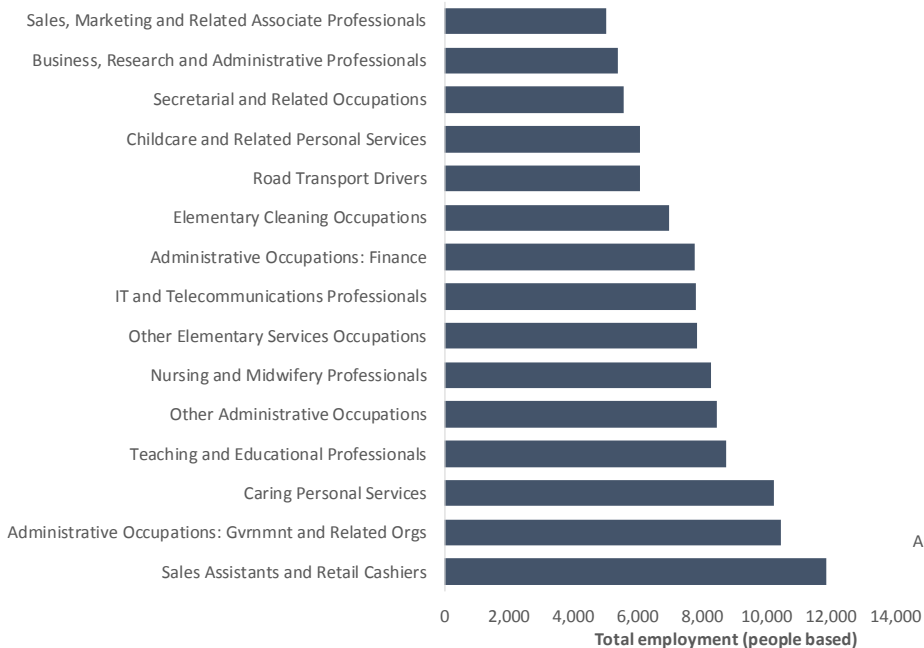


Administrative occupations are the largest occupation in BCC's workforce, accounting for 14% of total employment, compared to 10% for NI as a whole. BCC is more dependent upon a number of occupations relative to NI including administrative occupations, science and technology professionals, and business and public service professionals and associate professionals.

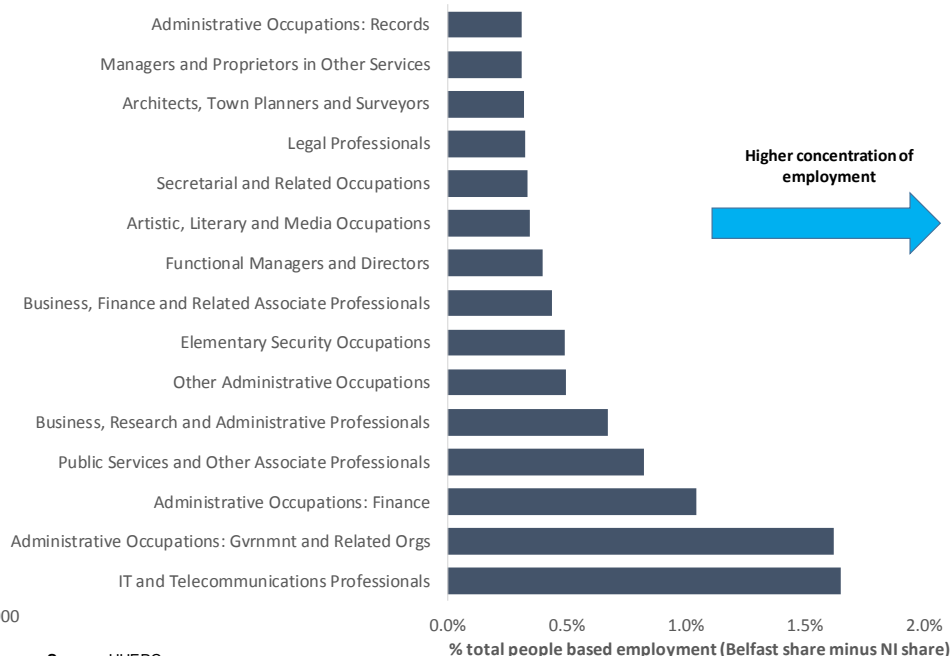
Sales assistants and retail cashiers are the largest detailed occupations'

Workplace based employment by occupation (top15 3-digit), BCC versus NI (2017)

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



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



At a granular level the largest occupation (3-digit) is sales assistants and retail cashiers (11,800 jobs). There is also a higher concentration of jobs in a number of detailed occupations within BCC, relative to the NI average. This includes IT and telecommunications professionals, administrative occupations in government related organisations and administrative occupations in finance.

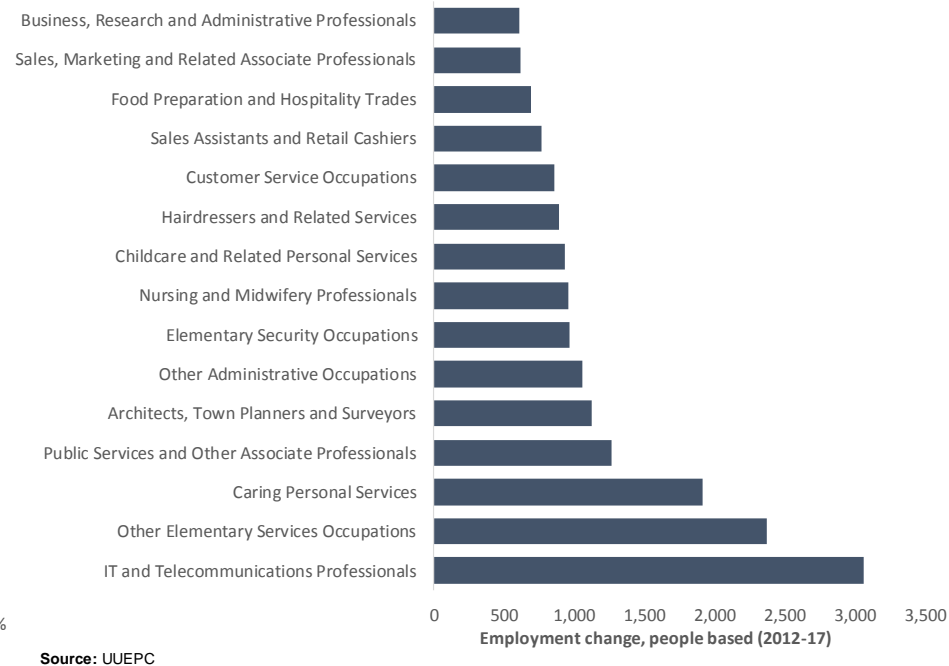
Protective service occupations experienced a considerable decline over the 2012-2017 period

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

Workplace based jobs growth by occupation (2-digit) structure, BCC (2012-2017)



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



The fastest growing occupation within BCC over the past five years is science and technology professionals (43%, accounting for 3,700 additional jobs) followed by customer service occupations (37%) and skilled metal and electrical trades (26%). Although caring personal services is ranked the 7th fastest growing occupation it contributed the 3rd largest increase in absolute terms.

Summary of workplace labour market structure

Sectoral structure – BCC's largest employers are health and social work (14% of total jobs), administration and support (13% of total jobs) and wholesale and retail (13% of total jobs). Relative to the NI average BCC has a higher concentration of workforce jobs in skill intensive sectors including professional services, IT and finance and insurance.

Scale of workforce - BCC is a hub for a number of key skill intensive sectors accounting for over half of total sectoral jobs in IT (64% of the NI total), finance and insurance (61% of the NI total) and administration and support services (52% of the NI total).

Sectoral growth - The largest quantum of job growth was in administration and support services (9,700 jobs) over the 2012-2017 period, followed by professional and scientific (3,790 jobs) and restaurants and hotels (3,580 jobs). The job growth rate in BCC was above the NI average, 11% and 9% respectively.

Occupation structure - BCC has a different occupation structure compared to NI as a whole, driven by differences in the sectoral structures. BCC's largest occupation is administrative occupations (14% of total), followed by elementary administrative and service occupations (10% of total) and caring and personal service occupations (7% of total).

Relative to the NI average, BCC has a higher concentration of jobs in a number of occupations including: administrative occupations; science and technology professionals; and business and public service professionals. On the other hand BCC has a lower concentration of jobs within: sales occupations; skilled agricultural trades; and process plant and machine operatives, relative to the NI average.

Summary of workplace labour market structure (continued)

Occupation growth- The fastest growing occupation within BCC over the period 2012-2017 was science and technology professionals (43%) followed by customer service occupations (37%) and skilled metal and electrical trades (26%).

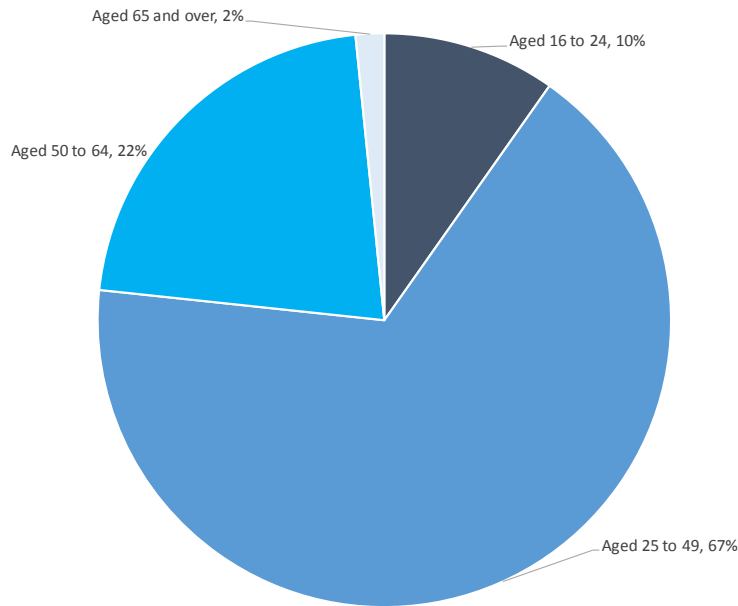
Occupation decline - A number of occupations have also declined over the past five years. For example, protective services and health and social welfare associate professionals. These can be linked to either a change in the occupational composition within sectors or an overall decline in sectors where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

Workplace demographic factors

Replacement demand is considerably lower in BCC

Workplace based employment by age, BCC (2011)

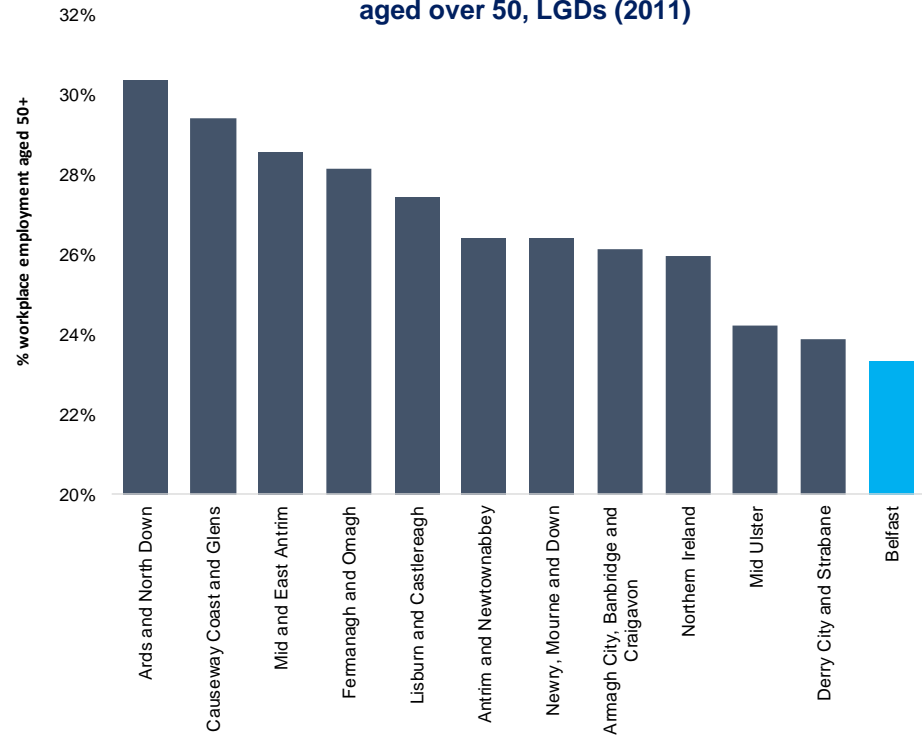
Workplace employment (excluding students) by age, BCC (2011)



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)

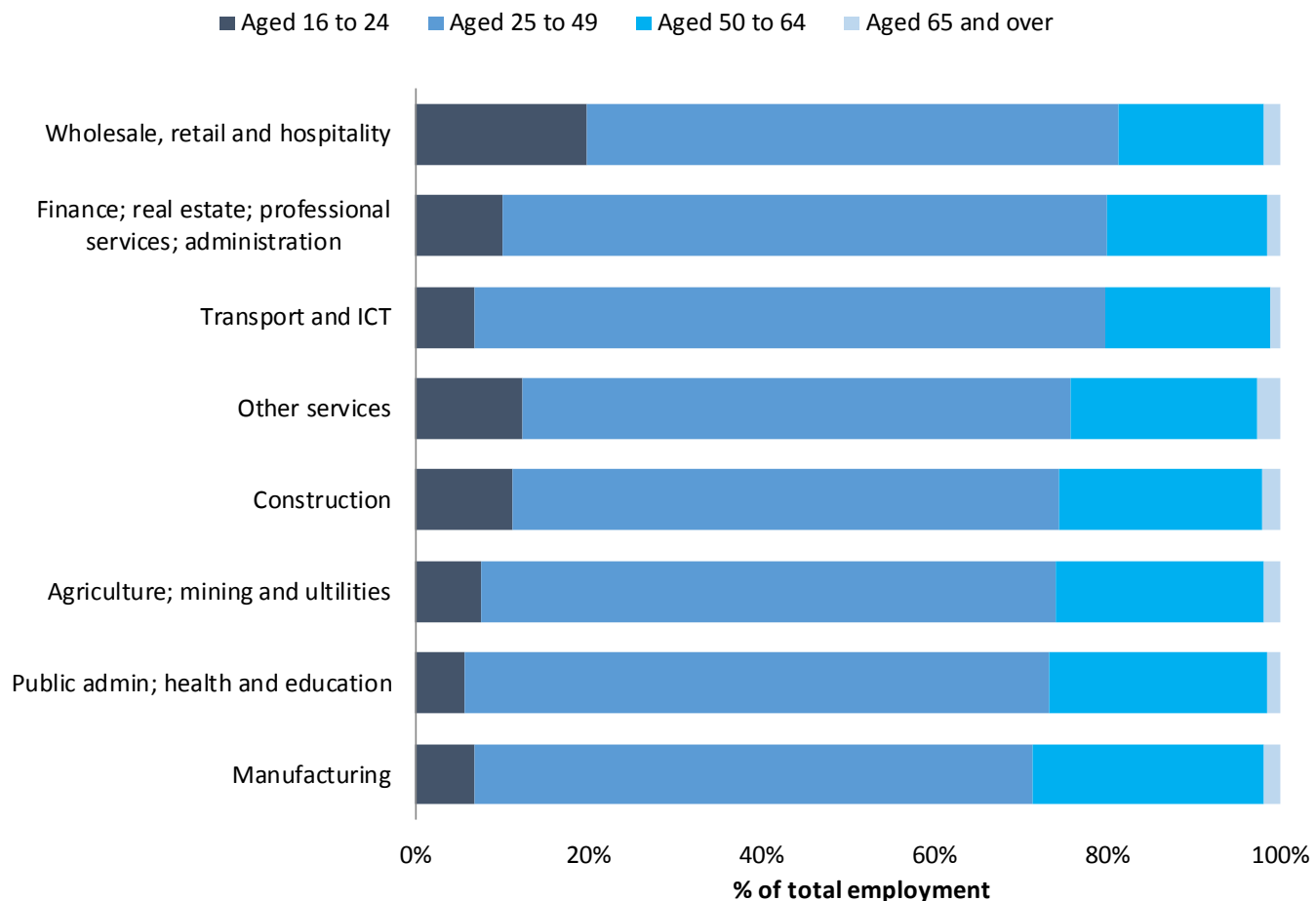


Source: NI Census 2011

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 in BCC is 23%, the lowest rate across LGD's. This suggests retiring workers will have to be replaced at a relatively lower rate relative to the NI average.

Manufacturing has the highest proportion of older workers

Workplace based employment by age and sector, BCC (2011)

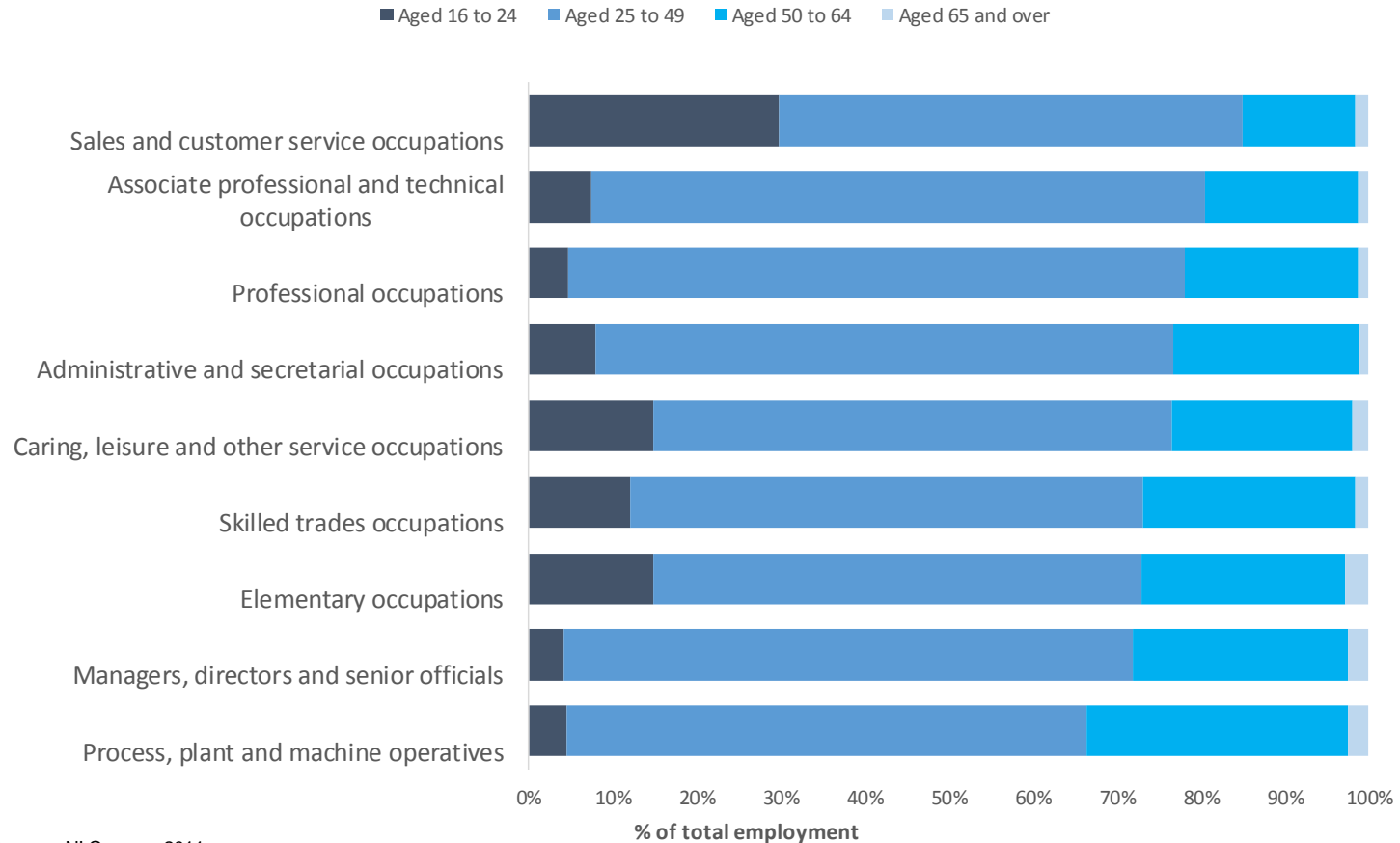


Source: NI Census 2011

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

Sales assistants and customer service occupations have the most youthful populations

Workplace based employment by age and occupation (1-digit), BCC (2011)

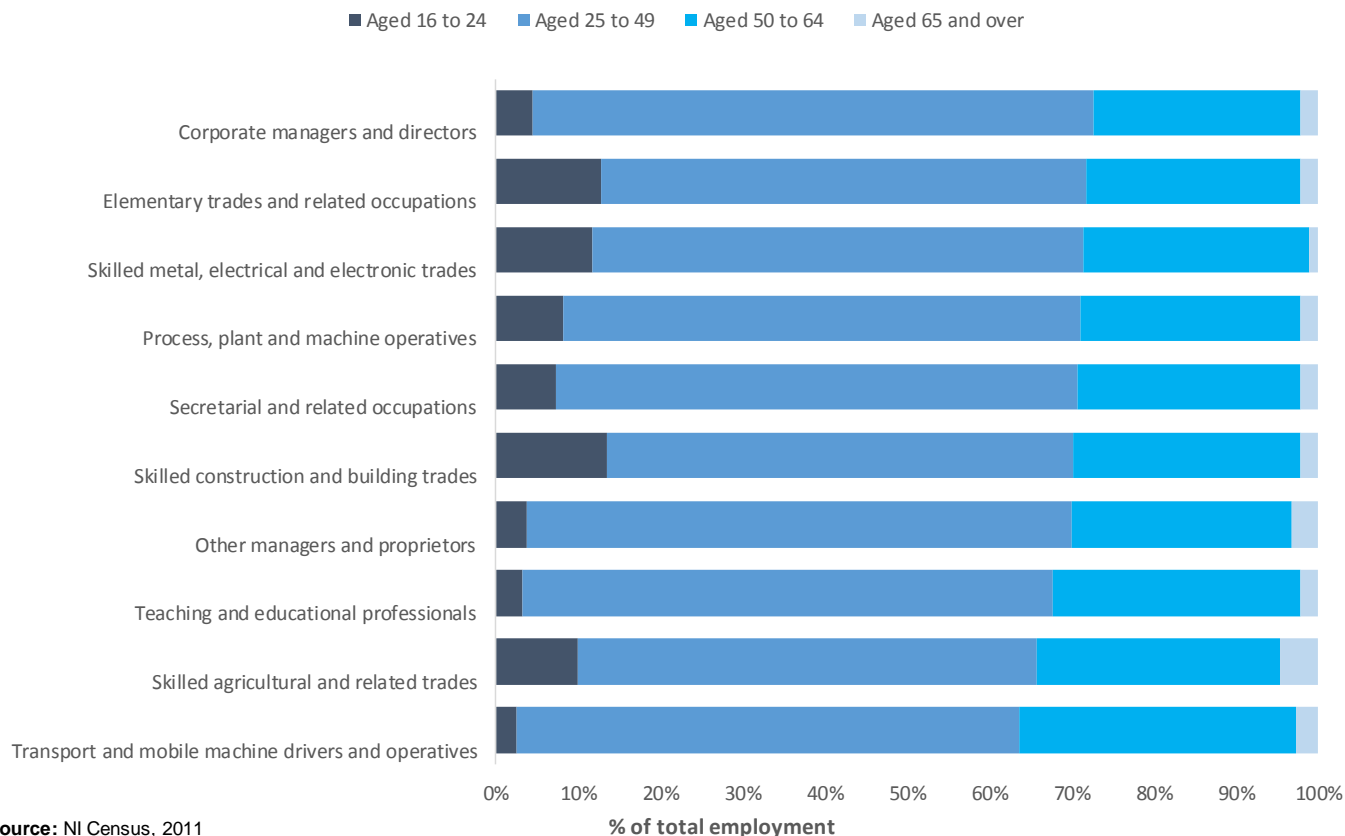


Source: NI Census, 2011

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

Over one third of transport and mobile machine drivers and operatives aged 50 or above

Workplace based employment by top 10 occupations (2-digit) with workers aged over 50, BCC (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 BCC workplace is similar to the NI average;

- 10% of BCC's workforce aged 16-24 (equal to NI average);
- 67% of BCC's workforce aged 25-49 (3 percentage points above NI average); and
- 24% of BCC's workers aged 50+ (2 percentage points below NI average).

A lower rate of workers aged over 50 in BCC relative to NI average indicates the BCC labour market will have a lower demand with regard to replacing retired workers compared to NI as a whole.

Workplace age and sector – Manufacturing has the highest concentration of workers aged 50+ (29%) followed by the public sector (26%). Therefore, these sectors will require a higher level of demand to replace workers, relative to other sectors.

Contrastingly wholesale, retail and hospitality employs the largest proportion of workers aged below 25 (20%). This suggests a relatively lower demand with regard to replacing retired workers.

Workplace occupation and age – Sales and customer service occupations have the largest proportion of workers aged 16-24 (30%) and process, plant and machine operatives constitute the highest proportion of workers aged 50 and above (33%).

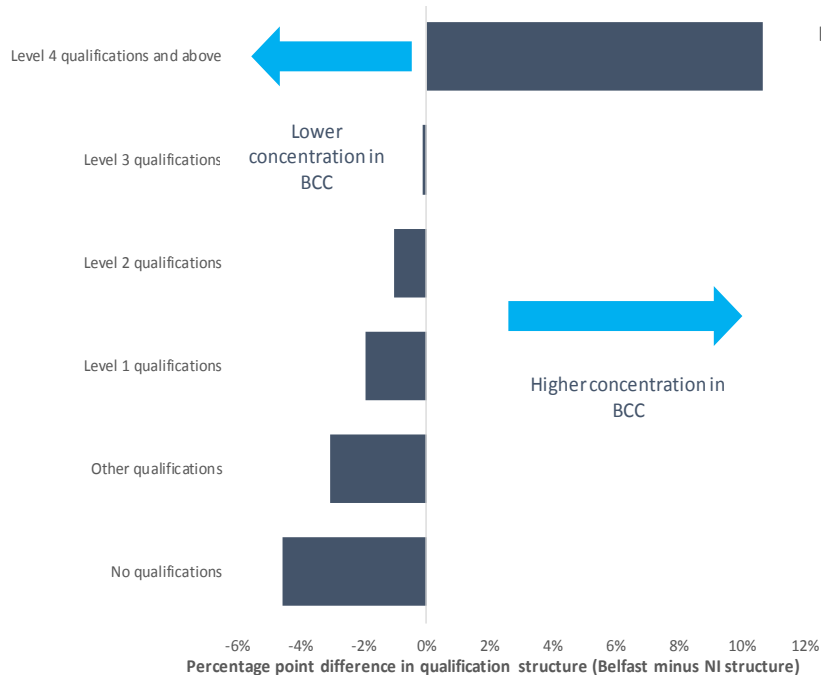
At a more granular level transport and mobile machine drivers and operatives have the largest proportion of workers aged over 50 (37%).

Workplace skills structure

Workplace tertiary level qualifications significantly above NI average

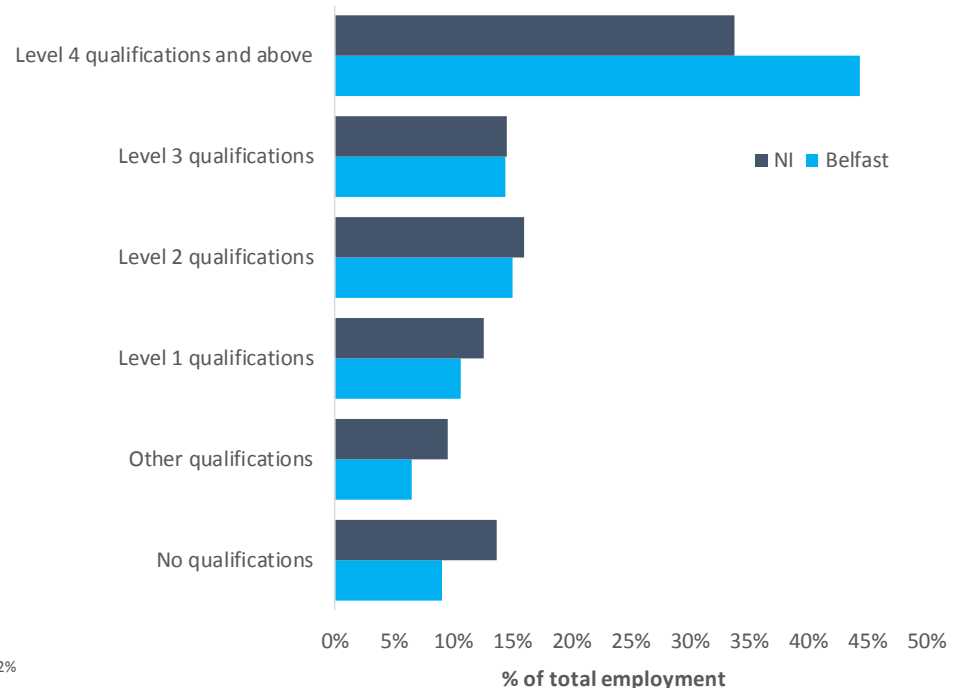
Workplace based qualification structure (NQF), BCC versus NI (2011)

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



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

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



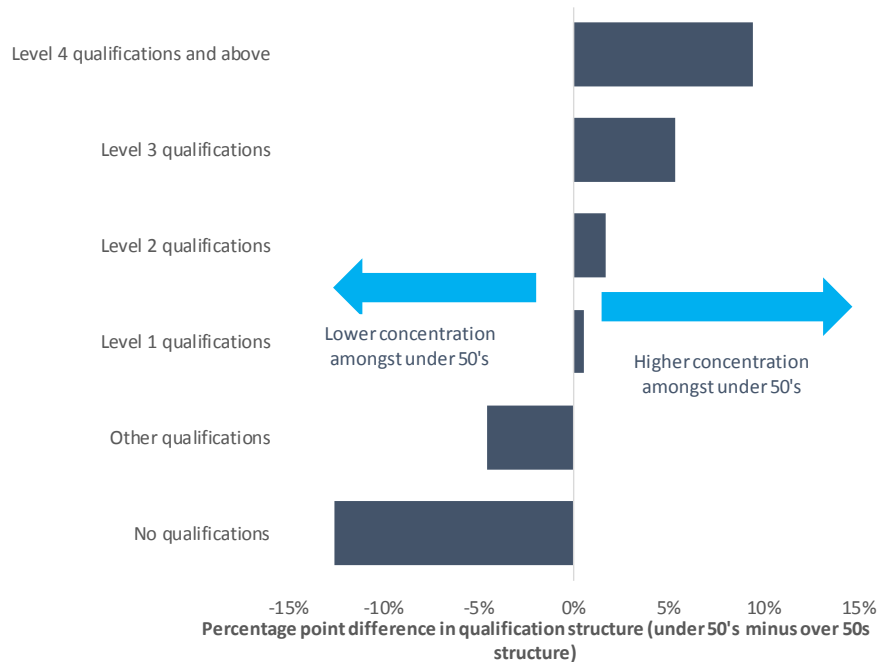
Source: NI Census 2011
 Note: Based on those aged 16-74 in employment, excluding students

BCC's workplace skills are weighted towards the higher end of the skills spectrum relative to NI. That is, 44% of people employed in the BCC workplace achieved tertiary level qualifications (NQF level 4+) compared to 34% in NI.

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

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

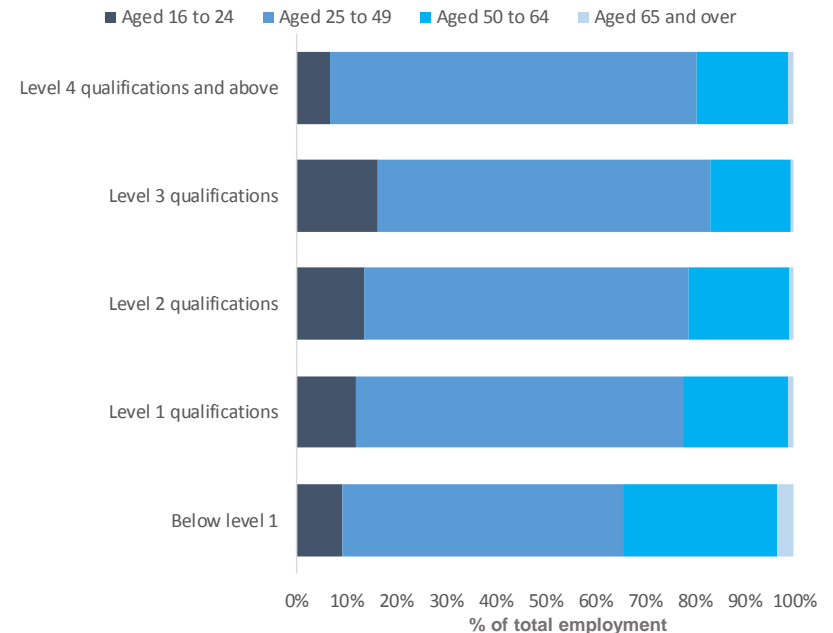
Percentage point difference in employed qualification profile (NQF), under 50's versus over 50's, BCC (2011)



Source: NI Census, 2011

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

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



Source: NI Census 2011

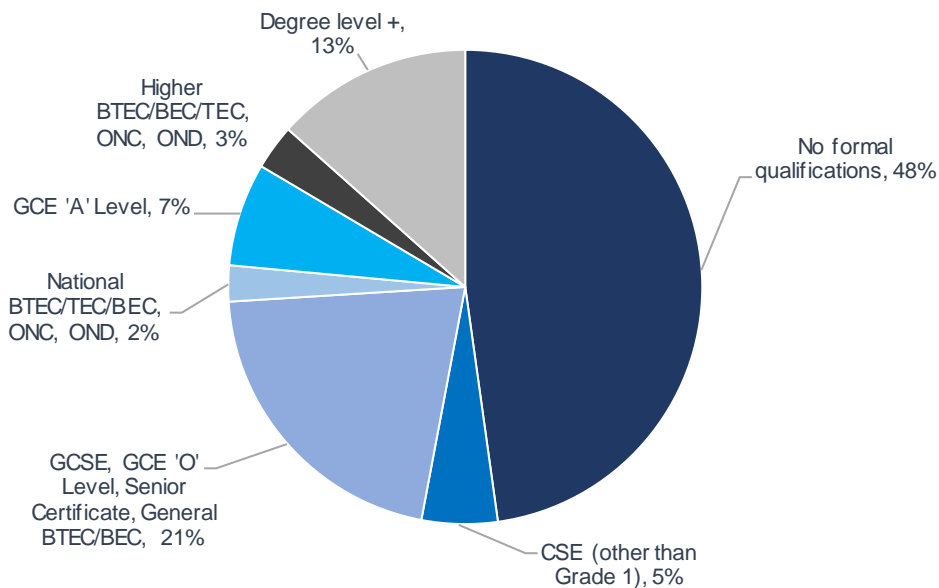
Note: Based on those aged 16-74 in employment, excluding students

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 BCC, 47% of the workplace aged 50 or over have achieved NQF level 3+ qualifications, compared to 62% of those aged under 50.

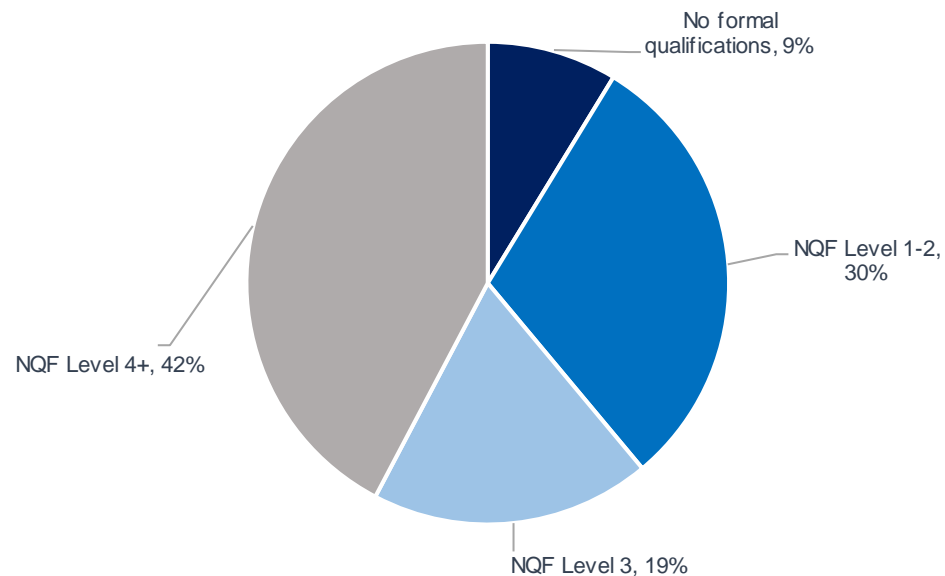
Older workers may have lower qualification levels, but not necessarily lower skilled

Qualification profile of employed residents, BCC (2016 LGD and 1991 Belfast Urban Area)

Qualification profile of employed residents from the Belfast Urban Area (1991)



Qualification profile of employed residents from BCC (2016)



Source: LADB & 1991 Census Belfast Urban Area Report

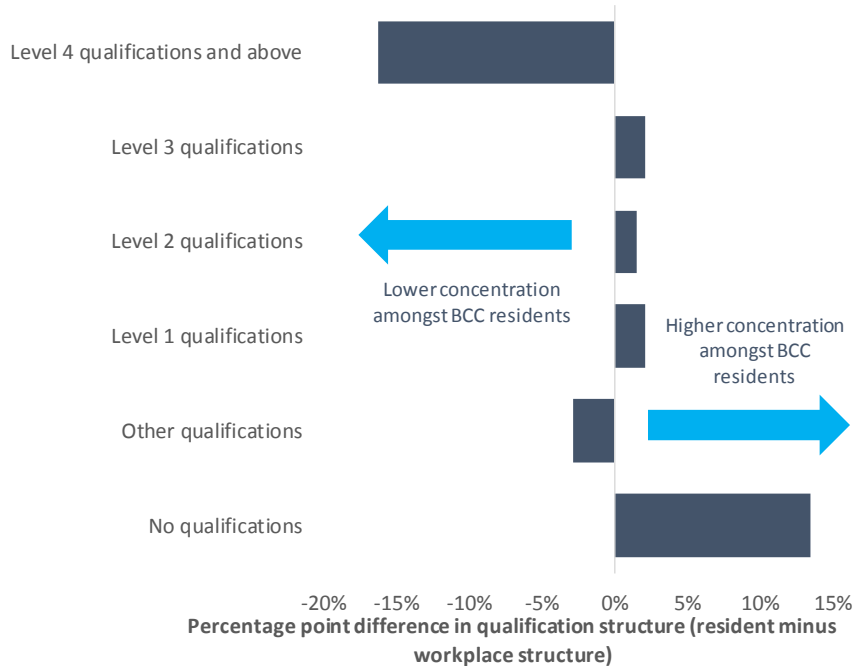
Notes: Figures are not directly comparable due to different categorisation of qualifications between 1991 & 2016. 1991 figures refer to 'Belfast Urban Area' which includes Belfast District Council (all wards), Lisburn District Council (selected wards), Newtownabbey District Council (selected wards), Carrickfergus District Council (selected wards) and North Down District Council (selected wards).

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 half 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.

Resident qualifications lower than workplace qualifications in BCC

Resident versus workplace skills (NQF), BCC (2011)

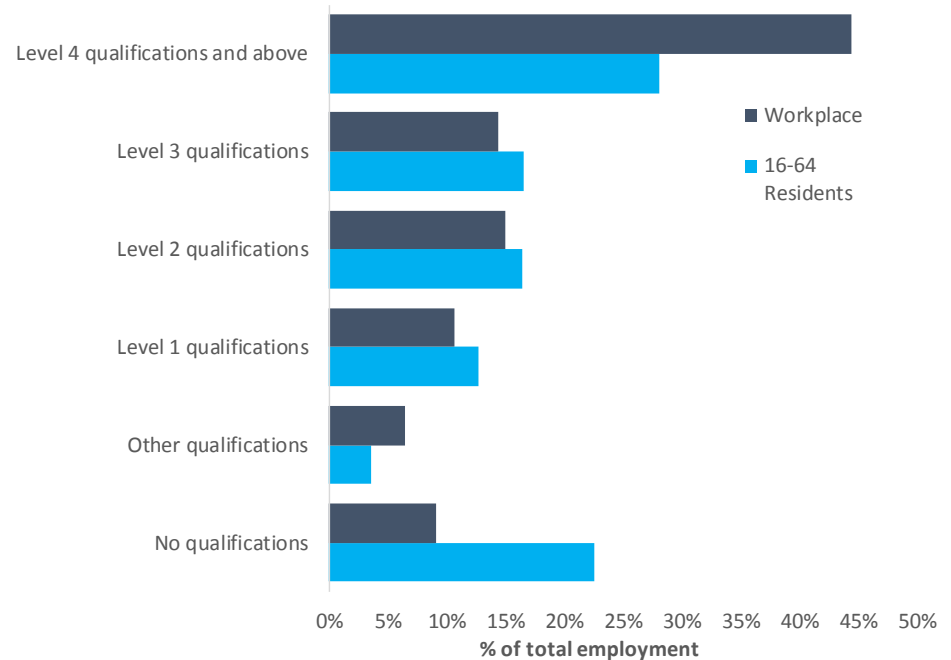
Percentage point difference in qualification structure (NQF), resident versus workplace, BCC (2011)



Source: NI Census 2011

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

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



Source: NI Census 2011

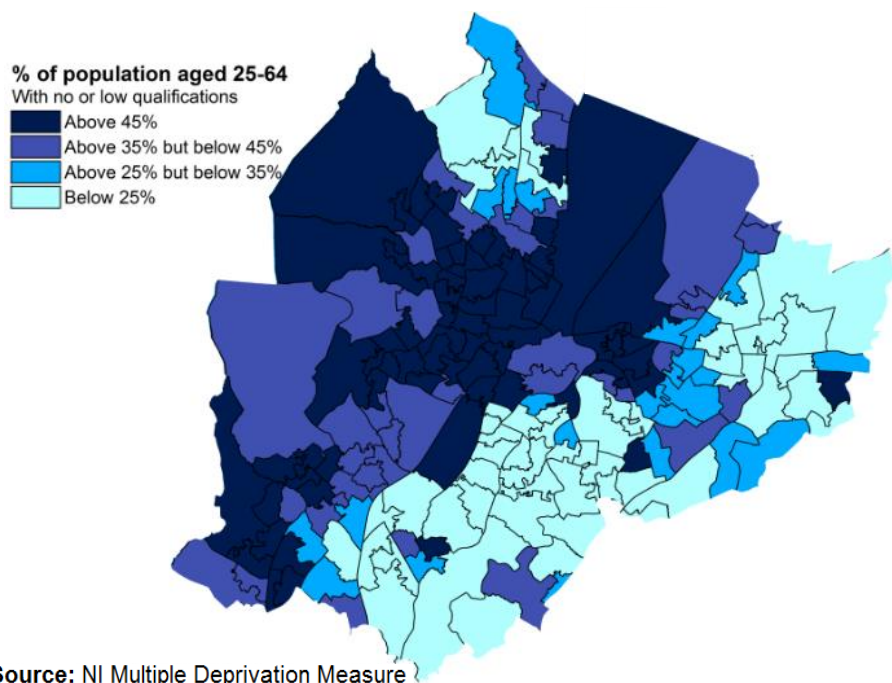
Note: Based on those aged 16-64, excluding students

A mismatch between the resident and workplace skill structure can generate labour market barriers, particularly for those at the bottom of the skills spectrum. For example, a poorly qualified resident with limited labour mobility living in an area where jobs are predominantly high skilled will face difficulties securing employment. In BCC, 28% of resident have achieved tertiary level education (NQF level 4+) compared to 44% of people employed in BCC's workplace

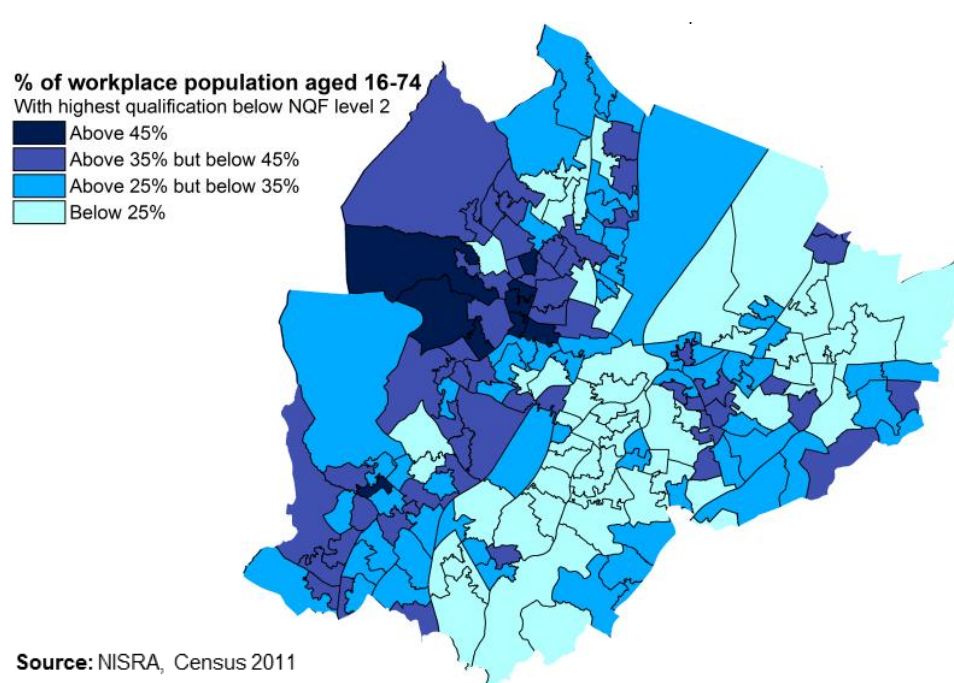
Low resident qualifications do not match workplace qualification structure

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

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



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



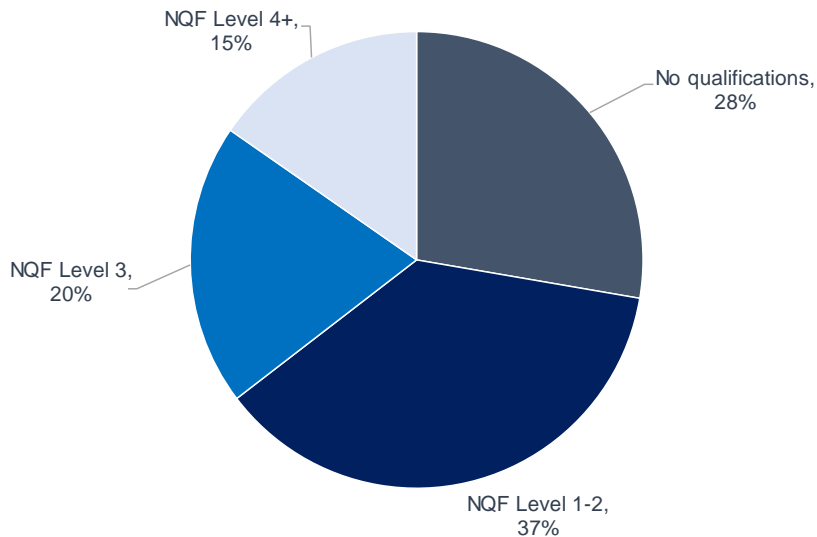
Source: NI Multiple Deprivation Measure

Source: NISRA, Census 2011

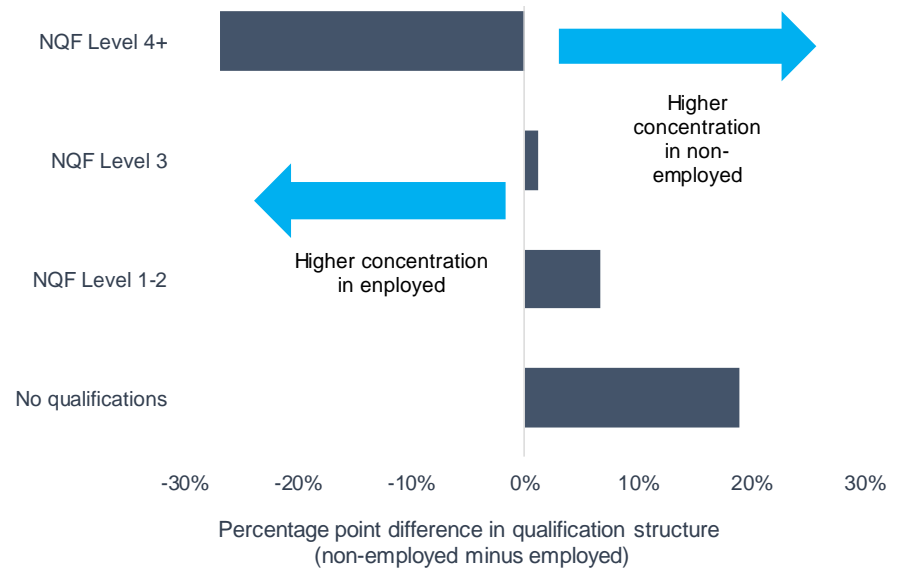
Significant qualification differences between employed and non-employed residents

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

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



Percentage point difference in non-employed resident qualifications, BCC versus NI (2016)



Source: LADB

The difference in qualification structure between the employed and non-employed population emphasises the relationship between skills and employability. For example, 15% of non-employed residents have NQF level 4+ compared to 42% of employed residents.

Summary of workplace skills structure

Workplace qualification structure versus NI – The qualification structure in BCC's workplace is weighted towards the higher end of the skills spectrum relative to NI. People with low qualifications (NQF level 1 or below) represent 26% of workplace employment in BCC, compared to 36% in NI. Contrastingly, 34% of people employed in NI have tertiary level qualifications compared to 44% in BCC.

Age profile and qualification structure - The qualification profile of BCC'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. Amongst the over 50's employed in BCC's workplace 39% have low qualifications (NQF level 1 or below), compared to 24% of those aged 16-24.

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

Qualification levels over time – There has been significant improvement in qualification levels over a generation. However, it is important to note that low qualification levels do not always directly translate to low skills. 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 skills versus workplace skills – There are significant differences between the level of resident skills and skills within BCC's workplace. In BCC, 28% of residents have achieved a tertiary level qualification (NQF level 4+) compared to 44% of people employed in BCC's workplace – a 16 percentage point difference. Contrastingly, 23% of residents have no qualifications compared to 9% of BCC's workplace – a 14 percentage point difference.

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 qualifications amongst the employed relative to the non-employed highlights the relationship between skills and employability.

In BCC 65% of non-employed residents have NQF level 2 or below qualifications, compared to 39% of employed residents. Contrastingly, 15% of individuals out of work have achieved NQF level 4+ qualifications compared to 42% of the employed.

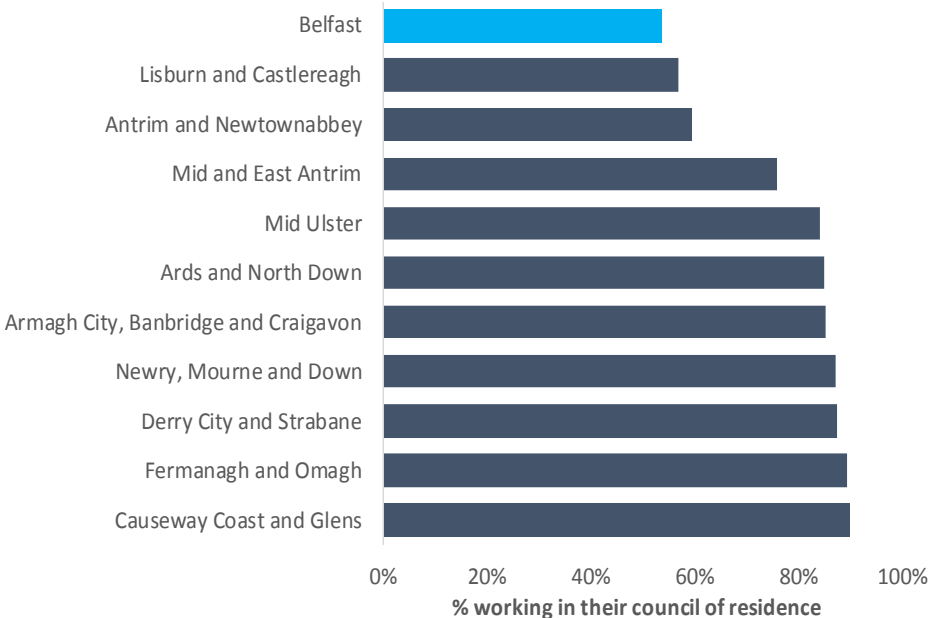
Therefore policy ambitions to reduce the number of out of work individuals through reintegration to the labour market should consider the need for upskilling.

Commuting flows

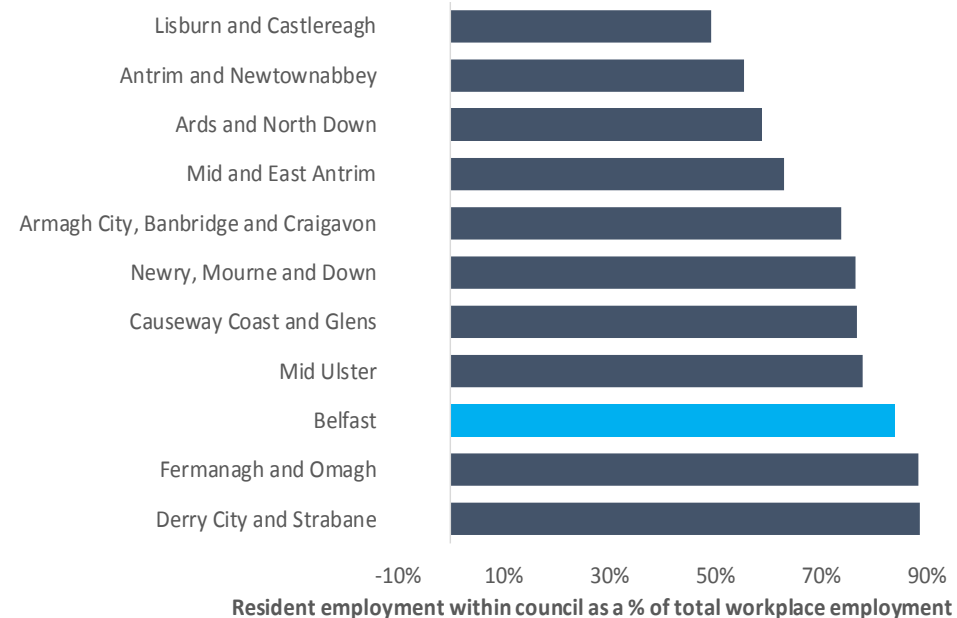
BCC has high in-commuting but relatively little out-commuting

Commuting incidence by LGD (2011)

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



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

Source: NI Census 2011

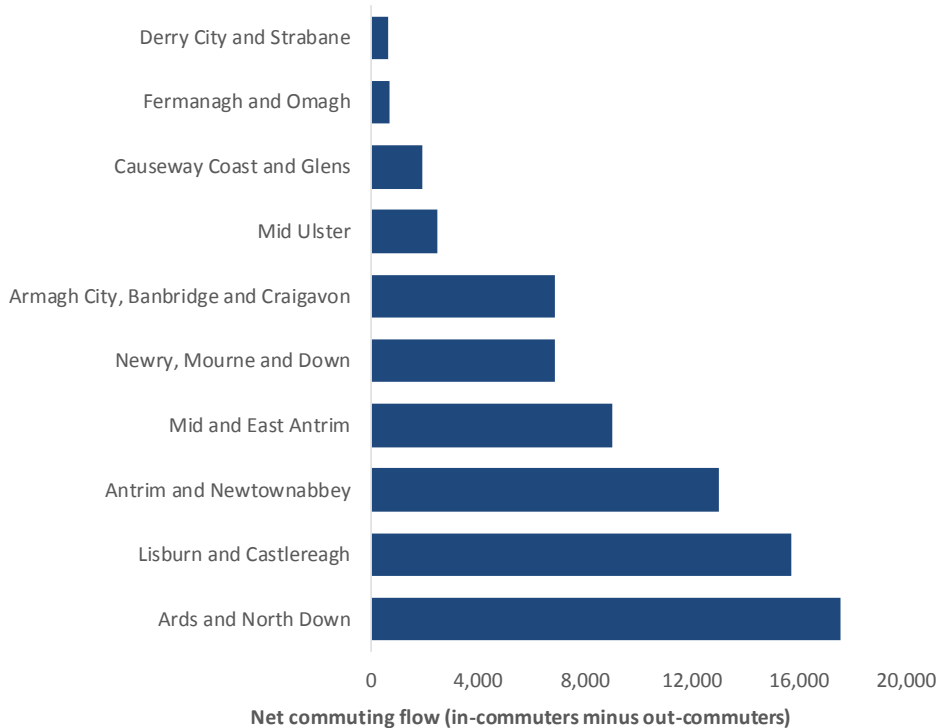
Note: Based on those aged 16-74 in employment, excluding students

BCC residents account for only 53% of total workplace employment. This is indicative of the City's role as an employment hub for NI, attracting a high proportion of in-commuters. On the other hand, BCC residents working within BCC account for 84% of total resident employment, highlighting relatively low out commuting.

The public sector is an important driver of BCC's net commuting inflow

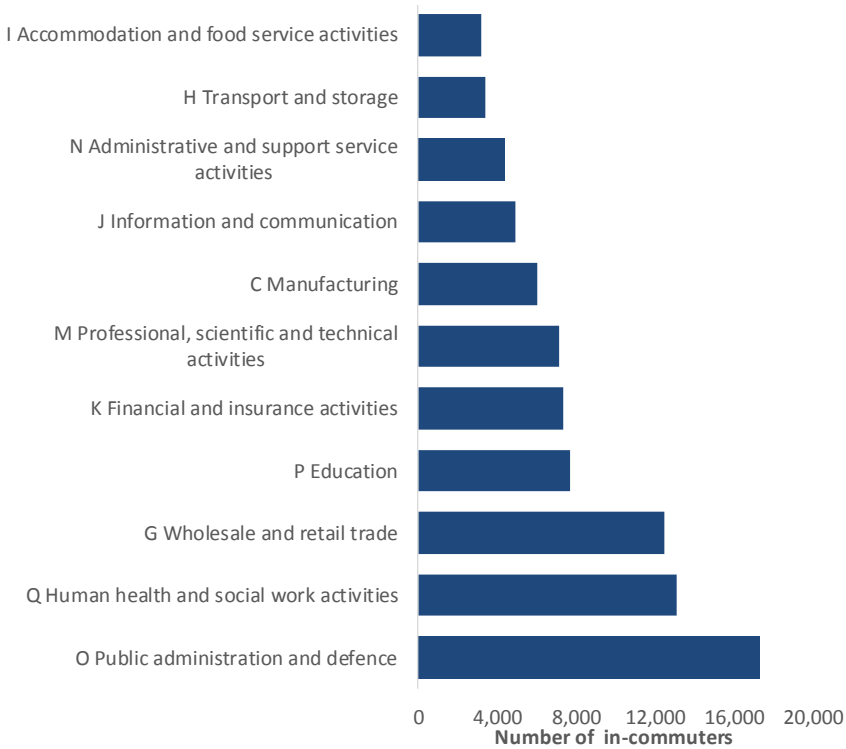
Commuting patterns in BCC (2011)

Net commuting flow, BCC versus LGDs (2011)



Source: NI Census 2011

Commuter inflow by sector (1-digit), BCC (2011)



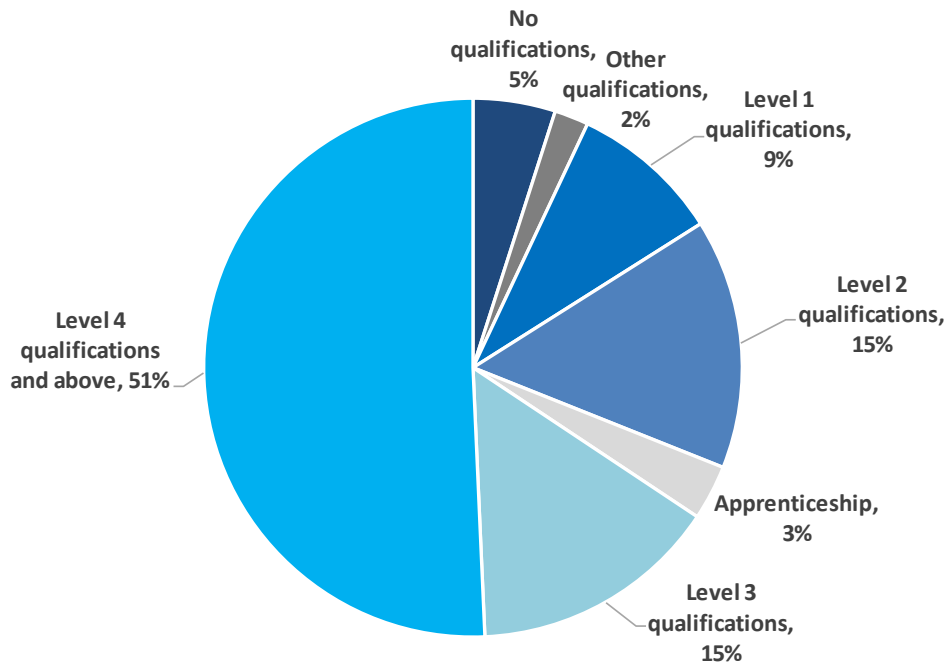
Source: NI Census, 2011

BCC holds a net commuting inflow from all other LGDs. That is, more workers enter BCC for employment than leave BCC to work in another LGD. The sectors with the highest rates of in-commuting are public administration and defence (17,400 workers), health and social work (13,100 workers), wholesale and retail (12,500 workers) and education (7,700 workers).

Over half of BCC in-commuters have degree level or above qualifications

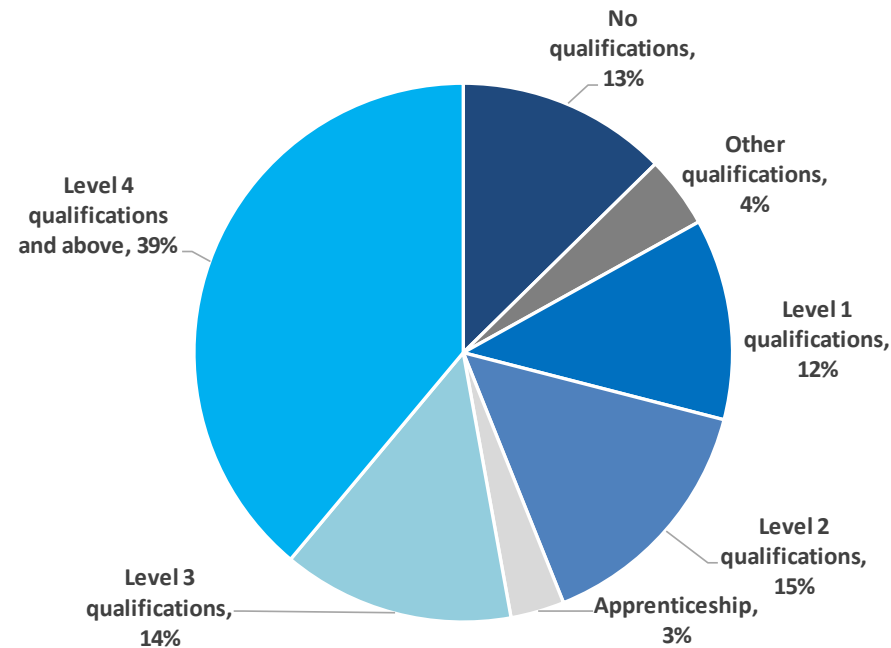
Skill differences between residents and commuters working in BCC (2011)

Highest level of qualification of in-commuters working in BCC (2011)



Source: Census, 2011

Highest level of qualification of Belfast residents working in BCC (2011)



Source: Census, 2011

Over half (51%) of BCC in-commuters have tertiary level qualifications (NQF level 4+), compared to 39% of employed residents. Likewise, only 16% of in-commuters have below NQF level 2 qualifications compared to 29% of employed residents. This highlights BCC as a net importer of high skills.

Summary of commuting flows

In-commuters – Much of BCC's workforce lives outside BCC. Approximately 47% of workers with jobs based in BCC live in other council areas, this is the highest proportion amongst any LGD. On the other hand, only 16% of workers living in BCC commute to other LGD's for employment. The largest inflow of commuters is from Ards and North Down (24% of in commuters), followed by Lisburn and Castlereagh (21% of in commuters) and Antrim and Newtownabbey (18% of in commuters).

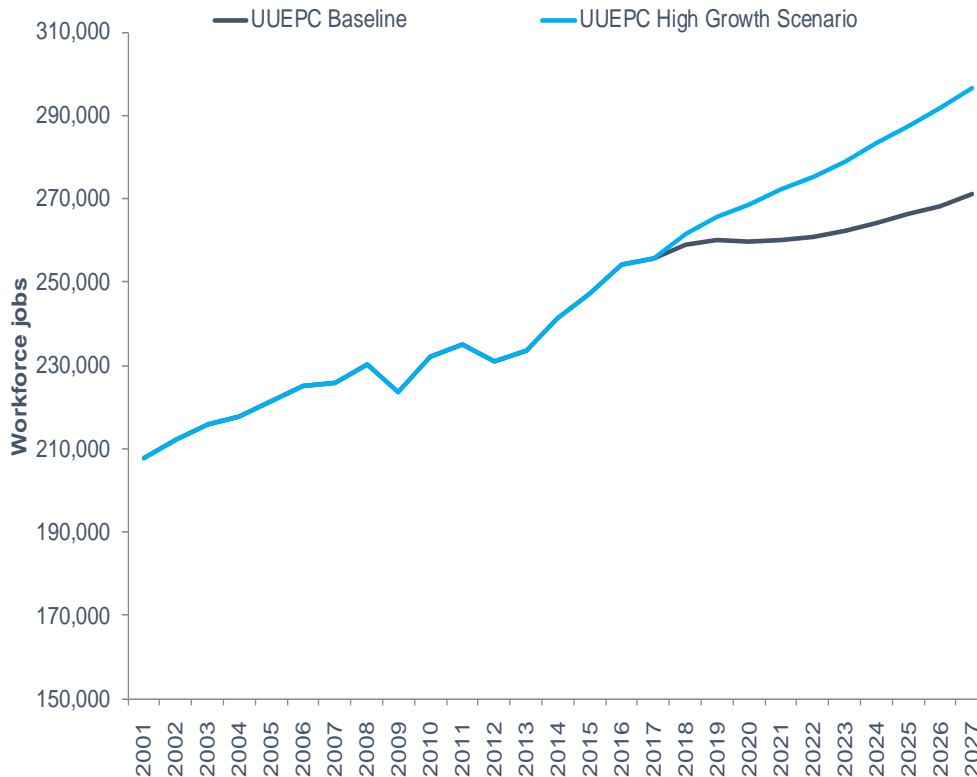
In-commuters by sector – Commuters are most likely to work in the public sector (17,400 public administration and defence commuters, 13,100 health and social work commuters and 7,700 education commuters) as well as wholesale and retail with 12,500 commuters.

In-commuters by skill – On average people commuting to work in BCC from other LGDs have higher levels of qualifications compared to BCC residents. For example, 51% of BCC commuters have NQF level 4+ qualifications compared to 39% of BCC employed residents. At the lower end of the skills spectrum 5% of in commuters have no qualifications compared to 15% of residents.

High growth scenario

UUEPC's high growth scenario predicts 40.8k extra jobs – 25.6k above the baseline by 2027

Workforce jobs, high growth scenario versus baseline scenario, BCC (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 scenario. This report will focus on outputs from the high growth scenario.

UUEPC estimates that under a high growth scenario employment in BCC has the potential to grow from 255,800 in 2017 to 296,700 in 2027.

Planning for skills in an aspirational nature

It is prudent to plan for skill 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. Although this involves a personal cost to individuals who have invested in their own skills development, the potential cost is lower compared to 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.

Professional services and IT jobs forecast to grow most rapidly over the coming decade

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

Industry	Total jobs 2017 baseline	Job growth 2017-27		% change in jobs - Compound annual growth rate	
		Baseline	High growth	High growth 2017-27	Actual 2012-17
Agriculture	80	-10	-10	-1.2%	0.0%
Mining	20	+0	+0	0.2%	-21.5%
Manufacturing	11,310	+340	+670	0.6%	2.0%
Electricity & gas	880	+200	+290	2.9%	13.5%
Water supply & waste	1,410	+50	+100	0.7%	5.8%
Construction	7,950	+500	+1,020	1.2%	-0.8%
Wholesale & retail	30,370	+990	+1,290	0.4%	0.0%
Transport & storage	8,030	+780	+1,110	1.3%	1.0%
Restaurants and hotels	16,940	+2,860	+4,360	2.3%	4.9%
Information & communication	14,020	+2,640	+8,120	4.7%	4.3%
Finance & insurance	11,660	+400	+3,490	2.7%	-0.6%
Real estate	2,910	+150	+370	1.2%	-4.3%
Professional scientific & technical	19,420	+3,410	+10,320	4.4%	4.4%
Administrative & support services	32,000	+2,590	+4,320	1.3%	7.5%
Public admin & defence	25,560	-1,280	+440	0.2%	-1.3%
Education	20,920	+380	+860	0.4%	1.5%
Health & social work	36,830	+560	+2,380	0.6%	0.5%
Arts & entertainment	5,590	+560	+1,140	1.9%	2.7%
Other service activities	9,920	+70	+550	0.5%	7.5%
Total	255,820	+15,190	+40,820	1.5%	2.1%

Source: UUEPC

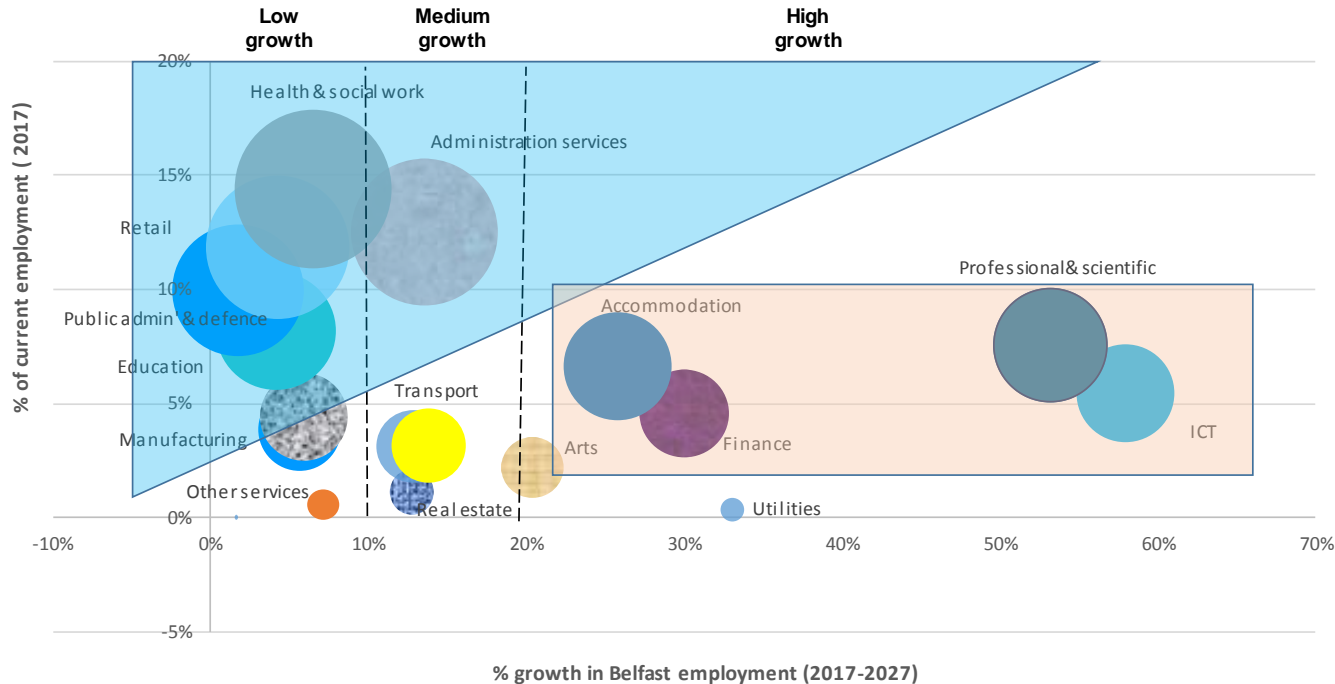
Note: Figures may not sum to total due to rounding

Relative to the baseline, the additional 40,820 jobs are primarily generated within the following sectors: professional scientific and technical (6,940 jobs above baseline); information and communication (5,480 jobs above baseline); and finance and insurance (3,100 jobs above baseline).

The sectors expected to contribute the largest increase in jobs in absolute terms over the period 2017-2027 are: professional scientific and technical (10,320); IT (8,120); and restaurants and hotels (4,360).

Large employment sectors expected to grow moderately in coming decade

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



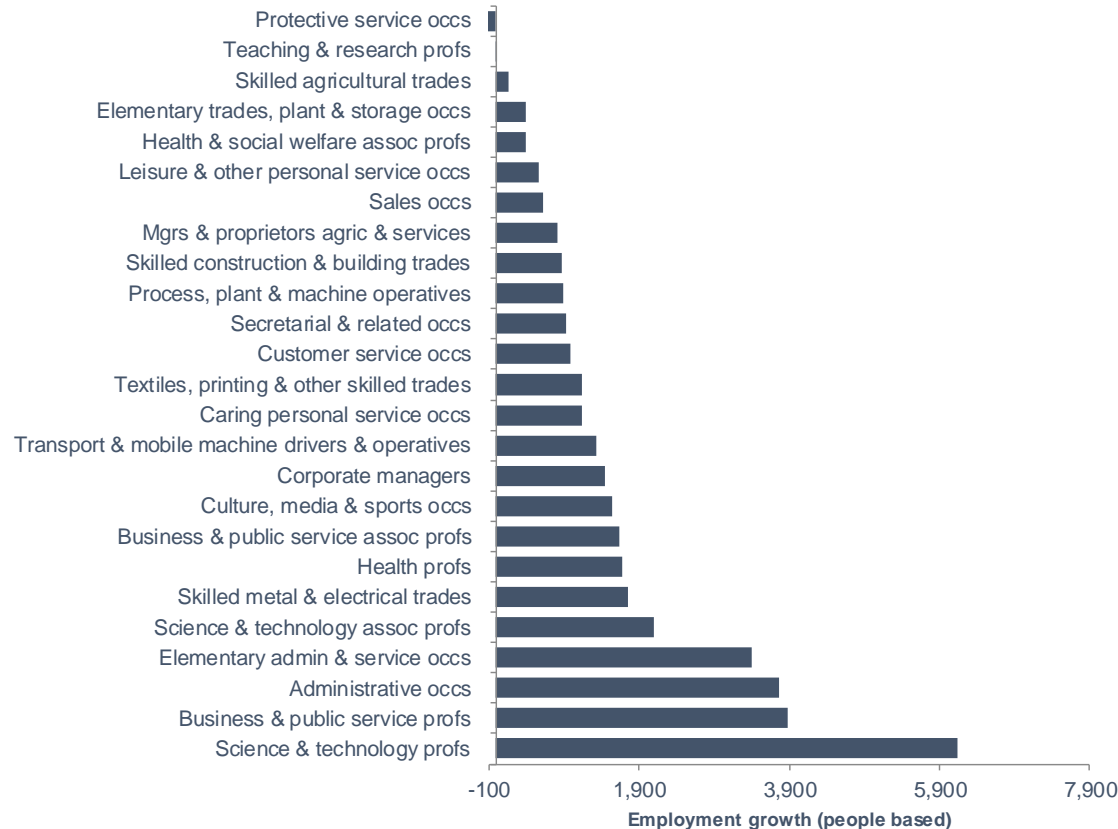
Source: UUEPC

Note: Triangle highlights the five largest sectors. Square highlights the fastest growing sectors in NI high growth scenario.

Large employment sectors are forecast to grow moderately over coming decade. For example health and social work (0.6% growth over the period 2017-2027) and retail (0.4%). However, given the large scale of such sectors slow growth rates will still constitute significant job numbers. That is, although health and social work is only forecast to grow by 0.6% over the coming decade this translates to 2,400 jobs.

The largest growth is forecast within science and technology professionals

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

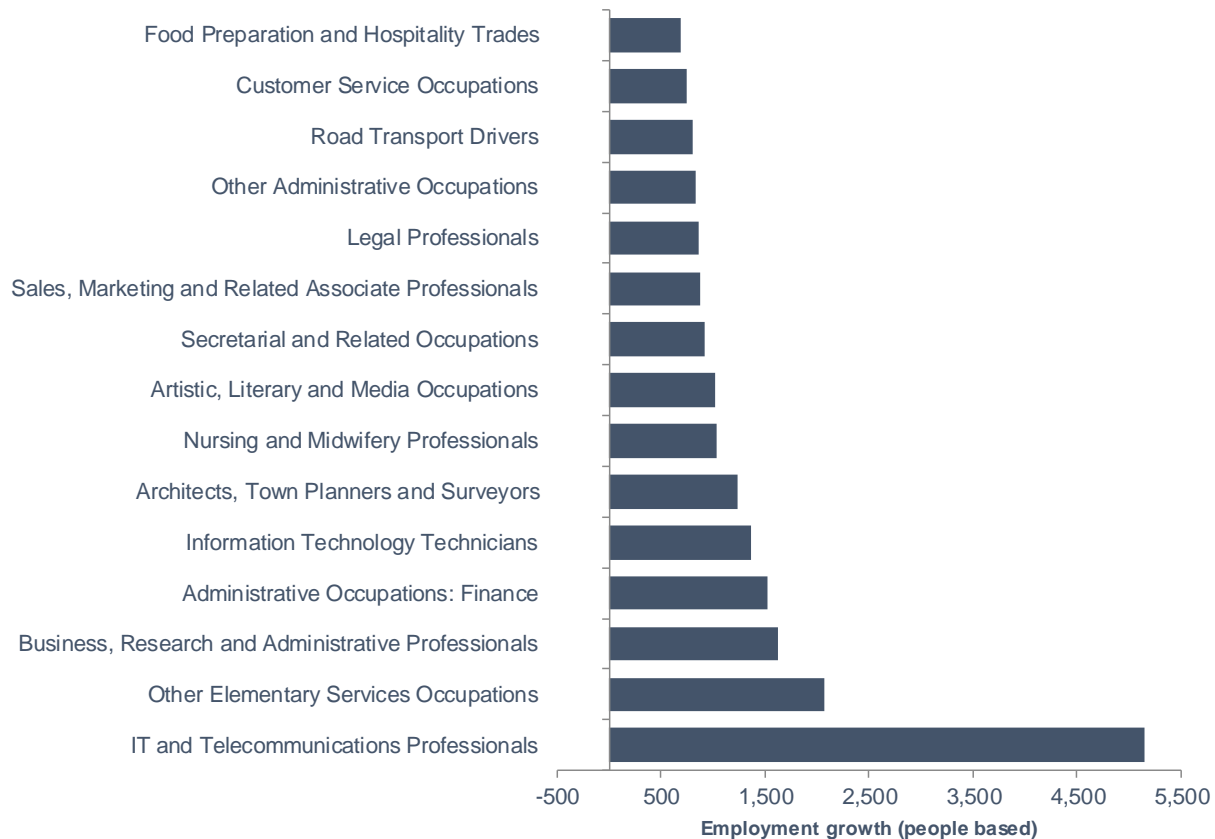


Source: UUEPC

Occupations accounting for the largest absolute growth over the coming decade are science and technology professionals (6,140), business and public services professionals (3,890) and administrative occupations (3,760).

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

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



Source: UUEPC

A granular analysis of occupation growth highlights specific areas of expected growth. At a detailed level IT and telecommunications professionals are expected to see the highest amount of absolute growth (5,150) over the coming decade, followed by other elementary service occupations (2,070) and business, research and administrative professionals (1,620).

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 40,820 additional jobs over the period 2017-2027. That is, 2.7 times as many jobs relative to the baseline scenario.

Sector growth over coming decade - The fastest growing sectors in percentage terms include IT (4.7% growth over period 2017-2027) and professional services (4.4% growth over period 2017-2027). In absolute terms the largest growth is also expected to be in professional scientific and technical (10,320) and IT (8,100).

However, despite relatively moderate growth over the coming decade in sectors such as health & social work (0.6%), in absolute terms this can equate to a high number of jobs in absolute terms over the coming decade (2,400).

Occupation growth over coming decade – The occupation forecast to account for the largest absolute growth over the period 2017-2027 is science and technology professionals (6,140) followed by business and public service professionals (3,890) and administrative occupations (3,390).

At a more granular level the occupations (3-digit) expected to grow most rapidly in absolute terms are IT and telecommunications professionals (5,150), other elementary services occupations (2,070) and business, research and administrative professionals (1,620). Occupation growth is linked to the forecast sectoral structure of BCC.

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.

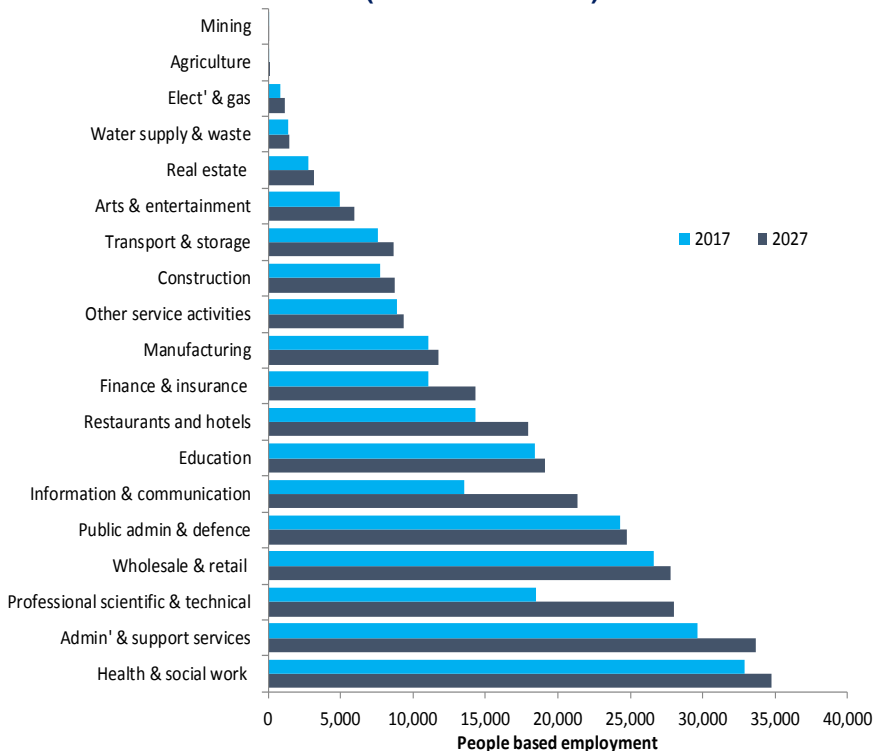
The focus on vacancies for education leavers and migrants should not be interpreted to mean that job opportunities for those out of work are ignored. Rather it is the case that joiners from unemployment and inactivity are already factored into replacement demand assumptions, and will essentially compete 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. However, it remains the case that, future skills and employability demand will still be significantly determined by net replacement demand.

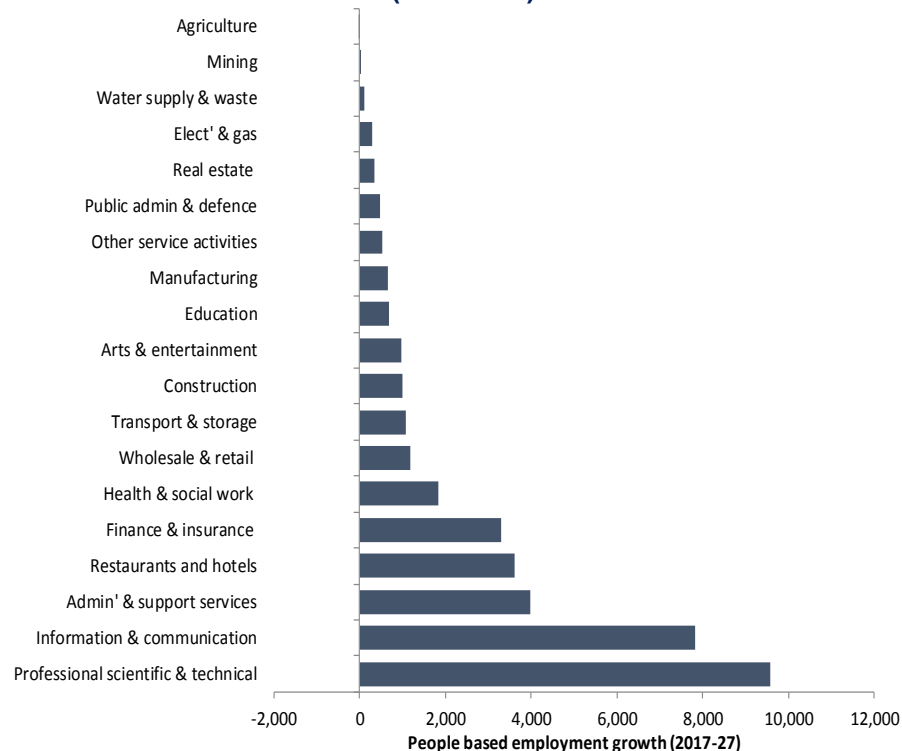
Health and social work is forecast to become the largest employment sector (people based)

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

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



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

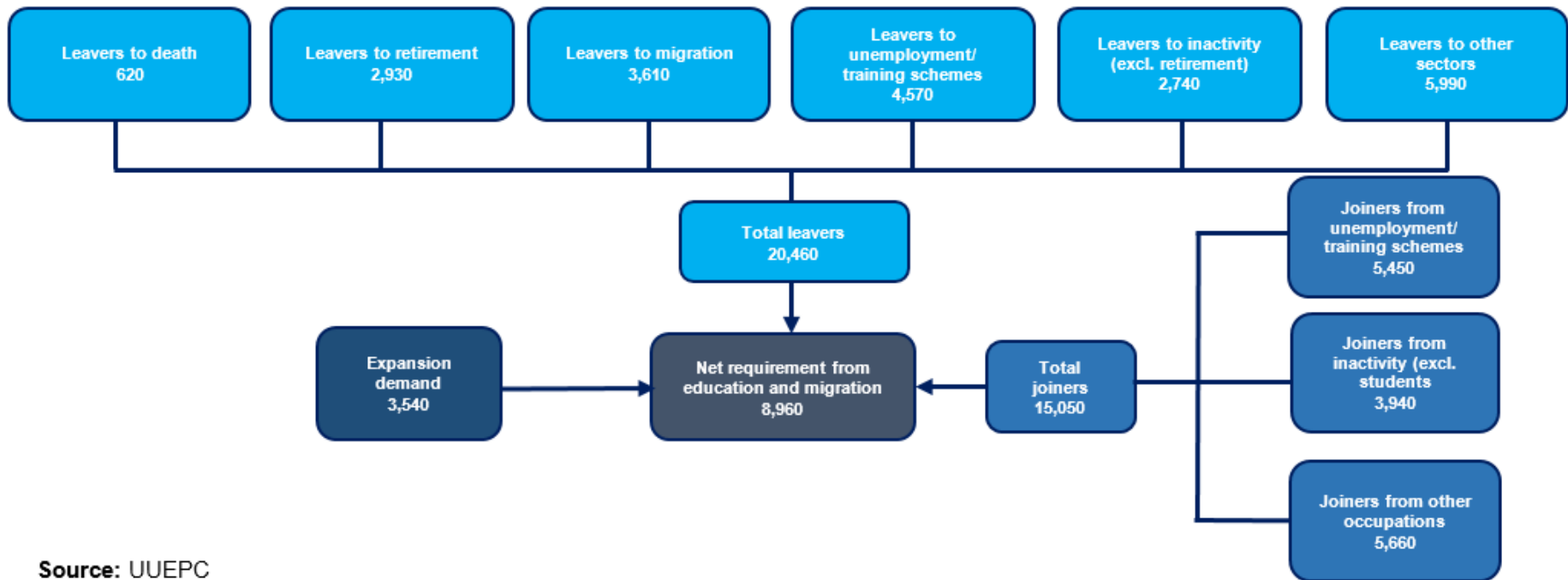


Source: UUEPC

Source: UUEPC

Labour market flows determine skills demand

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



Source: UUEPC

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

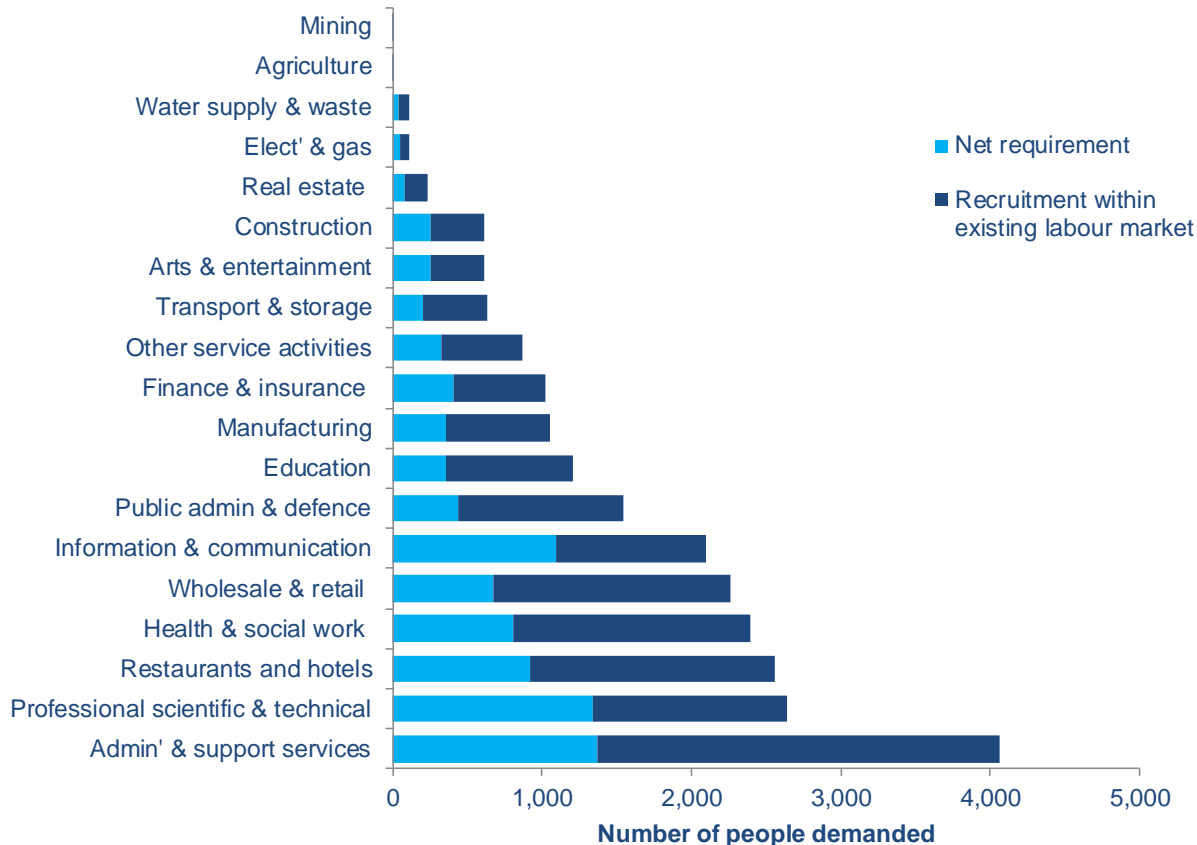
Demand category	2012-17 (annual)	2017-27 (annual)
(A) Gross demand	21,970	24,000
(B) Expansion demand	3,200	3,540
(C) Replacement demand	18,780	20,460
(D) Filled from within the existing labour market	14,000	15,050
(E) Net replacement demand	4,780	5,420
(F) Net requirement from education and migration	7,970	8,960

Source: UUEPC

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

Job opportunities tend to be filled from recruitment within the exiting labour market

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

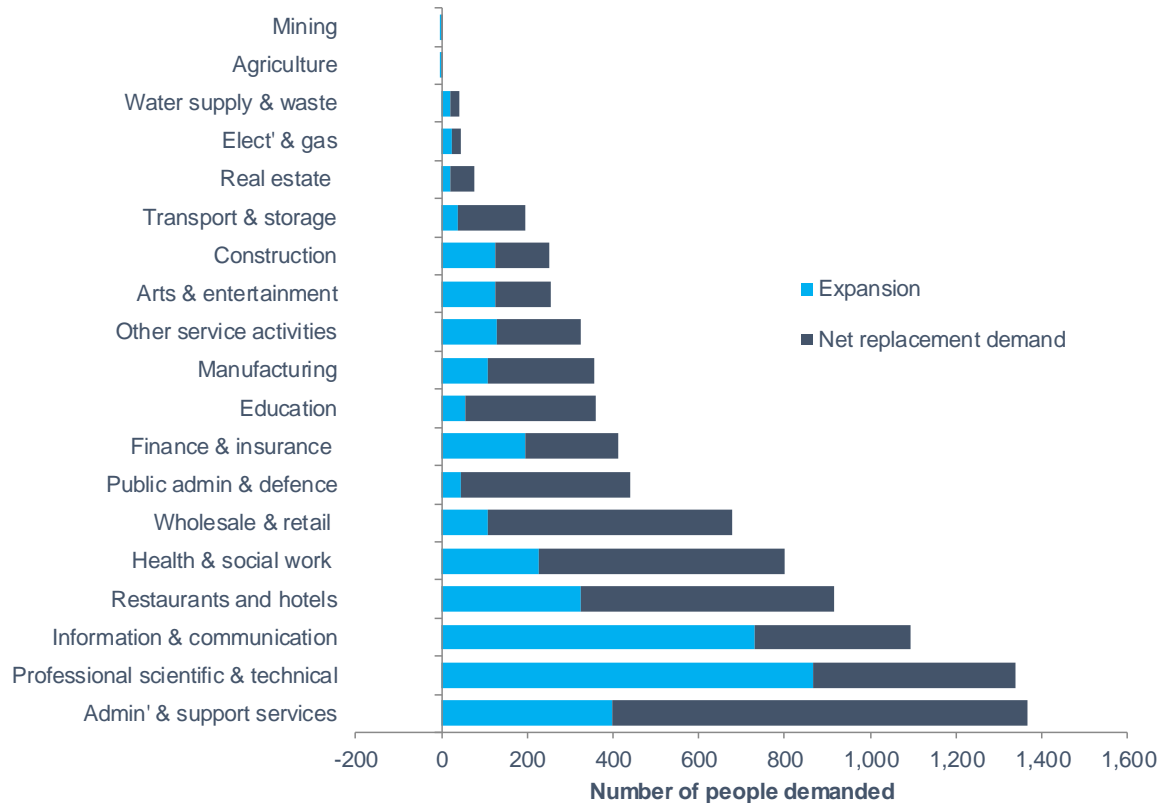


Source: UUEPC

Gross demand highlights that a significant number of total job opportunities tend to be filled from recruitment within the existing labour market. For example, in administration and support services 66% of total job opportunities are expected to be filled by individuals already within the existing labour market compared to 34% 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), BCC (2017-2027)

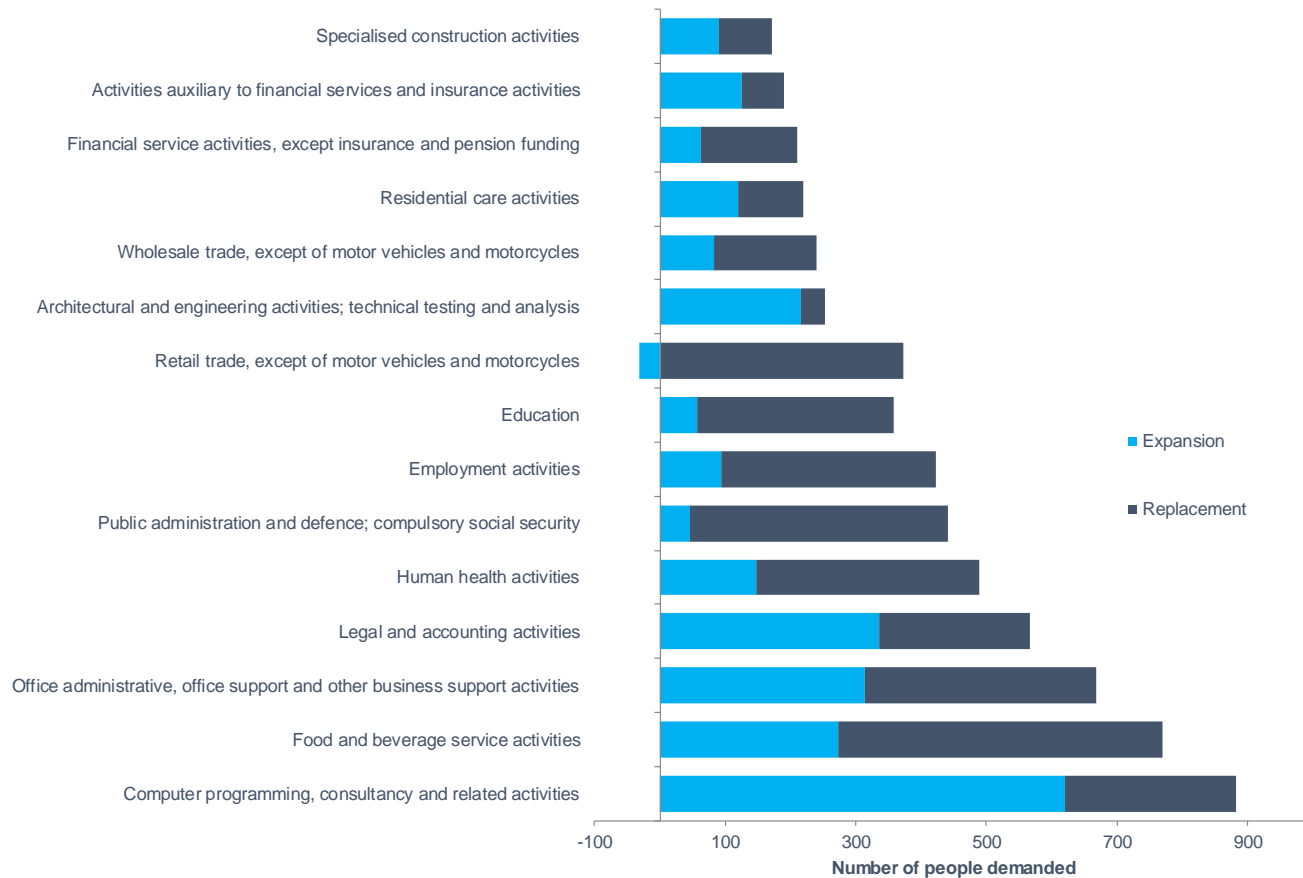


Source: UUEPC

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. However, if a sector is large in scale, it is likely replacement demand will account for a high proportion of the net requirement.

Computer programming and consultancy has the highest net requirement in BCC

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

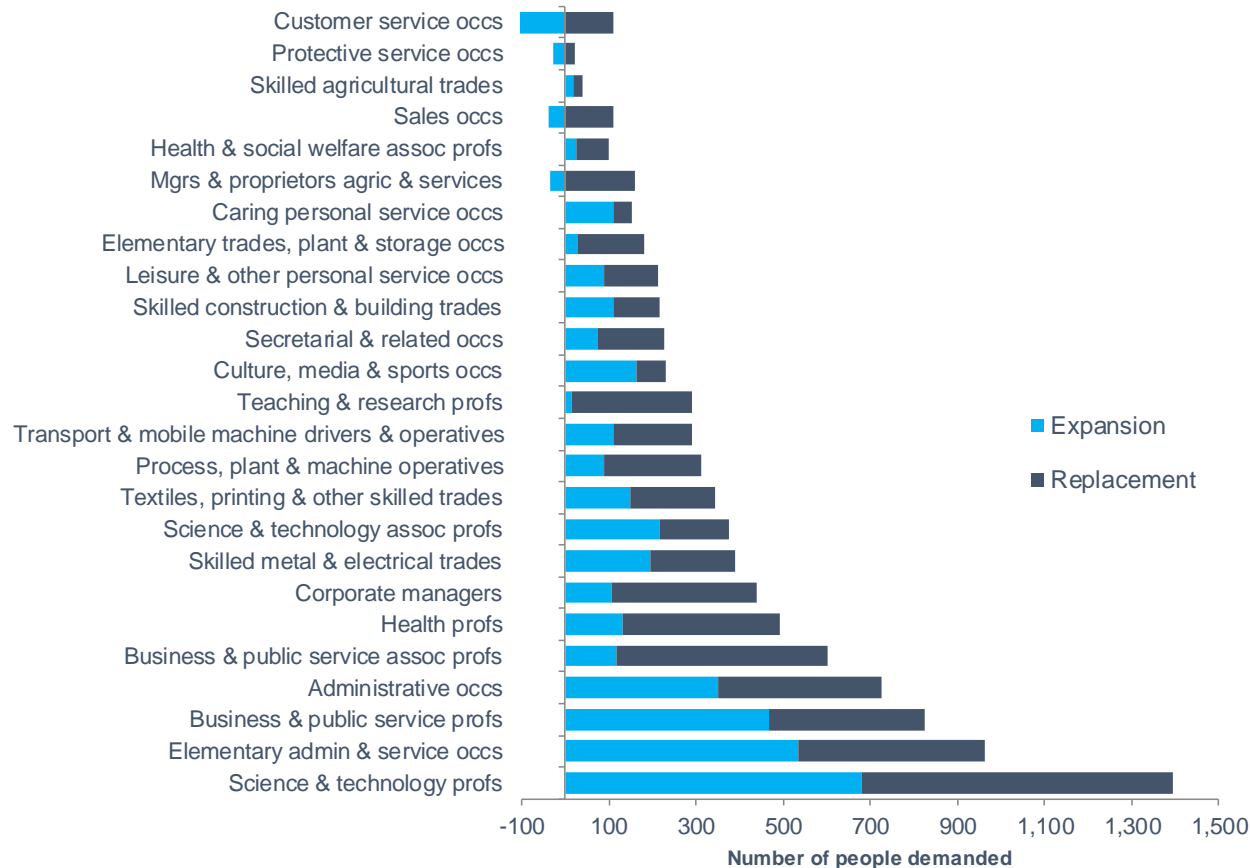


Source: UUEPC

The largest sub-sector is computer programming, consultancy and related activities (10% of total net requirement) followed by food and beverage service activities (9%).

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

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

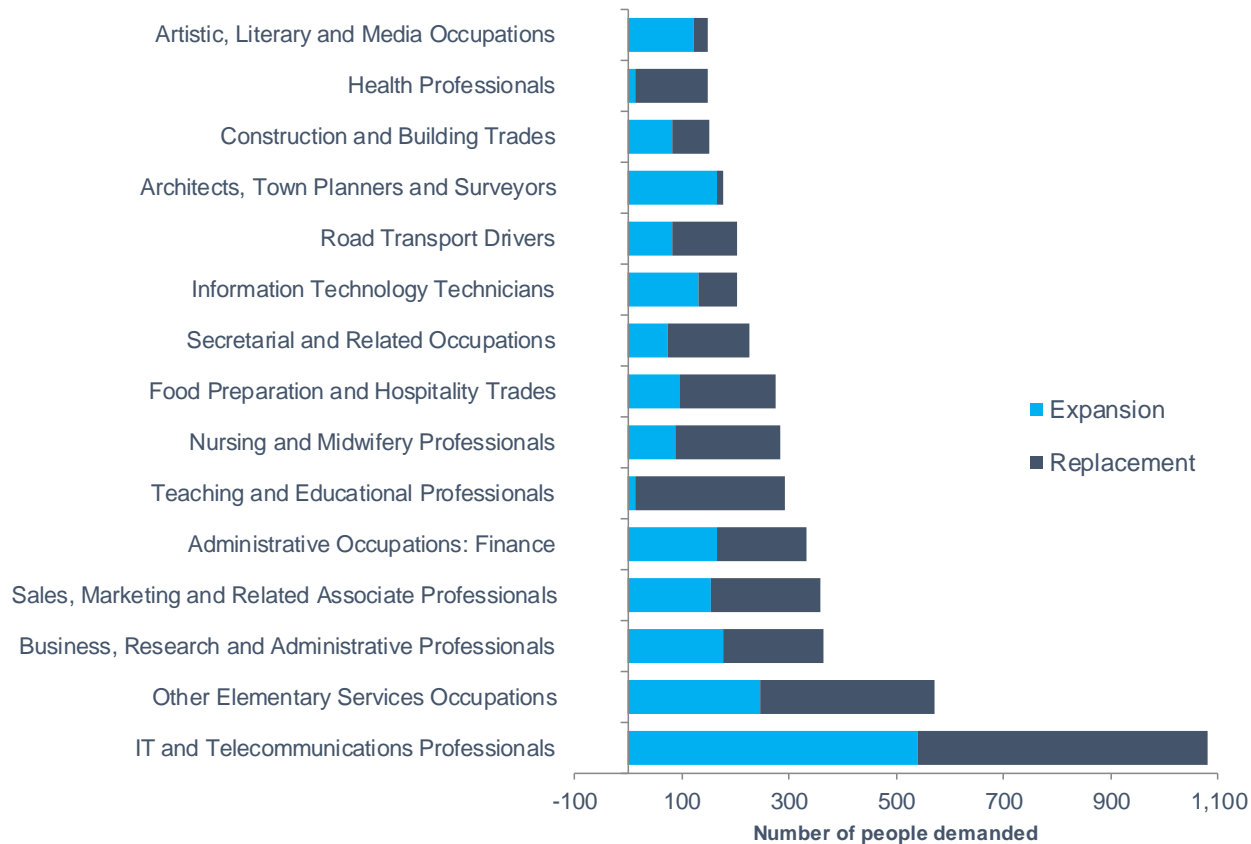


Source: UUEPC

Occupations that are expected to provide the most job opportunities in the coming decade are science and technology professionals (16% of total net requirement), elementary administration and service occupations (11%) and business and public service professionals (9%).

IT and Telecommunications forecast to experience the largest expansion and replacement demand

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



Source: UUEPC

At a more detailed level the occupations (3-digit) expected to be in 'high demand' over the coming decade are IT and telecommunications professionals (12% of net requirement), other elementary service occupations (6%) and business research and administrative professionals (4%).

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).

Replacement demand under a high growth scenario is expected to be 20,460 over the next 10 years which is 5.8 times higher than expansion demand of 3,540.

Vacancies not filled by labour market participants must be filled by either leavers from the education system or migrants. In BCC the average annual individuals required from education and migration is 3,540 over the 2017-2027 period.

Gross demand by sector – The sector expected to require the largest gross demand over the 2017-2027 period is administration and support services (15% of total gross demand) followed by professional scientific and technical (15% of total gross demand) and restaurants and hotels (10% of total gross demand).

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 activities is relatively small in scale but is forecast to experience rapid growth. Therefore expansion demand accounts for 65% of the net requirement, with the remaining 35% being replacement demand.

However in other sectors a significant proportion of labour demand is driven by replacement demand rather than expansion of the sector. For example, wholesale and retail is relatively large in scale and has high entry and exit rates. Therefore, over four fifths of labour demand comes from vacancies created by workers who leave their jobs and one fifth from expansion demand.

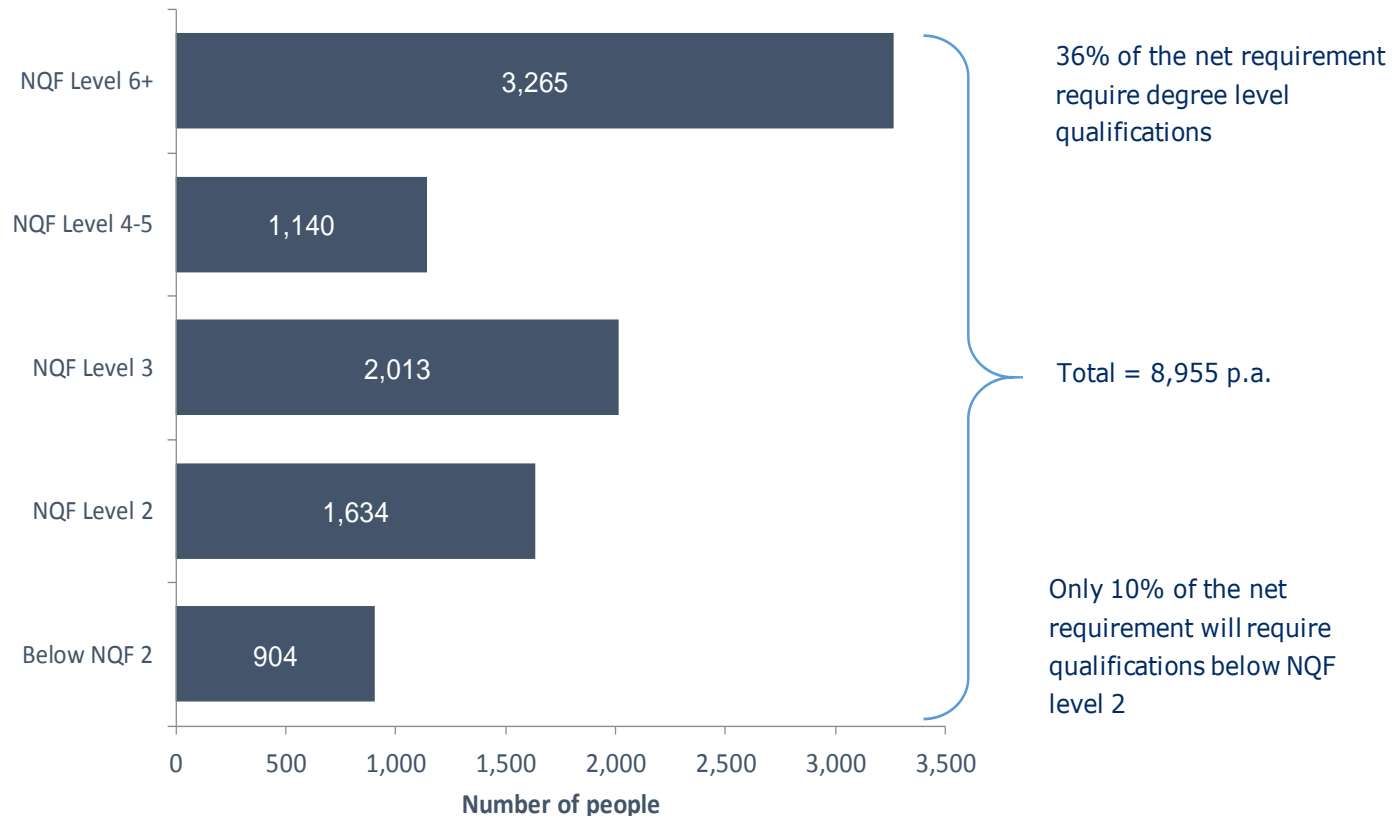
Net requirement by occupation – The occupations forecast to provide the most job opportunities for education leavers and migrants are science and technology professionals (16% of total net requirement), elementary administration and service occupations (11% of total net requirement), and business and public service professionals (9% of total net requirement).

At a more granular level the top 15 occupations (3-digit) account for 45% of the total net requirement. The largest net requirement in detailed occupations is expected in IT and telecommunications professionals (12% of net requirement), other elementary service occupations (6% of net requirement) and business research and administrative professionals (4% of net requirement).

Demand side – Qualifications

Sectoral structure in BCC leads to a higher demand for graduates

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



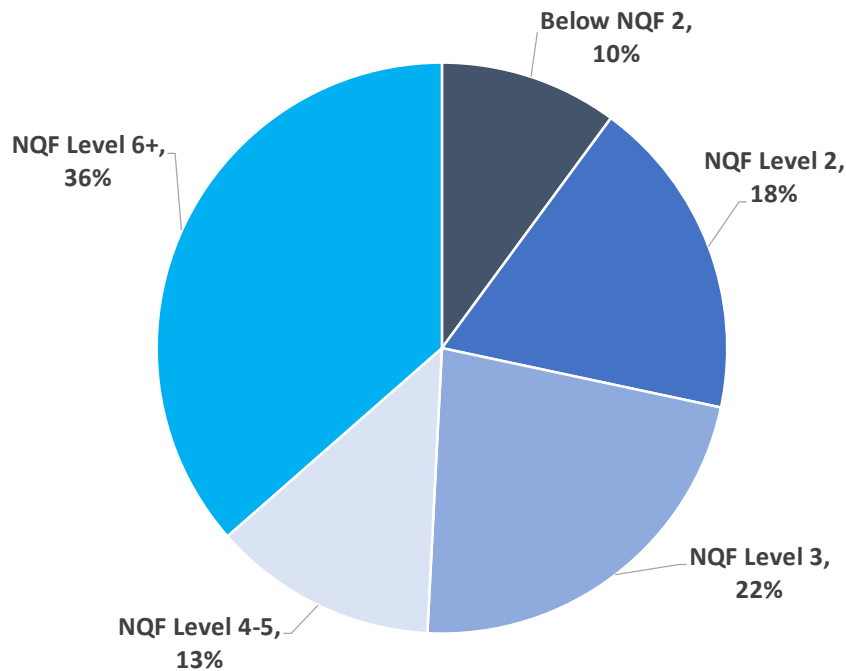
Source: UUEPC

UUEPC's skills model estimates the net requirement by highest NQF level. However it should be noted that skills and qualifications are not the same. For example, labour may be highly skilled but have low levels of formal qualifications and vice versa. It is estimated 56% of future net requirements will require a degree level qualification.

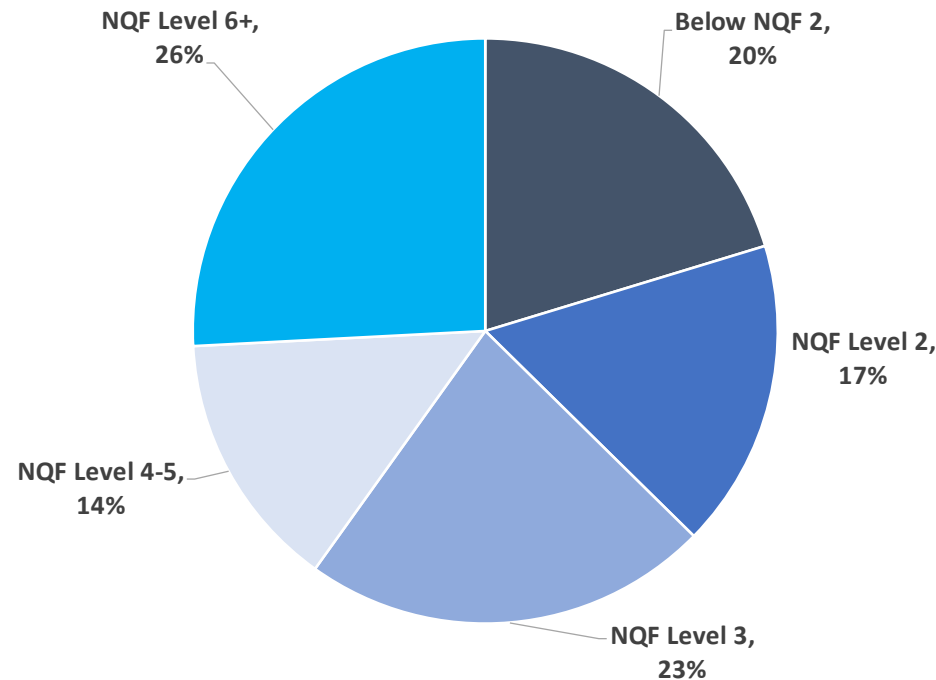
The profile of demand is more graduate intensive than the current stock of skills

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

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



Qualification profile of employed, BCC (2016)



Source: UUEPC

Source: UUEPC

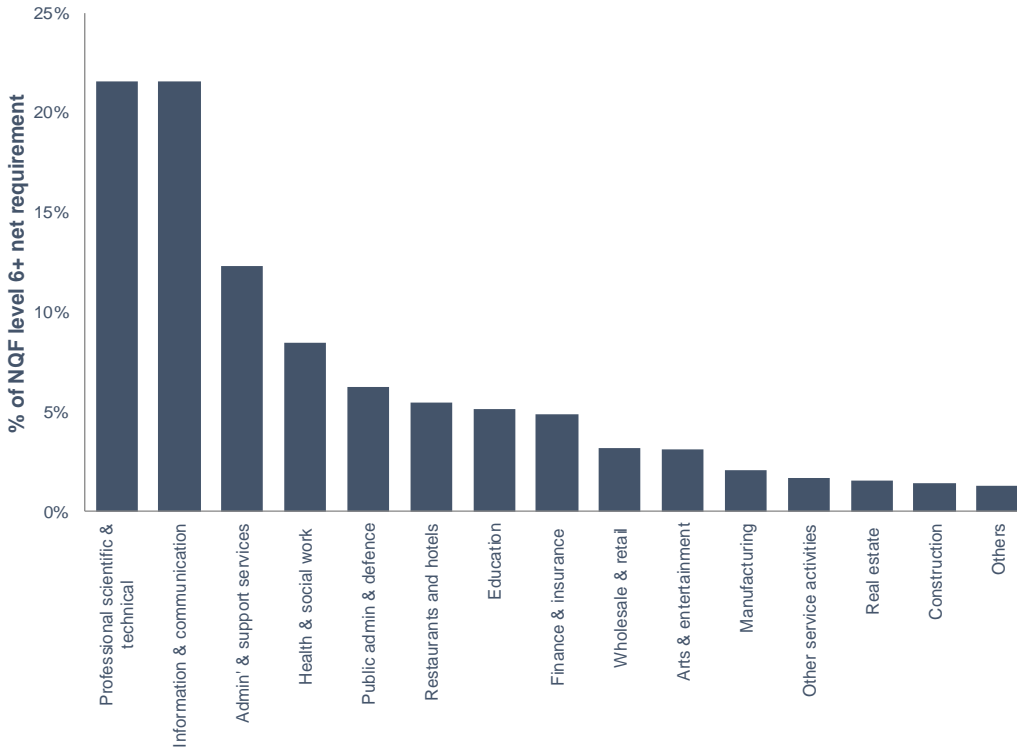
Increasing HE participation levels and employers attitudes towards qualifications has influenced a higher weighting towards degree level qualifications. This implies the current qualification profile of employed does not match future skill needs.

Professional services and IT account for over 2/5 of graduate demand

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

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

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



2 digit SIC	% of NQF level 6+ net requirement
Computer programming and related	19.3%
Legal and accounting activities	7.9%
Human health activities	6.3%
Public administration and defence	6.2%
Education	5.3%
Employment activities	5.2%
Office admin and support	5.1%
Food and beverage service activities	4.6%
Other professional, scientific and technical	4.1%
Architectural and engineering activities	3.7%
Activities of head offices	2.9%
Activities auxiliary to financial services and insurance activities	2.7%
Residential care activities	2.1%
Financial service activities, except insurance and pension funding	2.0%
Sports activities and amusement and recreation activities	1.7%

Source: UUEPC

Source: UUEPC

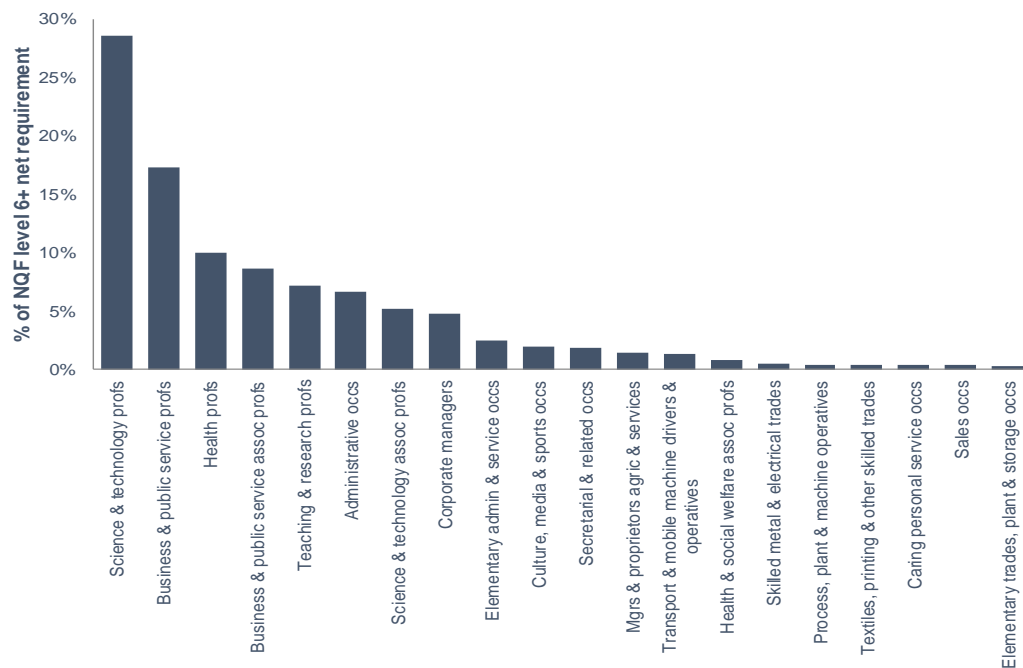
The proportion of graduates required from education and migration varies across sectors. For example, in information and communication 64% of the net requirement is estimated to require at least an undergraduate level degree, compared to 30% in administration and support services.



Science and technology professionals account for over one quarter of graduate demand in BCC

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

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



Source: UUEPC

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

3 digit SOC	% of NQF level 6+ net requirement
Information technology and telecommunications professionals	22.1%
Business, research and administrative professionals	7.6%
Teaching and educational professionals	7.2%
Nursing and midwifery professionals	5.8%
Sales, marketing and related associate professionals	5.2%
Architects, town planners and surveyors	3.8%
Administrative occupations: Finance	3.0%
Health professionals	3.0%
Information technology technicians	2.8%
Engineering professionals	2.8%
Legal professionals	2.6%
Natural and social science professionals	2.2%
Science, engineering and production technicians	1.9%
Secretarial and related occupations	1.8%
Business, finance and related associate professionals	1.6%

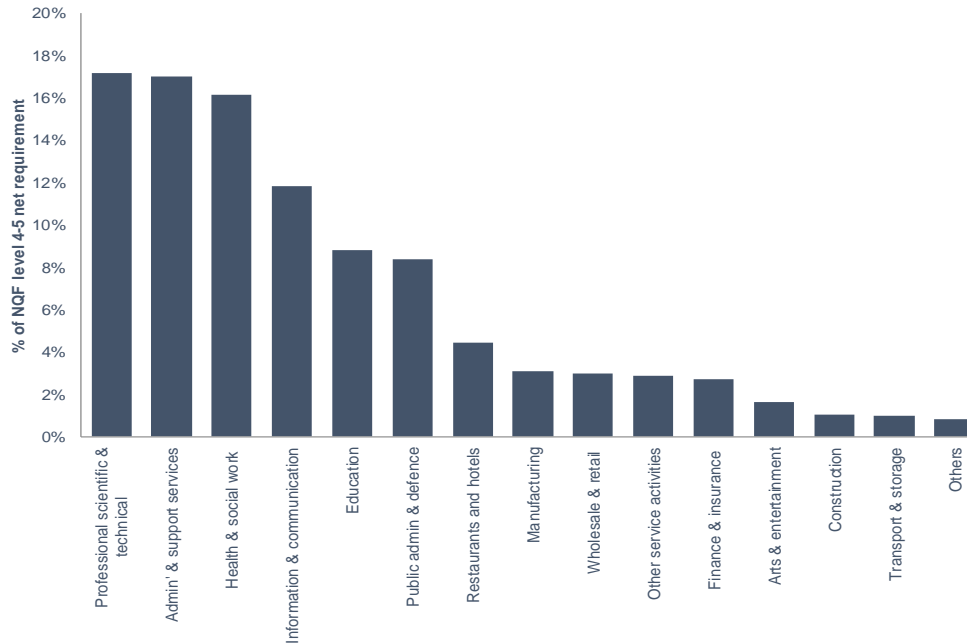
Source: UUEPC

The occupation profile of the net requirement is driven by BCC's sectoral structure. The occupations which account for the highest proportion of net requirement are science and technology professionals (29% of net requirement), business and public service professionals (17%) and health professionals (10%).

Professional & scientific and administration & support sectors dominate sub-degree level demand

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

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



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

2 digit SIC	% of NQF level 4-5 net requirement
Human health activities	11.1%
Legal and accounting activities	10.0%
Education	8.8%
Computer programming and related	8.5%
Public administration and defence	8.4%
Office admin and support	7.5%
Employment activities	7.5%
Residential care activities	4.4%
Other professional, scientific and technical	2.9%
Food and beverage service activities	2.6%
Repair of computers	2.4%
Wholesale trade	2.2%
Accommodation	1.8%
Manufacture of other transport equipment	1.8%
Financial service activities, except insurance and pension funding	1.6%

Source: UUEPC

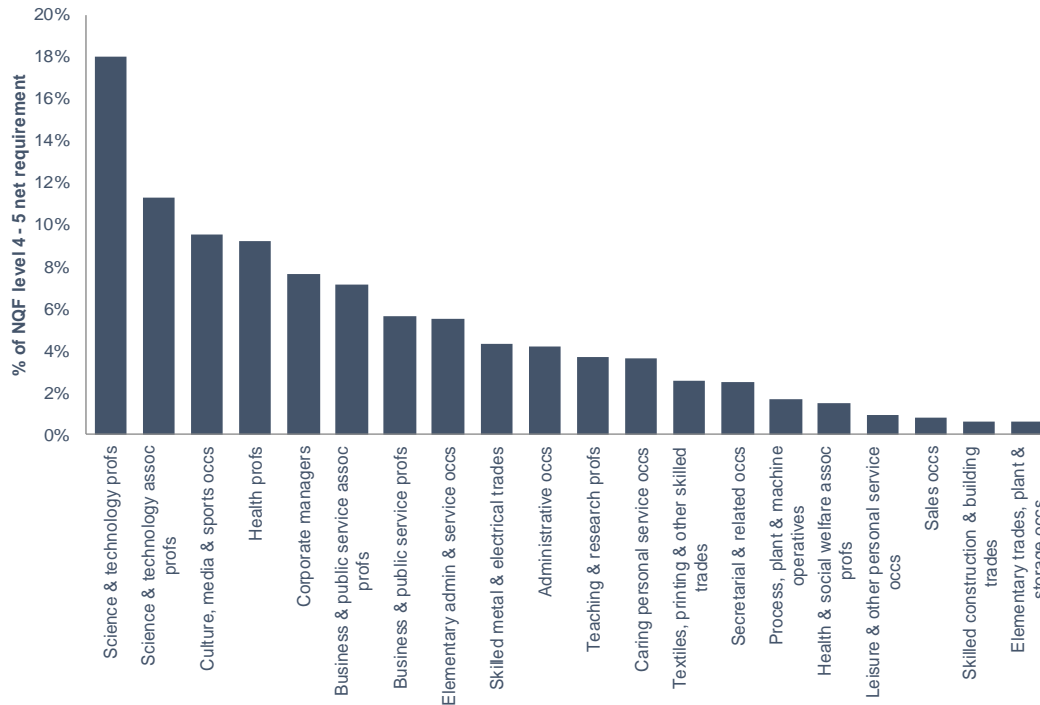
Source: UUEPC

The industry mix of the NQF level 4-5 net requirement is similar to NQF level 6+. The sectors accounting for the largest proportion of NQF level 4-5 net requirement are professional scientific and technical (17%), administration and support services (17%) and health and social work (16%).

Science & technology professionals account for highest proportion of sub-degree level demand

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

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



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

3 digit SOC	% of NQF level 4-5 net requirement
Information technology and telecommunications professionals	13.9%
Information technology technicians	6.1%
Artistic, literary and media occupations	5.9%
Nursing and midwifery professionals	5.3%
Sales, marketing and related associate professionals	4.2%
Science, engineering and production technicians	4.1%
Teaching and educational professionals	3.7%
Caring personal services	3.3%
Other elementary services occupations	3.3%
Health professionals	2.8%
Secretarial and related occupations	2.5%
Business, research and administrative professionals	2.5%
Food preparation and hospitality trades	2.1%
Design occupations	2.0%
Administrative occupations: Finance	1.9%

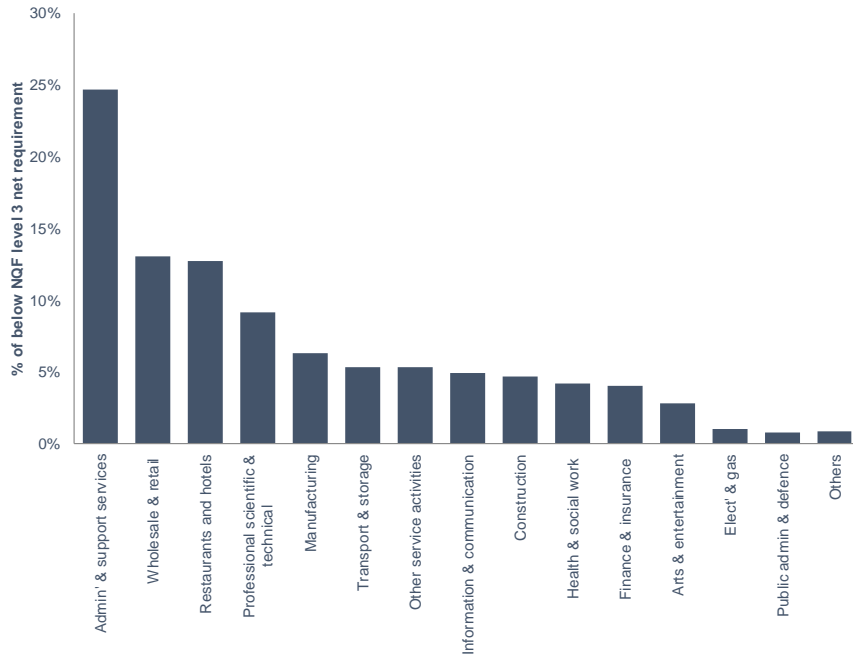
Source: UUEPC

The largest occupation demand within the NQF level 4-5 net requirement is accounted for by science and technology professionals (18%), science and technology associate professionals (11%) and culture, media and sport occupations (9%).

Administration & support services is the highest employer of lower skilled workers

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

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



Source: UUEPC

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

2 digit SIC	% of below NQF level 3 net requirement
Office admin and support	13.2%
Food and beverage service activities	10.5%
Retail trade	6.8%
Employment activities	5.3%
Wholesale trade	4.2%
Legal and accounting activities	3.4%
Security and investigation activities	3.3%
Specialised construction activities	3.3%
Other personal service activities	2.7%
Motion picture, video and television	2.7%
Architectural and engineering activities	2.6%
Land transport and transport via pipelines	2.5%
Warehousing and support activities for transportation	2.5%
Residential care activities	2.3%
Services to buildings and landscape activities	2.2%

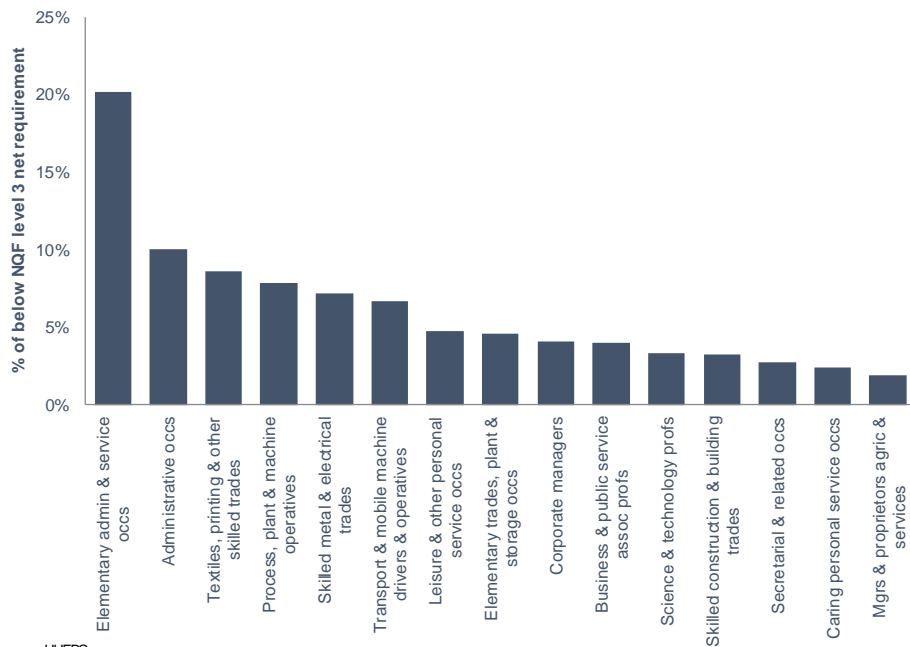
Source: UUEPC

The industry profile of the net requirement below NQF level 3 varies significantly relative to tertiary level qualifications. The largest proportion of the net requirement is within administration and support services (25%) followed by wholesale and retail (13%) and restaurants and hotels (13%). Due to graduate intensity within high growth sectors it is vital the local economy can still provide job opportunities for those with non-tertiary skills.

Administrative occupations are a big recruiter of people with low qualifications

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

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



Source: UUEPC

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

3 digit SOC	% of below NQF level 3 net requirement
Other elementary services occupations	12.0%
Food preparation and hospitality trades	6.9%
Road transport drivers	4.6%
Administrative occupations: Finance	4.5%
Elementary process plant occupations	3.0%
Secretarial and related occupations	2.8%
Elementary storage occupations	2.7%
Elementary security occupations	2.7%
Information technology and telecommunications professionals	2.5%
Metal machining, fitting and instrument making trades	2.5%
Process operatives	2.5%
Elementary cleaning occupations	2.4%
Sales, marketing and related associate professionals	2.4%
Construction and building trades	2.3%
Caring personal services	2.2%

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 elementary administration and services (20%), administration (10%) and textiles printing and other skilled trades (9%).

Summary of demand side qualifications

Net requirement by NQF – At the higher end of the qualification spectrum it is forecast that 36% of total demand will require at least a degree level qualification. Whereas, at the lower end only 10% of job opportunities will be available to individuals with a qualification level equivalent to NQF level 2 or below.

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 BCC.

Workforce qualifications current versus future – Current workforce qualifications do not match expected future qualification demands at the top end of the spectrum. For example, in BCC 26% of people employed have NQF level 6+ qualifications compared to 36% forecast for the coming decade.

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.

At mid-level (NQF level 2, 3 and 4-5) qualifications are closely aligned between current and future qualification demands, both account for a total of 40% net requirement.

Net requirement by NQF level 6+ by sector – The number of graduates from net requirement differs relatively across sectors. Over two thirds (64%) of net requirement in the IT sector require NQF level 6+ compared to only 29% in administration and support services.

It is important to note the scale of sectors alongside graduate intensity when analysing net requirement. For example, although graduate intensity in finance and insurance (5%) is nearly double that of the wholesale and retail (3%) the number of graduates required per annum is relatively similar, 160 and 104 respectively.

Summary of demand side qualifications (continued)

Net requirement by NQF level 6+ by occupation – The occupations which account for the highest proportion of the net requirement are science and technology professionals (29% of net requirement), business and public service professionals (17%) and health professionals (10%).

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 the NQF level 4-5 net requirement are professional scientific and technical (17%), administration and support services (17%) and health and social work (16%).

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 science and technology professionals (18%) followed by science and technology associate professionals (11%) and culture, media and sport occupations (9%).

Net requirement by below NQF level 3 by sector – The sectoral mix of net requirement at below NQF level 3 differs significantly from tertiary level qualifications. The largest proportion of net requirement is within administration and support services (25%) followed by wholesale and retail (13%) and restaurants and hotels (13%).

Due to high 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 occupation profile follows those which are most prevalent within the high demand sectors for low level qualifications. The occupations which account for the highest proportion of below NQF level 3 net requirement are elementary administration and services (20% of net requirement), administration (10%) and textiles printing and other skilled trades (9%).

Demand side - Subjects

Interpreting outputs relating to subject demand

The 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), a large employer closing or moving to another area.

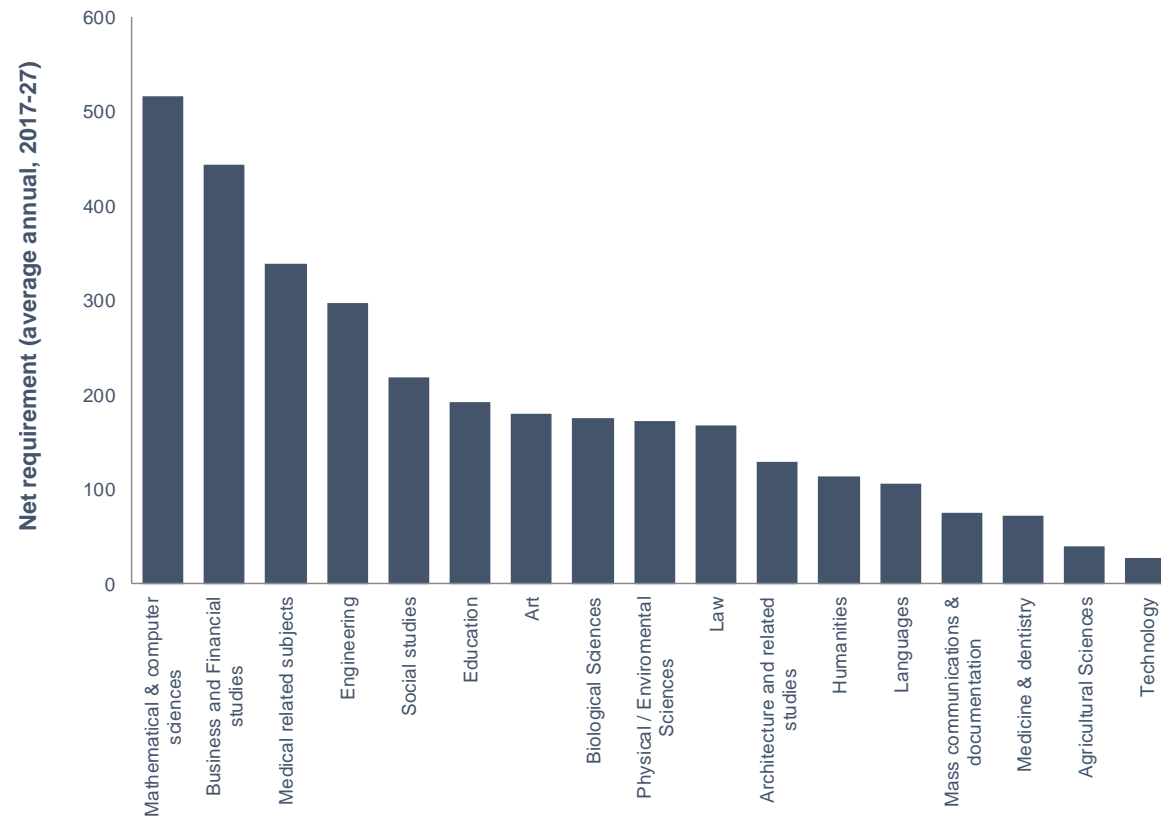
In addition, estimates of future skills demands are based on historic patterns. Therefore, it is possible demand in some sectors has the potential to evolve over time changing the required subject mix within sectors (e.g. growth in artificial intelligence or cyber-security).

This section will outline subject demand for:

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

Maths & computer science accounts for the highest proportion of graduate demand

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

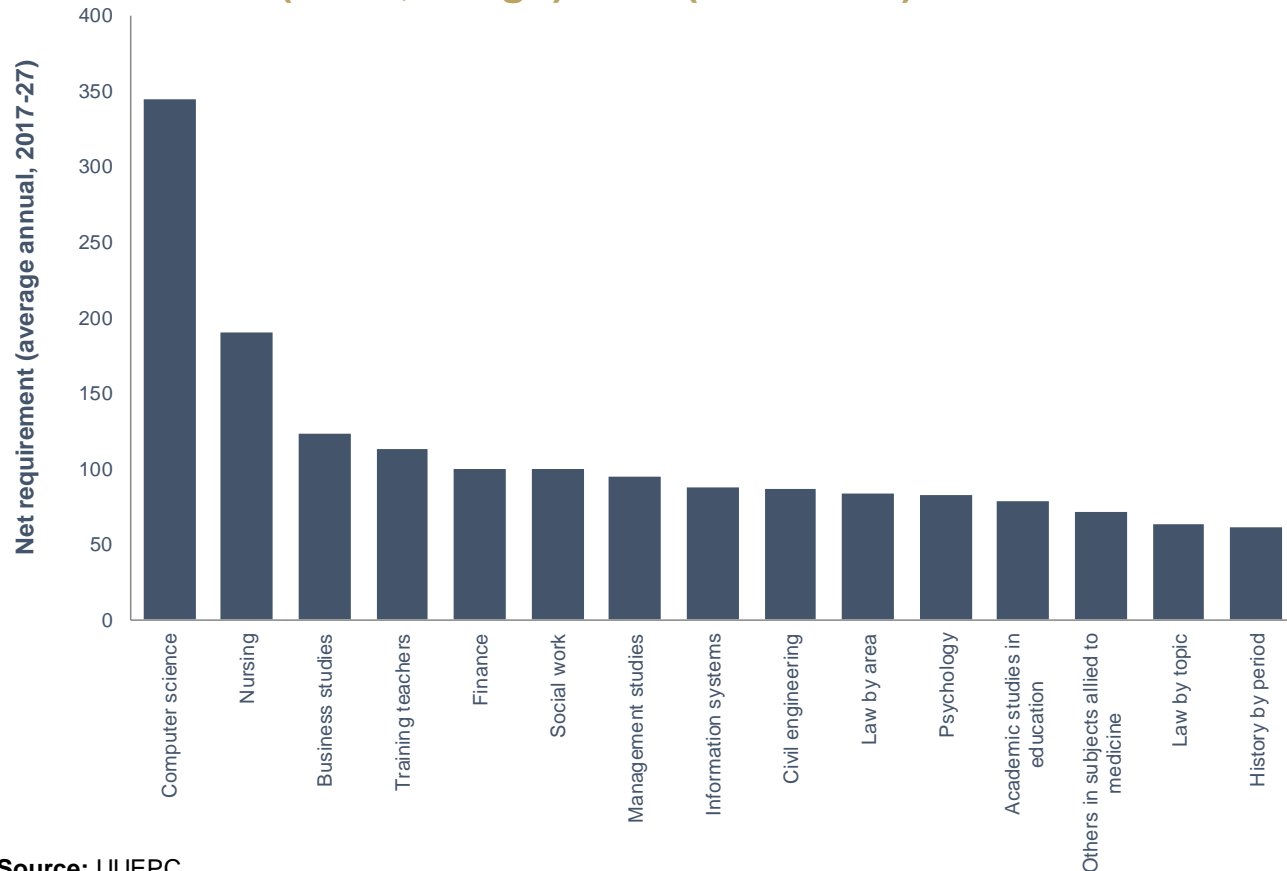


Source: UUEPC

Mathematical and computer science accounts for the largest proportion of the NQF level 6+ net requirement (16%), followed by business and financial studies (14%) and medical related subjects (10%).

A granular analysis can be more insightful – computer science will be most sought after

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

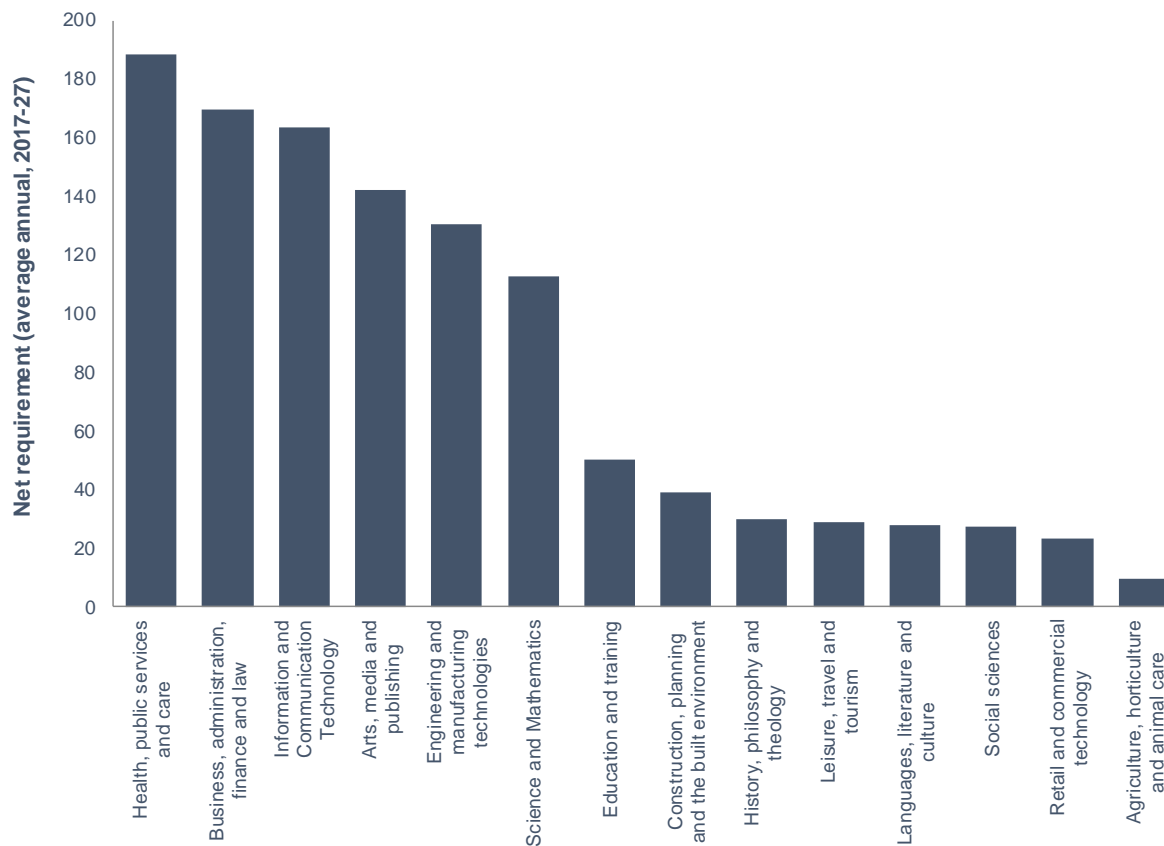


Source: UUEPC

A more detailed analysis highlights how broad subject groupings have potential to be misleading. For example, mathematics and computer science net requirement is 520 per annum over the 2017-2027 period. However, 67% of the net requirement is computer science and only 33% mathematics.

Health, public services and care account for the largest proportion of sub-degree level demand

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



Source: UUEPC

At a sub-degree level on average over the coming decade (2017-2027) the largest proportion of the net requirement is in health, public service and care professionals (17% of NQF level 4-5 net requirement) followed by business administration, finance and law (15%) and information and communication (14%).

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 e.g. a new large employer, the closure of a large employer or move of a large employer elsewhere.

Net requirement by NQF level 6+ subjects – The subject which accounts for the largest proportion of NQF level 6+ demand is mathematics and computer science (16%). This is directly influenced by high growth forecast within the information and communication sector over the coming decade (2017-2027). This is followed by business and financial studies (14%) and medical related subjects (10%).

Granular level analysis can provide detailed insight. For example, computer science accounts for the largest proportion of NQF level 6+ net requirement. This equates to over two thirds (67%) of net requirement in the mathematical and computer science subjects. The next largest subjects in demand at a detailed level are nursing (6% of NQF level 6+ net requirement) and business studies (4%).

Net requirement by NQF level 4-5 subjects – On average over the coming decade (2017-2027) the largest subject in demand for sub-degree programmes is health public services and care (17% of NQF level 4-5 net requirement). This reflects a high level of replacement demand based on the scale of the health sector within BCC.

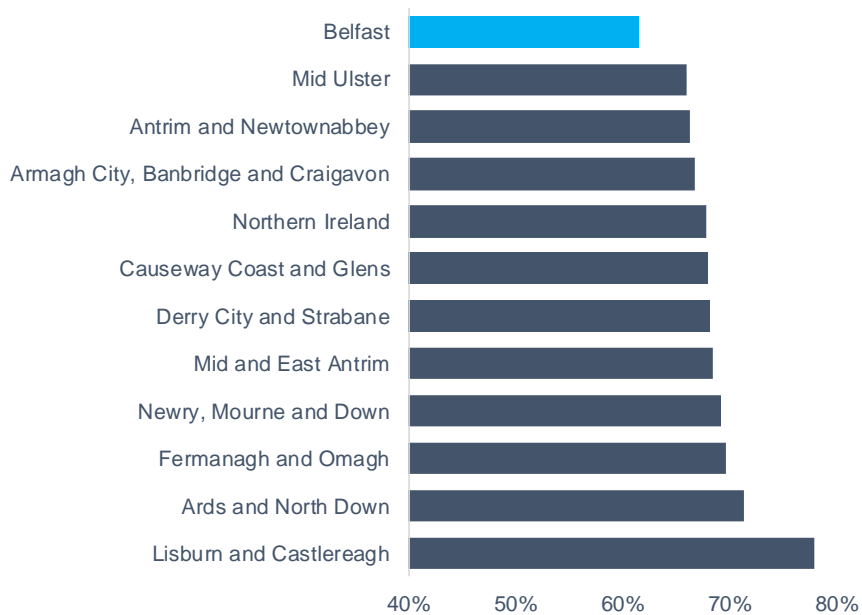
The next largest subjects in demand are business finance and administration (15% of NQF level 4-5 net requirement) and information and communication (14%).

Supply side – School leavers achievement

Educational attainment in BCC at GCSE is above the NI average

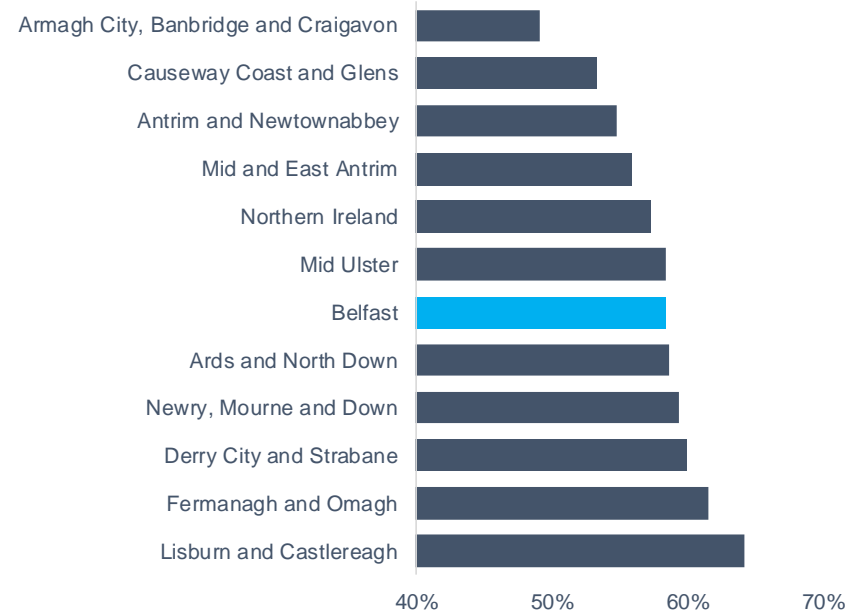
GCSE and A-level attainment of school leavers, LGDs (2015/16)

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)



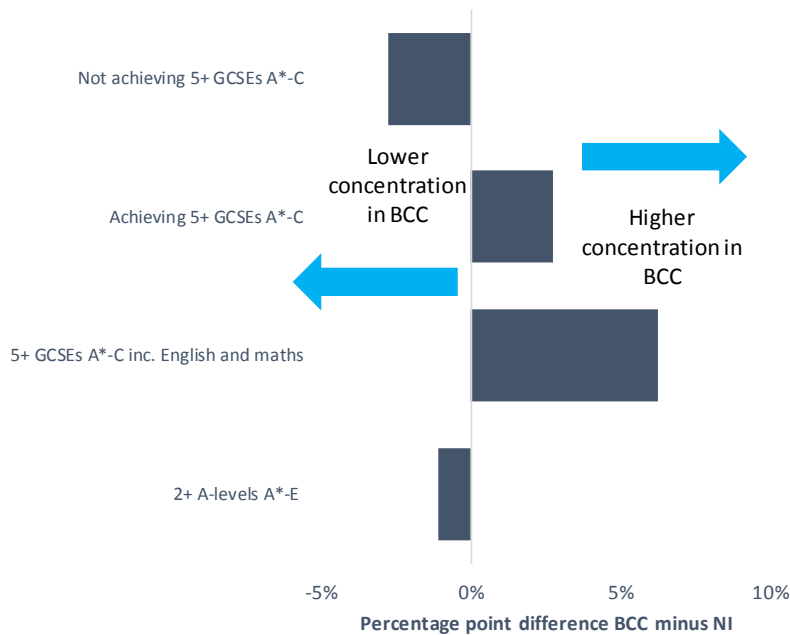
Source: NI school leavers survey

In BCC 62% of school leavers achieve 5 GCSEs A*-C including English and maths compared to 68% in NI as a whole – a 4 percentage point difference. This is the lowest rate amongst all LGDs. On the other hand BCC performs marginally above the NI average for school leavers achieving 2 or more A levels A*-C, 59% and 57% respectively.

Improvement in GCSE performance overtime in BCC is higher than the NI average rate of improvement

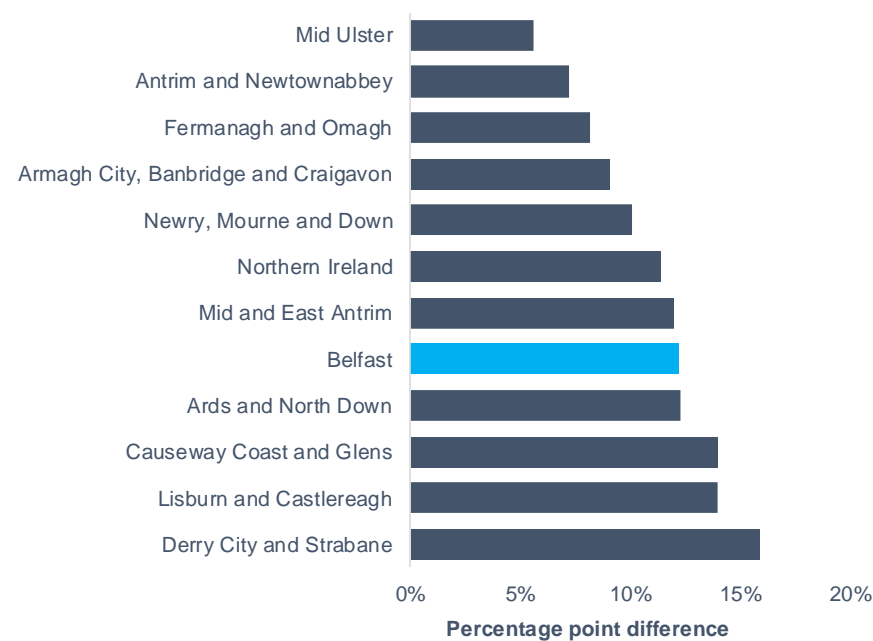
Skill structure of school leavers (2015/16) and change in performance (2007/08-2015/16)

Percentage point difference in qualifications of school leavers, BCC 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)

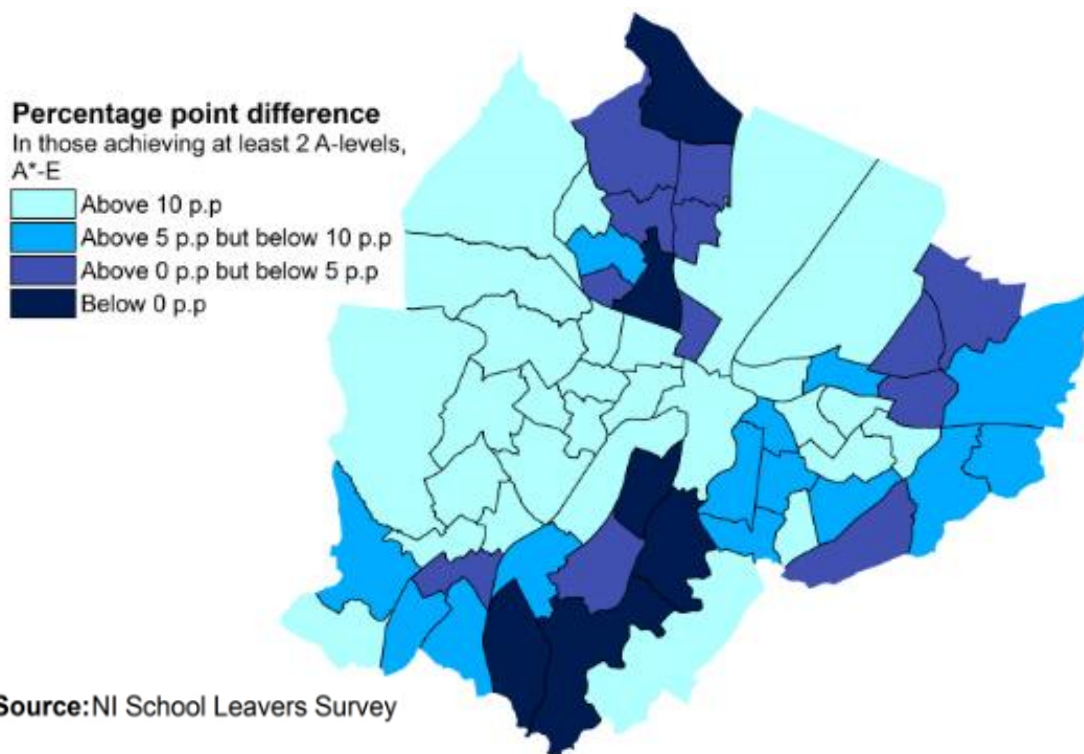


Source: NI school leavers survey

The rate of school leavers achieving 5+ GCSEs A*-C including English and maths in BCC has improved by 12 percentage points over the 2007/08-2015/16 period. That is the 5th strongest improvement across LGDs, albeit from a low base given it is the lowest performing region at GCSE level.

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, BCC (2007-2010 versus 2013-2016)



Source: NI School Leavers Survey

Highest Improvement in BCC

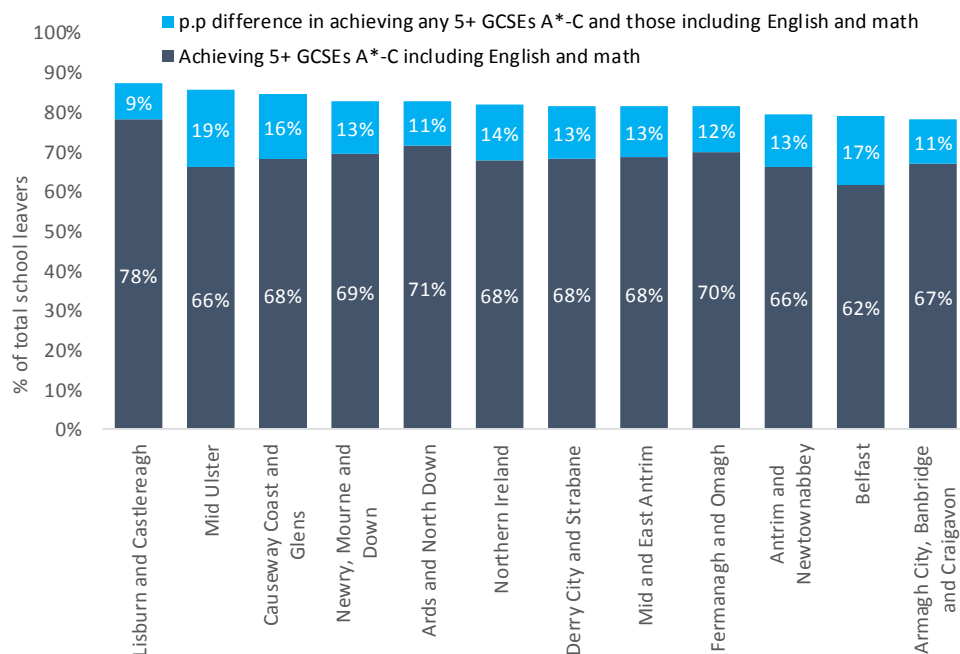
	Ward	P.P change
1	Falls	26%
2	Clonard	26%
3	Shaw's Road	24%
4	Beersbridge	22%
5	Sandown	19%
6	Collin Glen	17%
7	Lagmore	17%
8	Forth River	16%
9	Falls Park	16%
10	Woodvale	16%
11	Beechmount	16%
12	Cregagh	15%
13	Duncairn	15%
14	Orangefield	15%
15	Ballymurphy	14%
16	Belvoir	14%
17	Ballysillan	14%
18	Ballygomartin	13%
19	Turf Lodge	13%
20	Blackstaff	13%

To improve school achievements it is important to look at good practice in order to understand what works in which contexts. Analysis of school leaver achievements in BCC at a granular level highlights a 26 percentage point improvement in Falls and Clonard wards over the period 2007/08-2015/16. That is the 3rd strongest improvement across all 462 wards.

17% of NQF level 2 school leavers not achieving a pass grade in core subjects English and maths

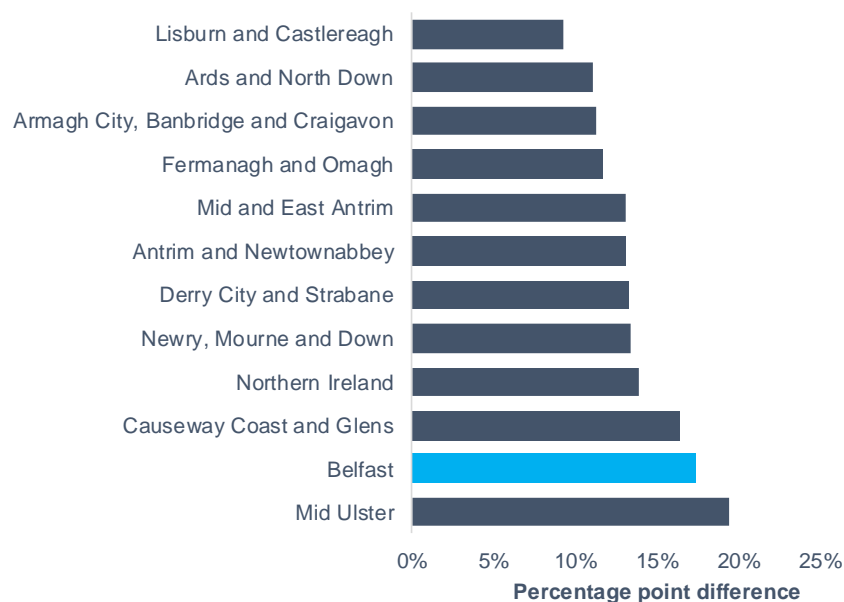
School leavers achieving any 5 GCSEs A*-C and those that include English and maths, LGDs (2015/16)

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 school leavers achieving 5+ GCSEs A*-C, including English and maths versus not including English and maths, LGDs 2015/16



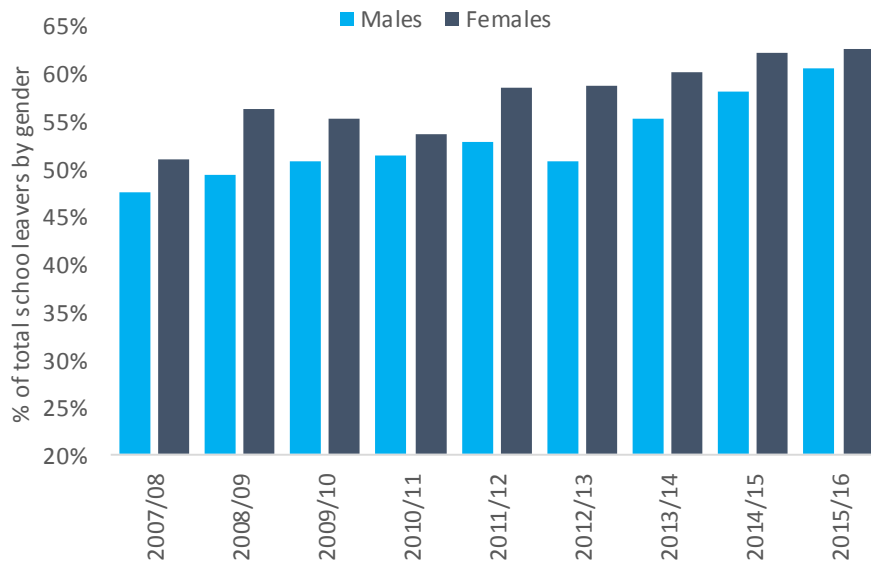
Source: NI school leavers survey

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 BCC the difference is the second highest across all wards.

Females consistently out perform males in school attainment

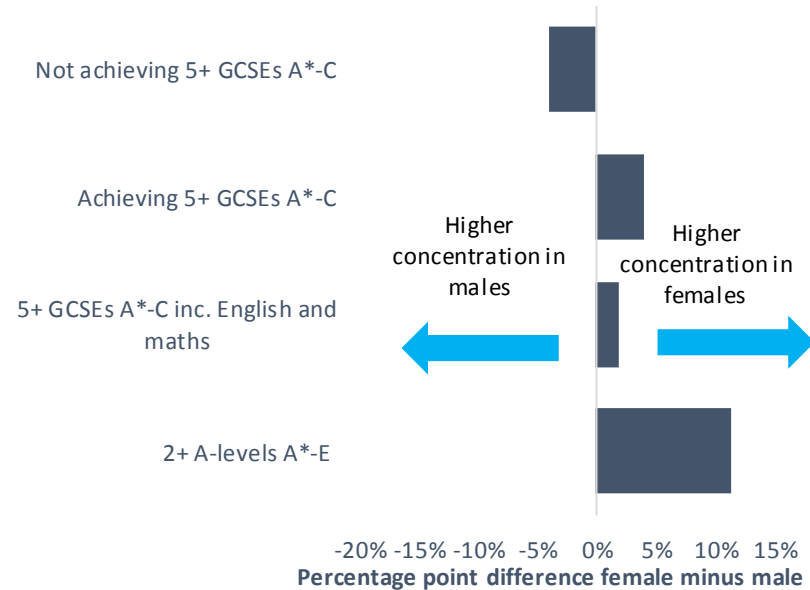
School leavers achieving 5+ GCSEs A*-C including English and maths, male versus female, BCC (2015/16)

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



Source: NI school leavers survey

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



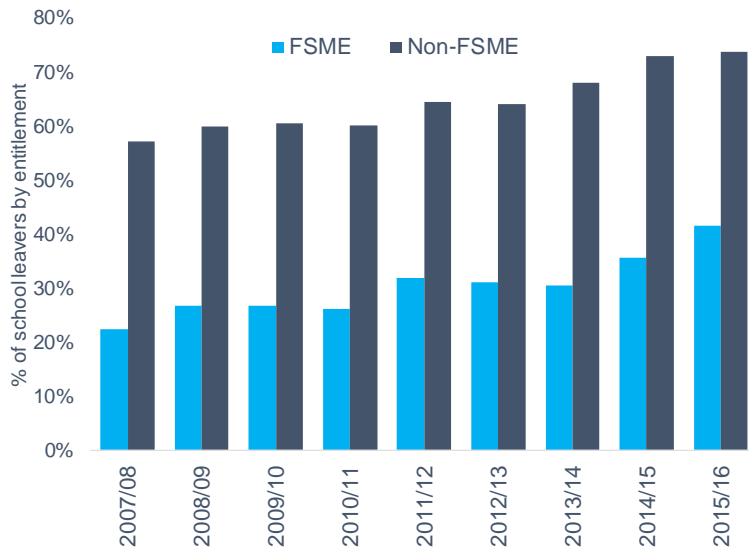
Source: NI school leavers survey

Gender analysis highlights female school leavers in BCC 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 11 percentage points. This compares to a difference of 17 percentage points across NI as a whole. However, the gap has increased for GCSE attainment in recent years.

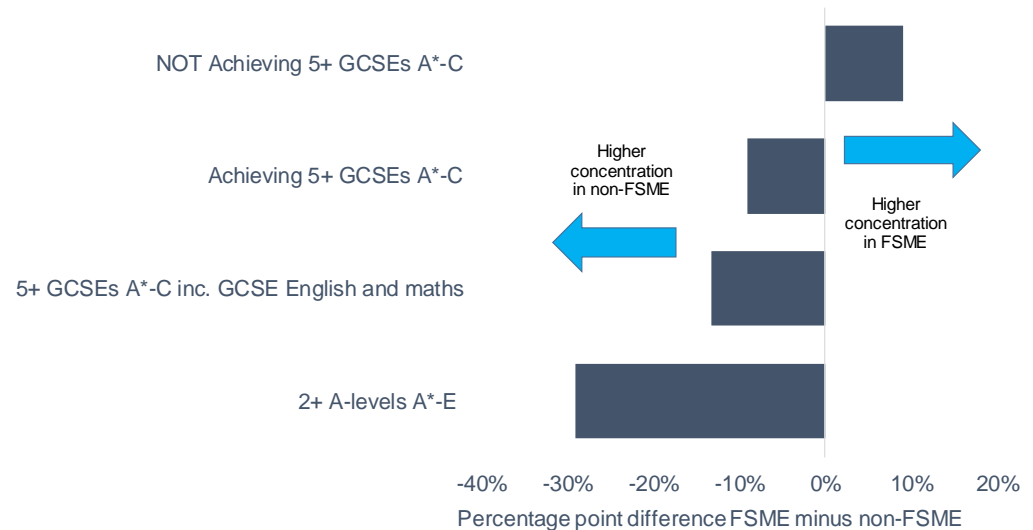
FSME achievement is improving, but the gap is narrowing slowly

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

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



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



Source: NI School leavers survey

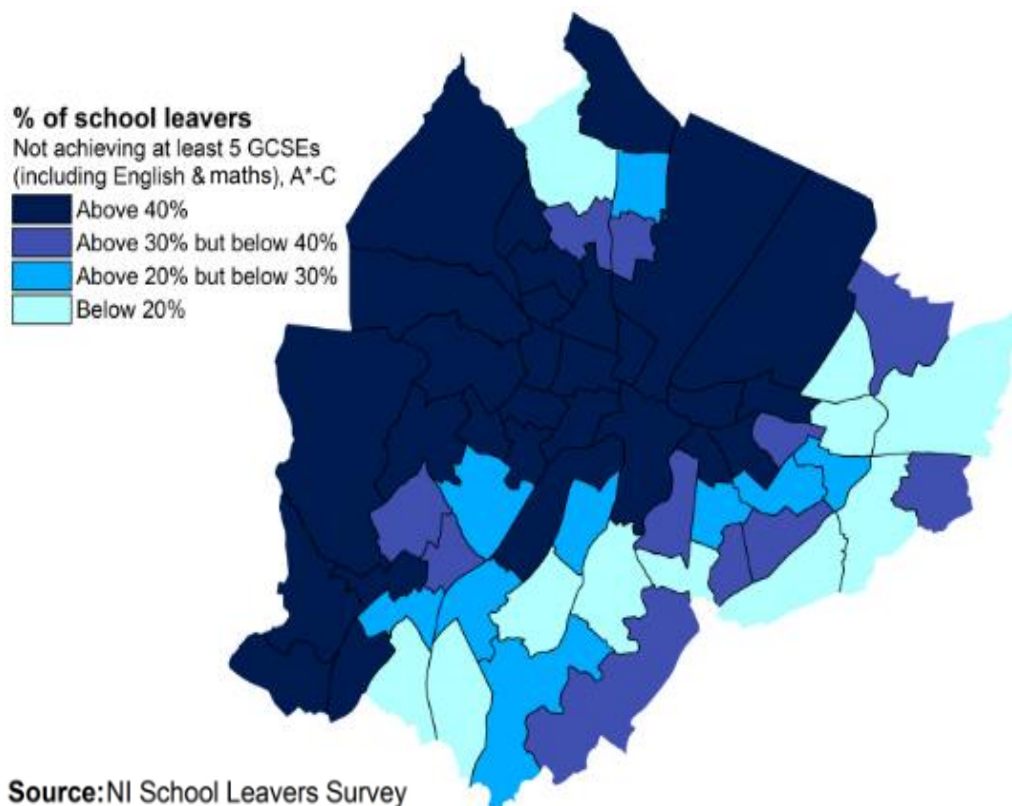
School leaver qualification profile (NQF) by gender and FSME, BCC (2015/16)

% of school leavers achieving	Male (2015/16)			Female (2015/16)		
	FSME	Non-FSME	percentage point	FSME	Non-FSME	percentage point
2+ A-levels A*-E	34%	65%	-31%	47%	74%	-27%
5+ GCSEs A*-C inc. GCSE English and maths	40%	73%	-33%	43%	74%	-31%
Achieving any 5+ GCSEs A*-C	64%	85%	-21%	71%	87%	-16%
NOT Achieving 5+ GCSEs A*-C	36%	15%	21%	29%	13%	16%

Source: NI School leavers survey

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

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



Lowest Achievers in BCC

	Ward	%
1	Woodvale	78%
2	New Lodge	74%
3	Shankill	71%
4	Ballymurphy	68%
5	Ardoyne	67%
6	Water Works	64%
7	Turf Lodge	64%
8	Falls	63%
9	Duncairn	60%
10	Blackstaff	58%

Highest Achievers in BCC

	Ward	%
1	Malone	2%
2	Stranmillis	4%
3	Hillfoot	10%
4	Rosetta	13%
5	Finaghy	13%
6	Belmont	16%
7	Dunmurry	16%
8	Cavehill	16%
9	Knock	16%
10	Stormont	17%

Despite improvements in school achievements across the region some areas continue to have high concentrations of school leavers failing to achieve the minimum standard of qualifications required by employers. For example, in Woodvale 78% of school leavers fail to achieve 5+ GCSEs A*-C including English and maths. This is the highest rate among NI's 462 wards.

BCC accounts for a disproportionately high 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%
South	18%	14%	11%

Source: NI school leavers survey

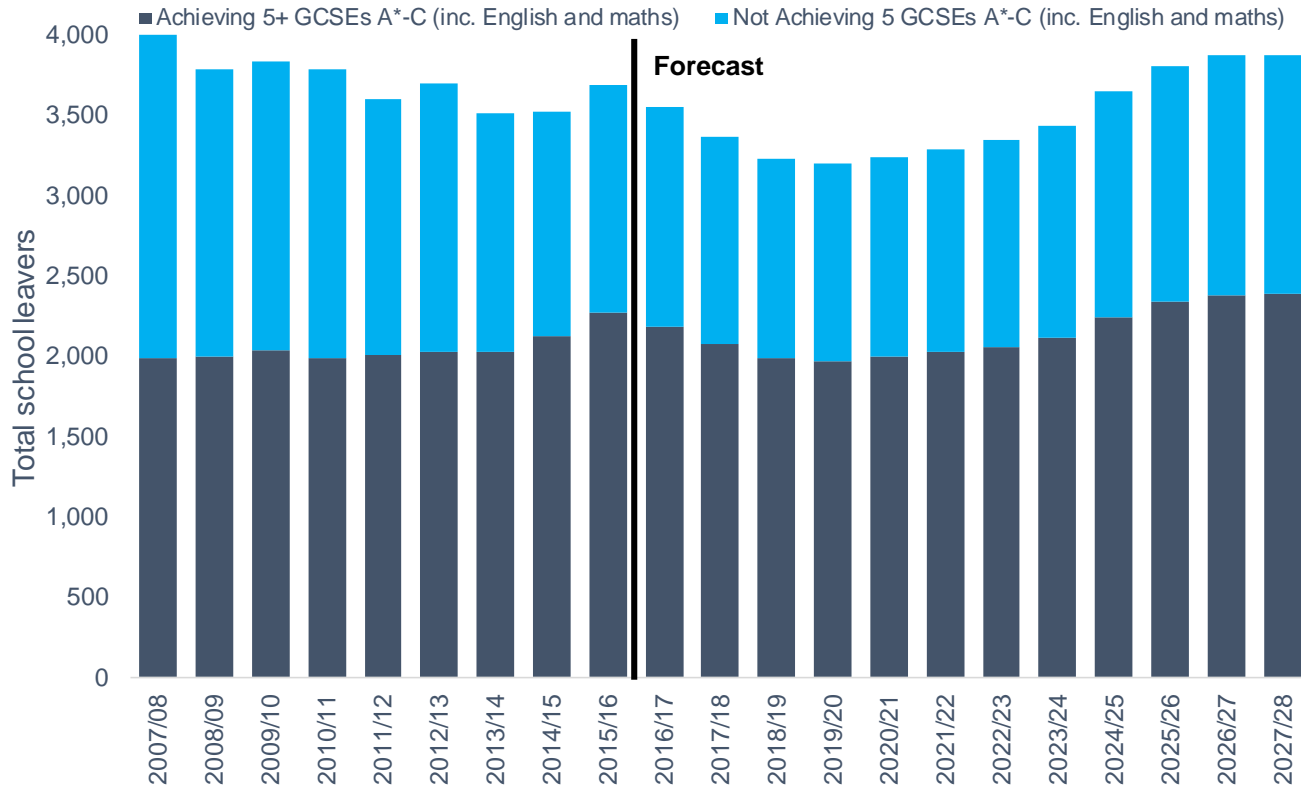
An analysis of school performance using small geographical areas highlights if an area has a proportionate or disproportionate share of pupils underachieving.

BCC accounts for 13% of total wards but 39% of wards within the lowest achieving decile relating to school leavers not achieving 5 GCSEs A*-C including English and maths.

This implies BCC has a disproportionately high number of school leavers not achieving the minimum standard of education required by employers. In other words, educational underachievement is highly concentrated within localised neighbourhoods across BCC.

14.7k pupils forecast to leave school by 2027 without achieving 5 GCSE's A*-C including English and maths

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



Source: NI School leavers survey

Summary of school leavers attainment

2+ A-levels A*-E - The proportion of BCC school leavers achieving 2+ A-levels A*-E performs marginally above the NI average, 59% and 57% respectively.

5+ GCSEs A*-C - The rate of school leavers in BCC achieving 5+ GCSEs A*-C including English and maths performs below the NI average, 62% in BCC compared to 68% in NI.

However, an increase of 12 percentage points in the rate of school leavers achieving 5+ GCSEs A*-C including English and Maths over the period 2007/08-2015/16 shows strong potential for the area.

At a more granular level both Falls and Clonard wards have experienced a 26 percentage point increase in the proportion of school leavers achieving 5+ GCSEs A*-C including English and maths. It is important to recognise such improvements and understand what works in which contexts. The improvements are the 3rd fastest across 462 NI wards.

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 BCC there is a 17 percentage point difference between the two, that is above the NI difference of 14 percentage points.

Summary of school leavers attainment (continued)

Male versus female - There are 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, 42% 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.

GCSE attainment using smaller geographical areas – Despite improvements across BCC there is a disproportionately high rate of school leavers not achieving 5+ GCSEs A*-C including English and maths, typically concentrated within inner city areas.

Future attainment - Assuming current school participation and performance rates 14,750 children resident in BCC over the period 2017-2027 are estimated to leave the school system without achieving the minimum standard education expected by most employers.

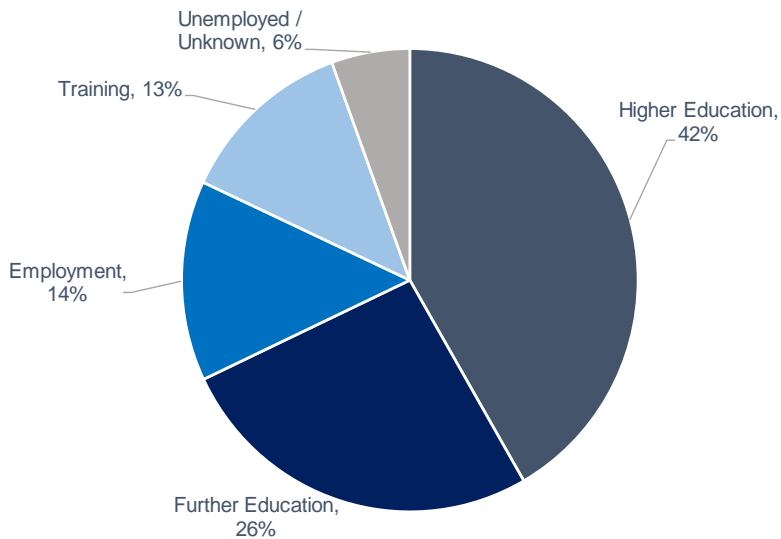
A high proportion of low achievers puts pressure on other parts of the education system. For example, high enrolment in low NQF level courses at FE which are publically funded, as well as participation in Government training courses Essential Skills and Training for Success.

Supply side – Destination of school leavers

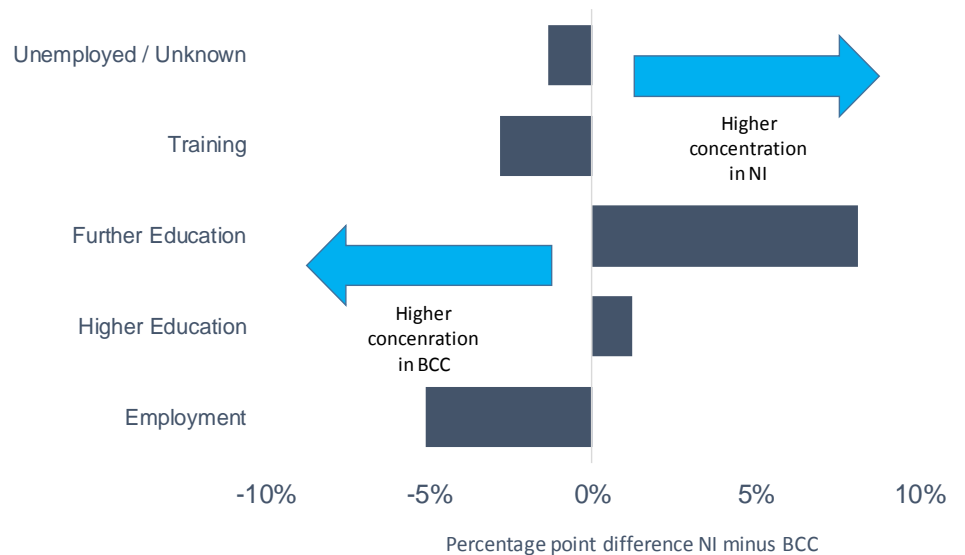
Higher Education is the most common destination for school leavers in BCC

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

Destination of school leavers, BCC (2015/16)



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

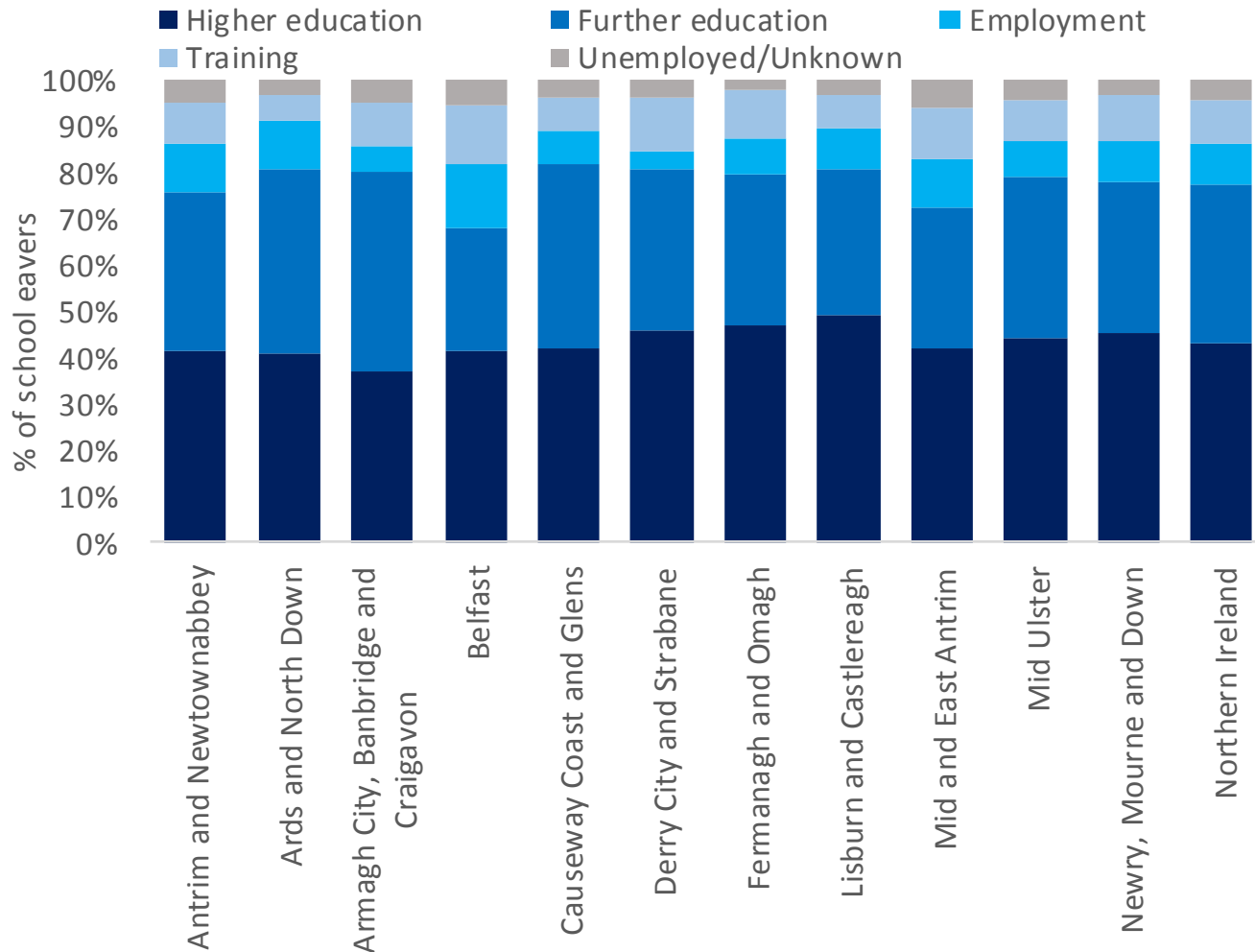


Source: NI School leavers survey

The destination of BCC school leavers remains broadly similar to the NI average. The largest differences are observed in higher proportions of BCC school leavers entering employment and lower proportions entering further education, relative to the NI average.

A relatively high proportion of BCC school leavers enter employment

Destination of school leavers, LGDs (2015/16)



Source: NI school leavers survey

Summary of destination of school leavers

Higher Education (HE) – school leavers proceeding to HE accounts for 42% of total BCC school leavers, slightly below the NI average of 43%.

Further Education (FE) – school leavers proceeding to FE accounts for 26% of BCC school leavers, significantly below the NI average of 34%.

Employment – school leavers moving into employment is above the NI average, 14% and 9% respectively.

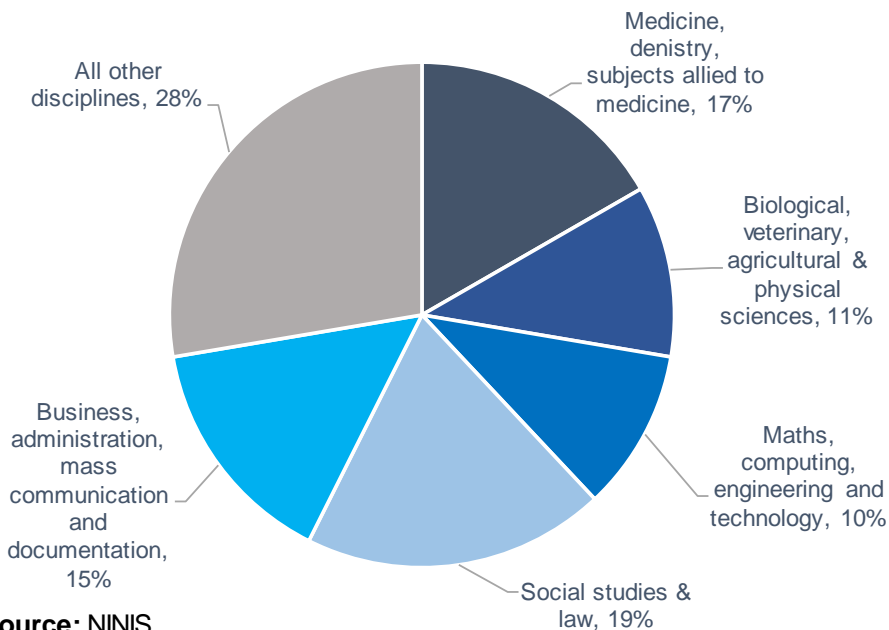
Training/unemployed/unknown – a combination of training, unemployed and unknown as destinations of leavers accounts for 19% of BCC leavers compared to 14% for NI average.

Supply side – Post secondary education

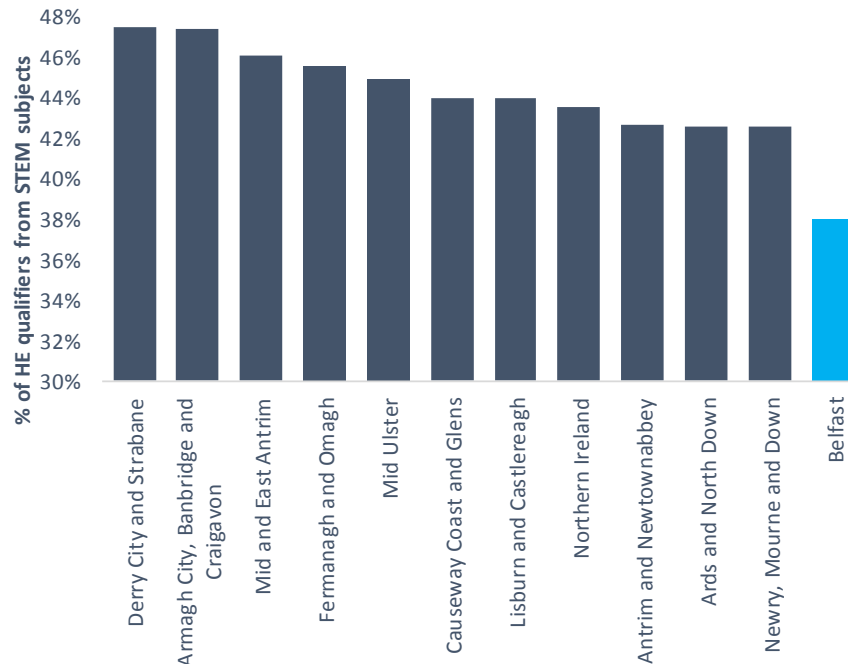
There is a higher concentration of BCC qualifiers in social studies and law

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

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



HE qualifiers from STEM related subjects, LGDs (2015)



Source: NINIS

Source: NINIS

Social studies and law subjects account for almost one fifth (19%) of total HE qualifiers in BCC, this compares to 15% at NI level. In BCC 38% of students qualify from a broad STEM related subject, 6 percentage points below the NI average (44%).

A relative undersupply of high demand subjects

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

	% distribution of BCC qualifiers (2015)	% distribution of net requirement (2017 - 2027)	p.p. difference
Medicine, dentistry, subjects allied to medicine	17%	13%	4%
Biological, veterinary, agricultural & physical sciences	11%	12%	-1%
Maths, computing, engineering and technology	10%	26%	-15%
Social studies & law	19%	12%	8%
Business, administration, mass communication and documentation	15%	16%	-1%
All other disciplines	28%	22%	6%

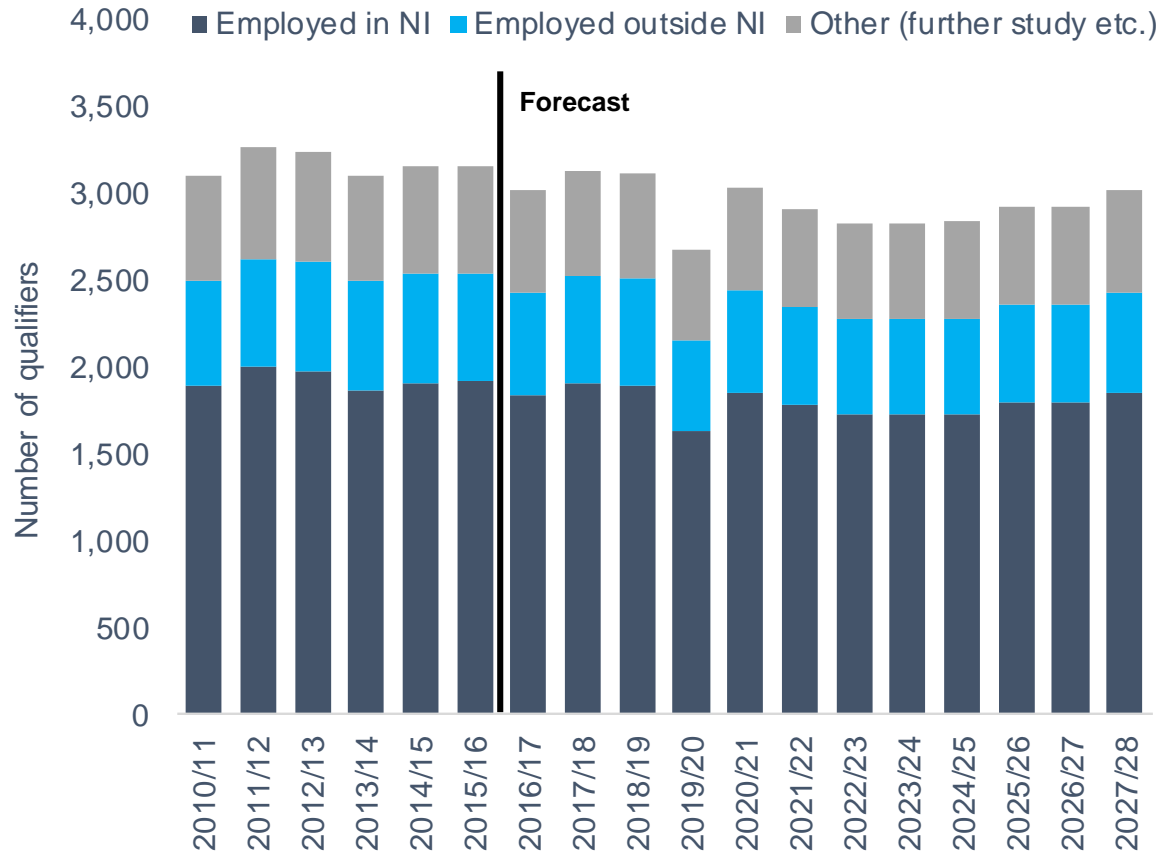
Source: NINIS

Considering the current subject profile of graduates against the future net requirement identifies some imbalances. For example, currently 10% of graduates qualify from maths, computing, engineering and technology subjects. However, the net requirement of NQF level 6+ qualifications is forecast to demand 26% of graduates from subjects of maths, computing, engineering and technology. That is a 15 percentage point difference.

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

Over the coming decade 600 HE qualified BCC residents will work outside the region per annum

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



Source: DfE, NINIS

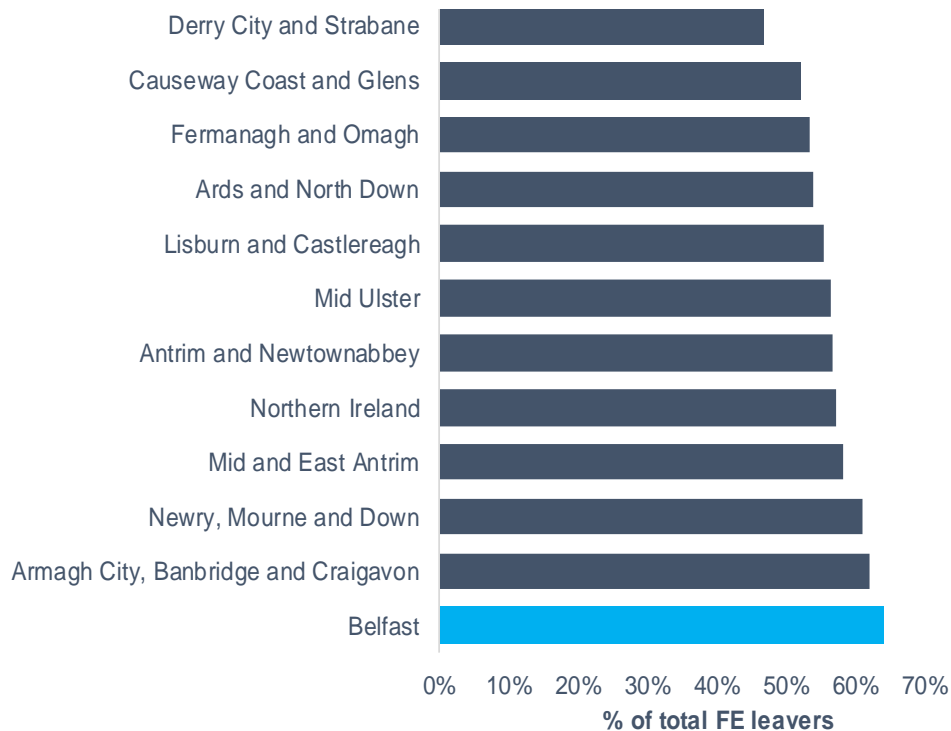
Note: The fall in qualifiers in 2019 is caused by a fall in the population of 21 year olds in the NISRA population projections

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 BCC residents, this would imply a brain drain of 660 highly skilled BCC residents in 2015.

Higher concentration of NQF level 1 and below FE leavers in BCC, relative to NI

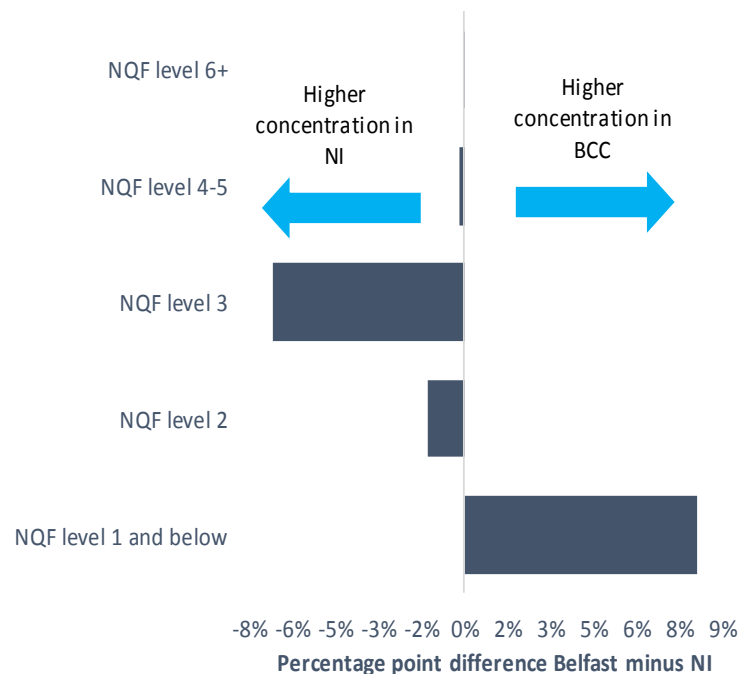
Qualification (NQF) profile of FE leavers, LGD (2016/17)

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



Source: Further Education Leavers Survey, DfE

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

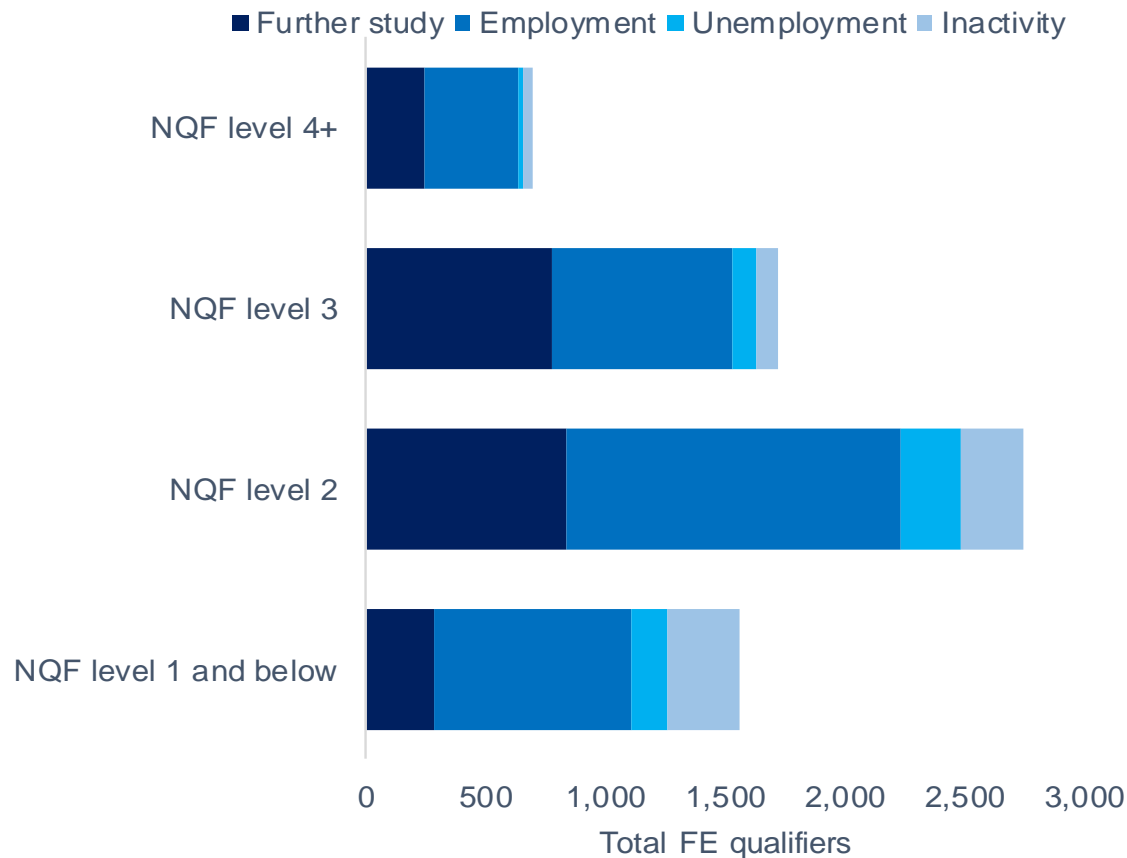


Source: Further Education Leavers Survey, DfE

The majority of FE qualifiers tend to qualify from low-level courses. In 2016/17 6,750 BCC residents qualified from FE, 64% of which from courses at NQF level 2 or below. That is the highest rate of NQF level 2 qualifiers across LGDs and 7 percentage points above the NI average of 57%.

Nearly one third of FE qualifiers in BCC return to further study

Destination of FE qualifiers by level of NQF achievement, BCC (2016/17)

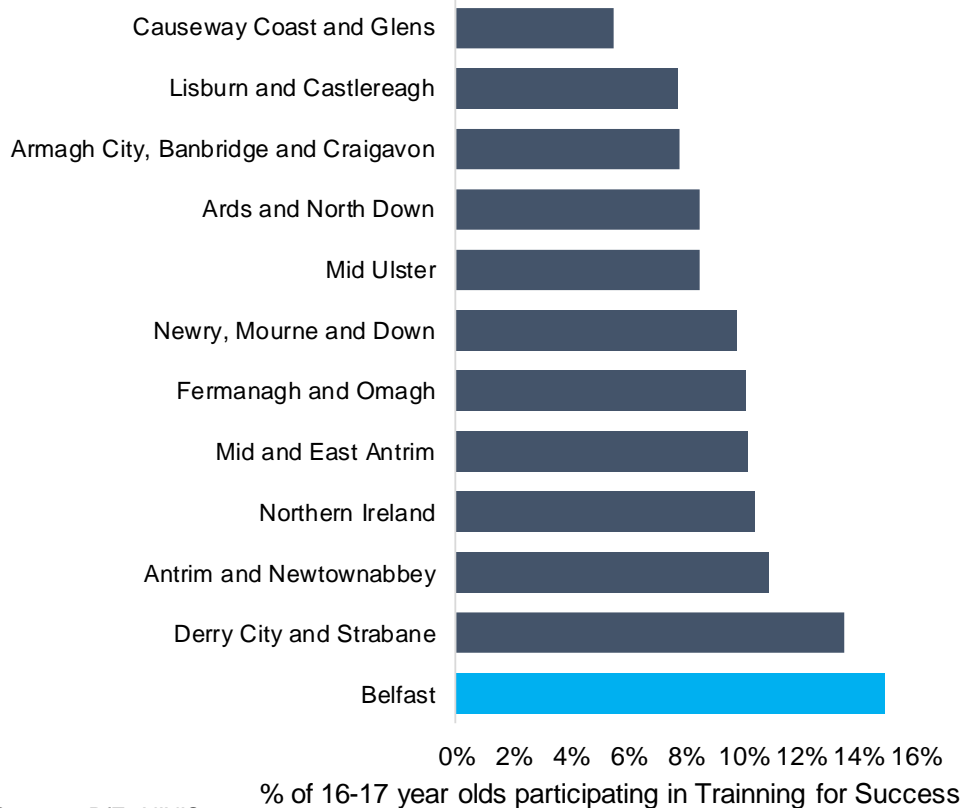


Source: DfE, NINIS

Although data at a sub-regional level for destinations of FE leavers is not available, it is possible to estimate by holding NI rates constant across LGDs. It is estimated 32% of BCC FE qualifiers proceed to further study and 6% to employment. However, the destination of leavers varies across the qualification profile.

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

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



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, 1,200 BCC residents participated in TfS training, 15% of the BCC 16-17 year old population, the highest rate of participation amongst LGDs. This rate can be linked to the relatively low proportion of school leavers achieving 5+ GCSEs A*-C including English and maths.

Source: DfE, NINIS

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	35780	15%
Antrim and Newtownabbey	2590	15%
Ards and North Down	2460	14%
Armagh City, Banbridge and Craigavon	3550	14%
Belfast	6180	12%
Causeway Coast and Glens	3050	16%
Derry City and Strabane	3640	18%
Fermanagh and Omagh	2390	17%
Lisburn and Castlereagh	2180	13%
Mid and East Antrim	2780	17%
Mid Ulster	3250	18%
Newry, Mourne and Down	2990	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 6,180 BCC residents participated within Essential Skills courses, accounting for 12% of the 15-24 year olds. This participation rate is 2 percentage points below the NI average of 15%.

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
North	3,160	17.0
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
Antrim and Newtownabbey	560	6.3
Mid Ulster	580	6.3
Lisburn and Castlereagh	530	5.9

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 BCC 2,830 residents participated with StS, accounting for 21.4 in every 1,000 16-64 year olds. BCC also accounted for 23% of total enrolments across NI.

Source: DfE, NINIS

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 BCC 38% of HE qualifiers have studied a STEM related subject, 6 percentage points lower than the NI average of 44%. On the other hand there appears to be a high proportion of general degrees in 'social studies and law' relative to the NI average.

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 10% of BCC HE leavers qualify in maths, computing, engineering or technology. This is 15 percentage points below the forecast requirement of 26% of NQF level 6+ qualifiers.

Destination of HE qualifiers – Assuming NI rates apply to BCC residents it is estimated 600 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 6,250 HE qualifiers over the next decade.

Qualifications of FE leavers – In BCC FE leavers are more likely to qualify from lower level courses relative to the NI average. For example, FE leavers achieving NQF level 2 in BCC is 7 percentage points higher than the NI average, 64% and 57% in respectively. This is the highest rate of residents across LGDs and likely linked to lower GCSE attainment within the region.

Summary of post secondary leavers (continued)

Destination of FE leavers - It is estimated 32% of BCC FE qualifiers proceed to further study. This is likely a result of high proportions of FE qualifiers studying low-level courses. 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 10% 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 BCC 15% of 16-17 year olds participate within TfS government training scheme, this equates to 1,200 individuals. The rate of participation is 5 percentage points higher than the NI average of 10%.

Essential skills – 12% of 15-24 year olds within BCC are enrolled on an essential skills course, 3 percentage points below the NI average of 15%.

StS – This government training course accounts for 21.4 in every 1000 individuals in BCC, a total of 2,830 individuals.

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 quartile	Pupils achieving level 4 or above (%)	% of wards in lowest performing quartile	% of wards in lowest performing quartile
Antrim and Newtownabbey	78%	10%	7%	80%	9%	11%
Ards and North Down	77%	10%	9%	78%	7%	11%
Armagh City, Banbridge and Craigavon	77%	9%	9%	79%	9%	2%
Belfast	72%	23%	33%	74%	19%	30%
Causeway Coast and Glens	77%	9%	9%	78%	10%	9%
Derry City and Strabane	79%	6%	2%	79%	9%	7%
Fermanagh and Omagh	79%	9%	7%	81%	8%	4%
Lisburn and Castlereagh	78%	9%	7%	79%	8%	9%
Mid and East Antrim	77%	9%	9%	78%	12%	11%
Mid Ulster	79%	4%	9%	82%	6%	4%
Newry, Mourne and Down	81%	3%	2%	81%	4%	2%
Northern Ireland	77%	-	-	79%	-	-

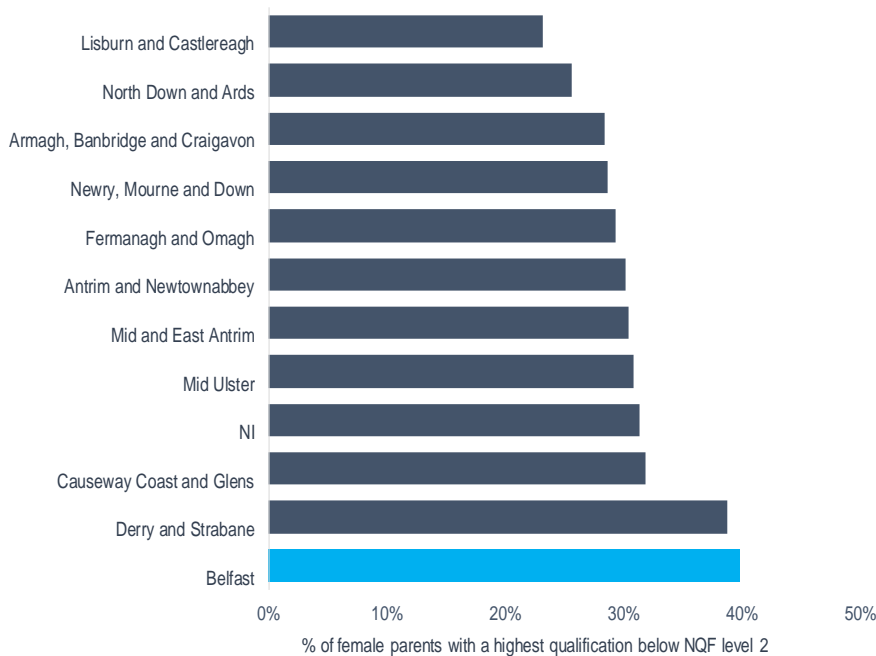
Source: Department of Education

Literature suggests 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.

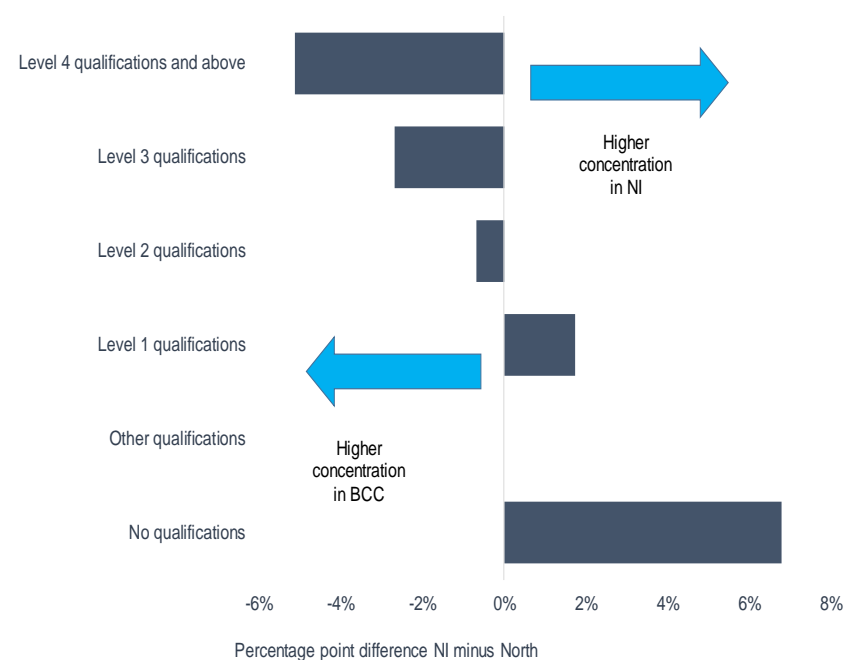
The level of education of parents has a more significant impact than income levels

Skill 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)



Qualification profile (NQF) of mothers, BCC versus NI (2011)



Source: NI Census 2011

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

Longitudinal research undertaken in the US, UK, Australia and Canada by Bradbury 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. BCC has the highest rate of mothers with NQF level 2 as their highest qualification at 40%, which is 9 percentage points above the NI average of 31%.

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) BCC SOA's

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



Source: NI Multiple Deprivation Measure
 Note: SOAs where no data is available have been excluded

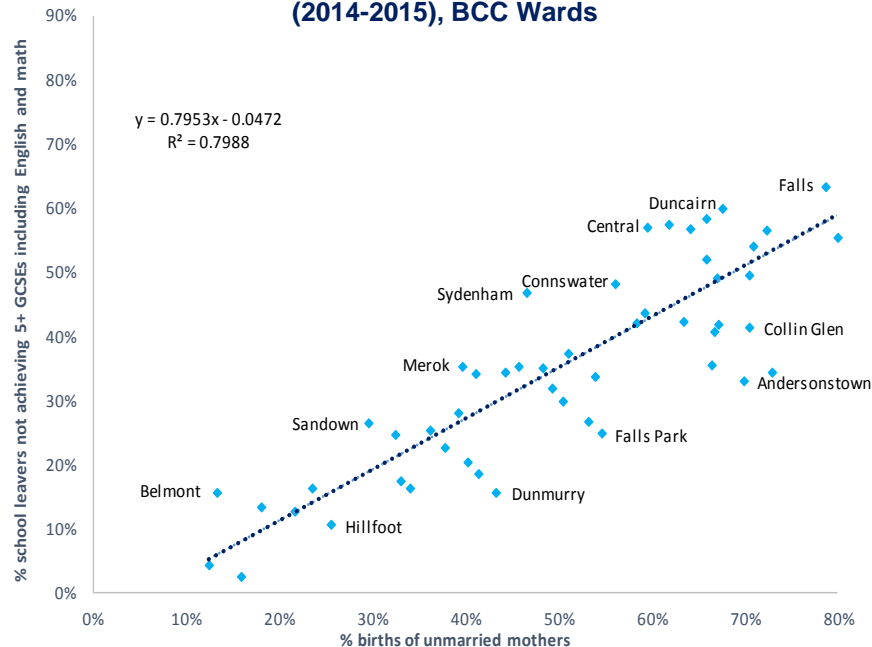
Research from Millennium Cohort Study (MCS) highlights 80% of the richest fifth of mothers expect their child to go to University but the figure falls to 40% for the poorest mothers. In BCC there is a strong correlation between the rate of young adults not enrolled in a HE level course and the rate of 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) BCC

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



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

	Birth rate per 1,000 female population aged 15-44 years	Births to Teenage Mothers (%)	Births to Unmarried Mothers (%)	Births to Single Parent Homes (%)
Antrim and Newtownabbey	0.63	3.4%	43.2%	22.9%
Ards and North Down	0.59	3.2%	39.6%	18.5%
Armagh City, Banbridge and Craigavon	0.72	2.7%	40.0%	19.8%
Belfast	0.62	5.3%	57.6%	41.1%
Causeway Coast and Glens	0.62	3.3%	47.2%	28.6%
Derry City and Strabane	0.66	3.4%	55.8%	44.3%
Fermanagh and Omagh	0.70	1.7%	30.3%	16.5%
Lisburn and Castlereagh	0.67	2.8%	34.7%	16.8%
Mid and East Antrim	0.63	3.6%	41.7%	23.8%
Mid Ulster	0.74	2.4%	31.1%	15.8%
Newry, Mourne and Down	0.73	2.1%	37.9%	22.3%
NI	0.66	3.3%	43.5%	26.4%

Sources: NISRA & ONS

Notes: Single parent home is calculated through the aggregation of joint registrations at different address and sole registrations, divided by the total number of births.

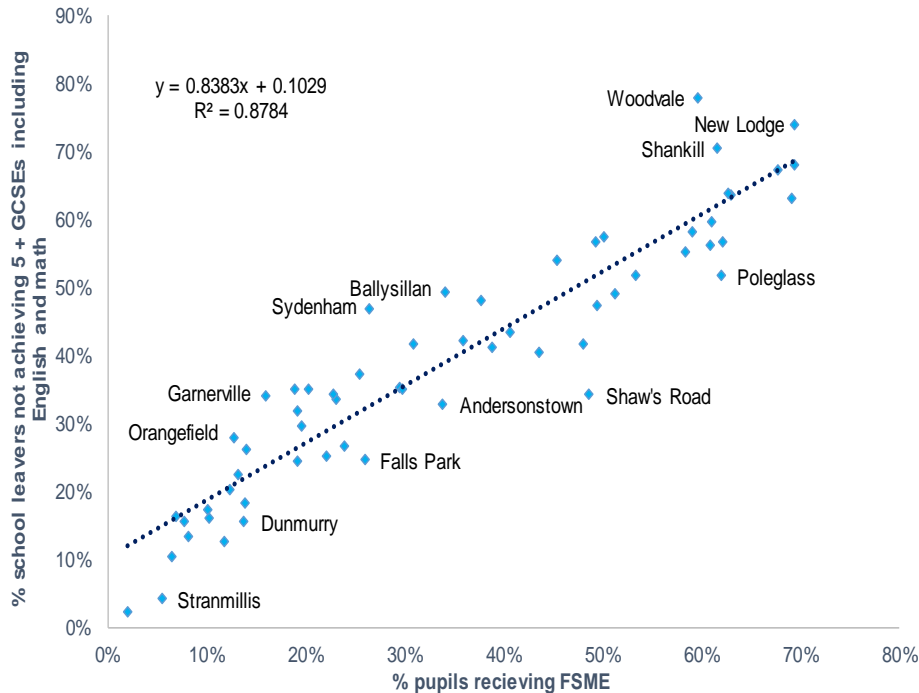
Source: NINIS and NI School Leavers Survey

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. BCC has the second highest proportion of births to single parent homes (41%) across NI LGDs, 3 percentage points below the highest rate of 44% in Derry City and Strabane.

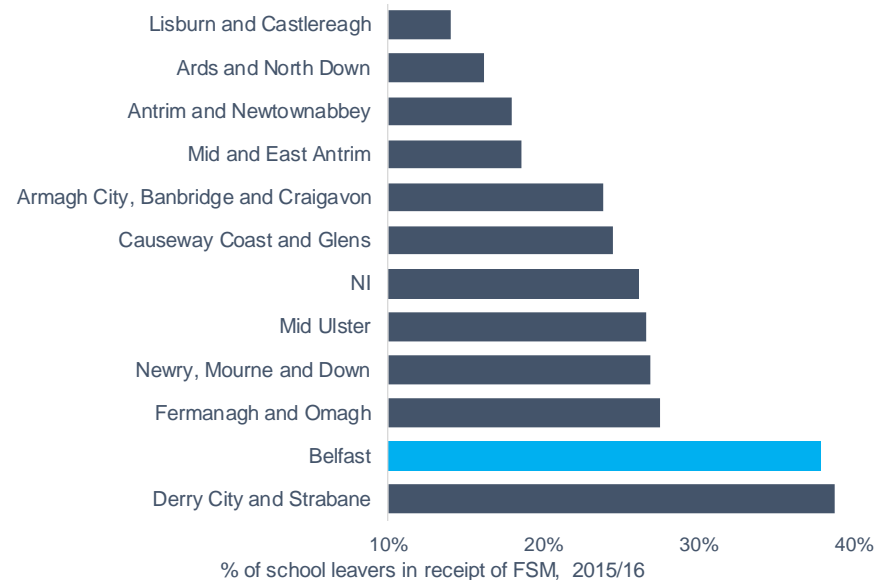
Experiences of poverty linked to educational attainment from a young age

School attainment (2015/16) and FSME (2015/16), BCC 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) , BCC Wards



School leavers (%) receiving FSME, LGDs (2015/16)



Source: NI School leavers survey

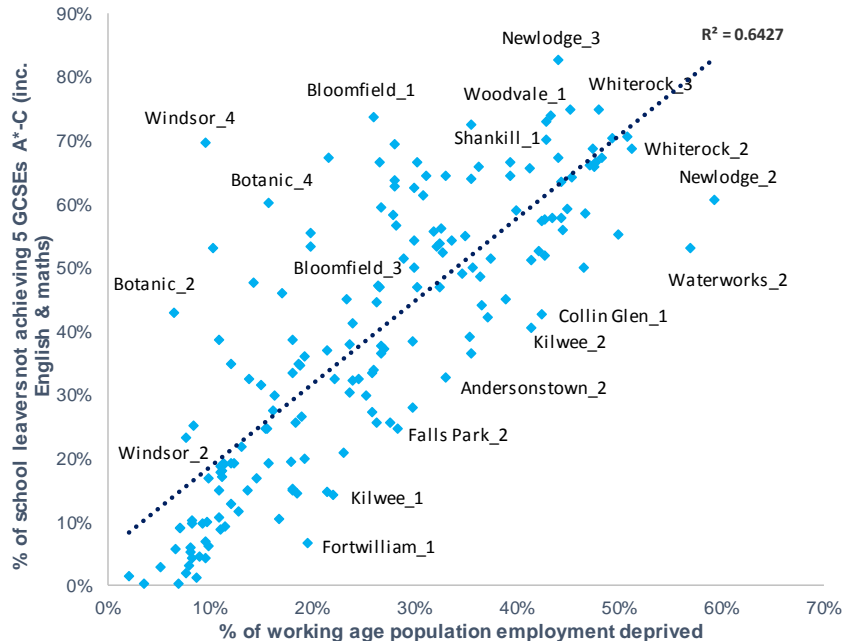
Source: NI School Leavers Survey

The MCS highlighted 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 BCC there is a strong association between disadvantaged pupils (defined by their entitlement to FSM's) and low levels of academic achievement, as well as a relatively high rate of pupils in receipt of FSM's (38% of total pupils).

Parental worklessness is negatively associated with educational attainment

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

% of school leavers not achieving 5+ GCSEs A*-C (inc. English & maths) (2015/16) versus % of working age population employment deprived (2015/16), BCC SOA's



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

LGDs	% of total SOAs	% of SOAs in bottom quartile	% of SOAs in bottom decile
Antrim and Newtownabbey	8%	4%	1%
Ards and North Down	10%	4%	1%
Armagh City, Banbridge and Craigavon	10%	6%	4%
Belfast	20%	37%	55%
Causeway Coast and Glens	8%	8%	3%
Derry City and Strabane	8%	17%	27%
Fermanagh and Omagh	6%	5%	3%
Lisburn and Castlereagh	8%	1%	0%
Mid and East Antrim	7%	6%	1%
Mid Ulster	7%	2%	0%
Newry, Mourne and Down	9%	9%	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 BCC there is a disproportionate number of employment deprived SOA's as BCC accounts for 20% of total wards but 55% in the bottom 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 (28%) children that reside in BCC fail to achieve what is essentially basic reading writing and communication skills – 5 percentage points above the NI average of 23%. Proficiency in numeracy skills show a similar pattern, 26% of BCC residents do not achieve proficiency level 4 or above, which is also 5 percentage points above the NI average of 21%.

Influence of parents education – The educational attainment of parents is a strong predictor in the educational performance of children. In BCC, 40% of female parents (of seven year old children) have a highest qualification level NQF level 2 (GCSEs A*-C), that is 9 percentage points above the NI average.

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.

Summary of causal supply side factors (continued)

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 BCC 41% of births are to single parent homes, this is the second highest rate among LGDs. In addition 58% of mothers are unmarried which is the highest rate among LGDs.

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

In BCC there is a disproportionate effect as the LGD hosts 20% of total NI wards but 55% in the lowest performing decile of employment deprivation.

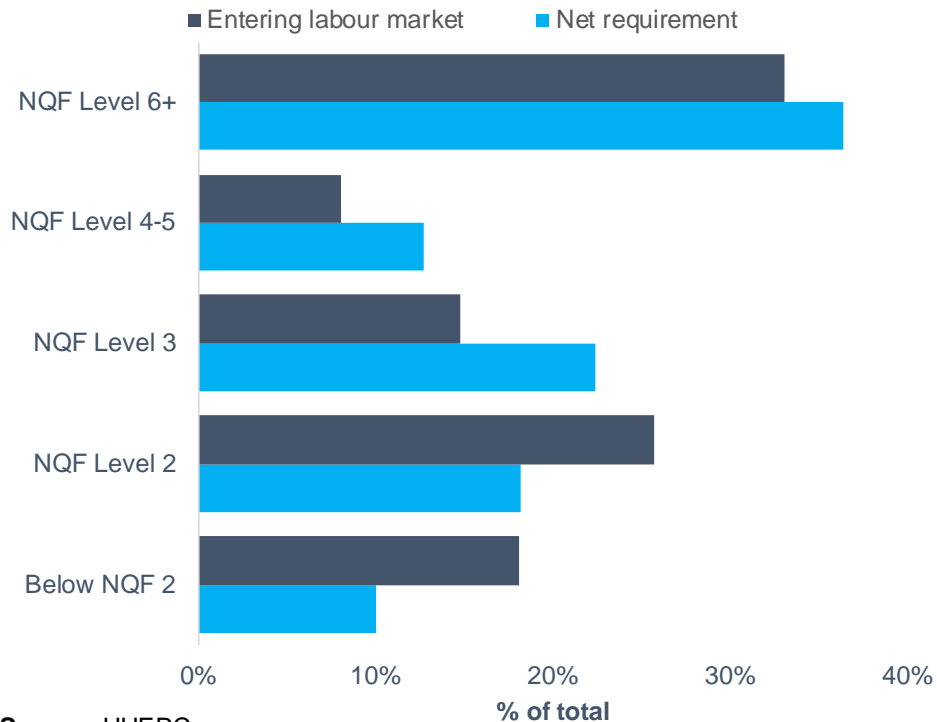
Poverty and education attainment – Research highlights that experiencing poverty has a negative impact on children's vocabulary ability in early years (MCS). In BCC there is a disproportionately higher rate of disadvantaged pupils (as defined by FSME) and a strong association between FSME and poor educational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

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

Can BCC's resident service tomorrow's skills needs?

The missing middle

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



Source: UUEPC

In total 12,880 BCC residents per annum are forecast to gain qualifications over the coming decade and 6,940 of such are projected to enter the labour market.

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

- General alignment of 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 (most proceed to further study).
- An over supply of low-level skills (NQF level 2 and below), consistent with relative underperformance of BCC school leavers.

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

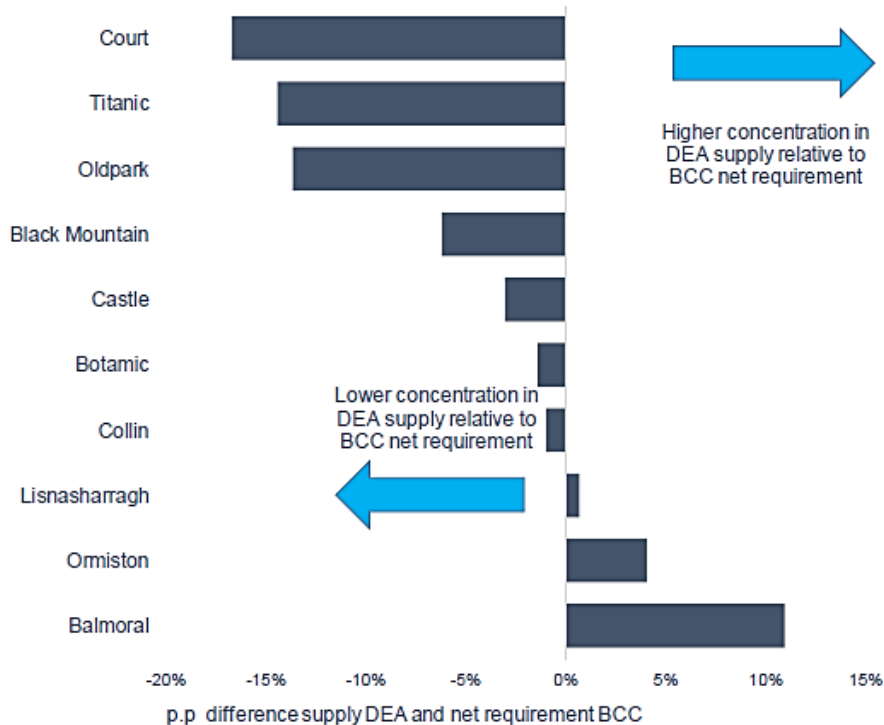
	School leavers		FE leavers		HE leavers		Total	
	Total leavers	Entering labour market	Total leavers	Entering labour market	Total leavers	Entering labour market	Total leavers	Entering labour market
Below NQF level 2	730	320	1,500	930	0	0	2,230	1,260
NQF level 2	720	210	2,630	1,590	0	0	3,350	1,790
NQF level 3	2,040	210	1,650	820	0	0	3,690	1,030
NQF level 4 - 5	0	0	640	350	260	200	900	560
NQF level 6	0	0	30	20	1,840	1,510	1,870	1,530
NQF level 7 - 8	0	0	0	0	830	770	840	770

Source: UUEPC

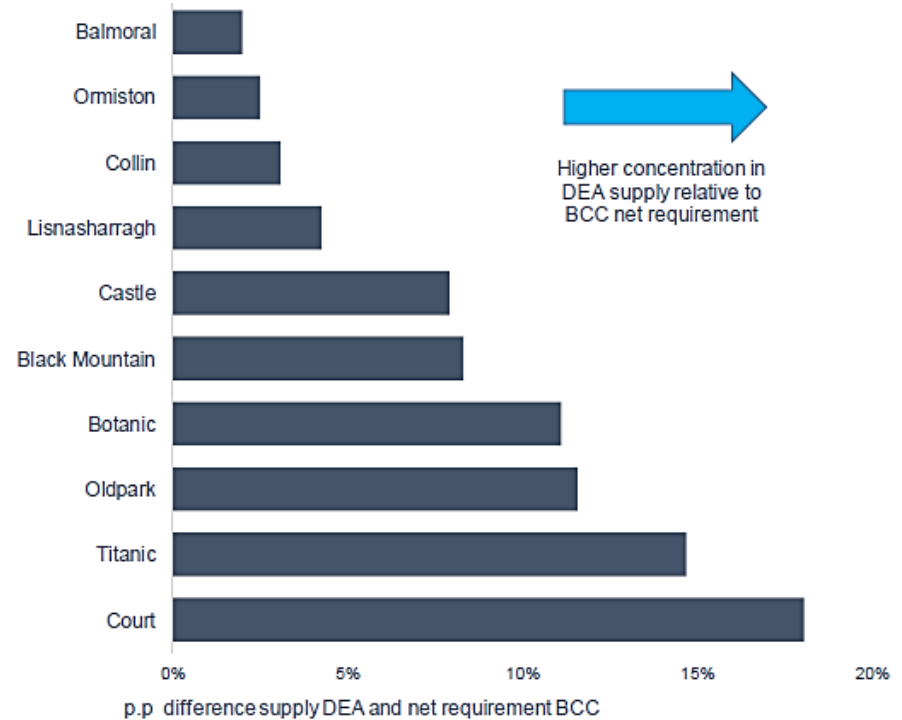
The skill balance varies across the city

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

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



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



Source: UUEPC

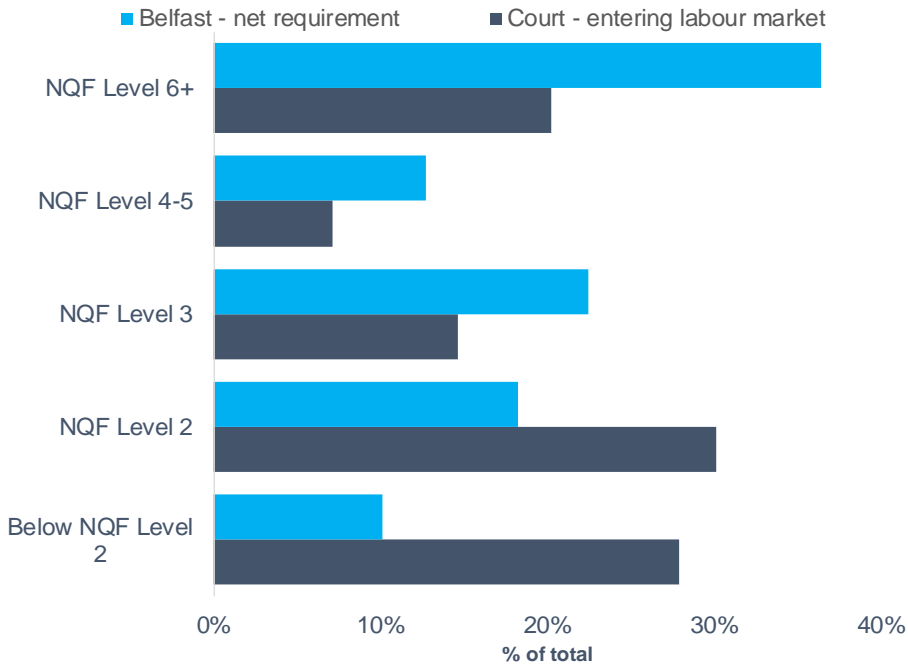
Source: UUEPC

The largest gap between supply and demand at NQF level 6+ is in Court DEA - supply is 16 percentage points below the net requirement. In contrast supply of NQF level 6+ is 13 percentage points above the net requirement in Balmoral DEA. It is evident such gaps are indicative of large differences in HE participation across BCC.

Diverse labour markets operate within BCC

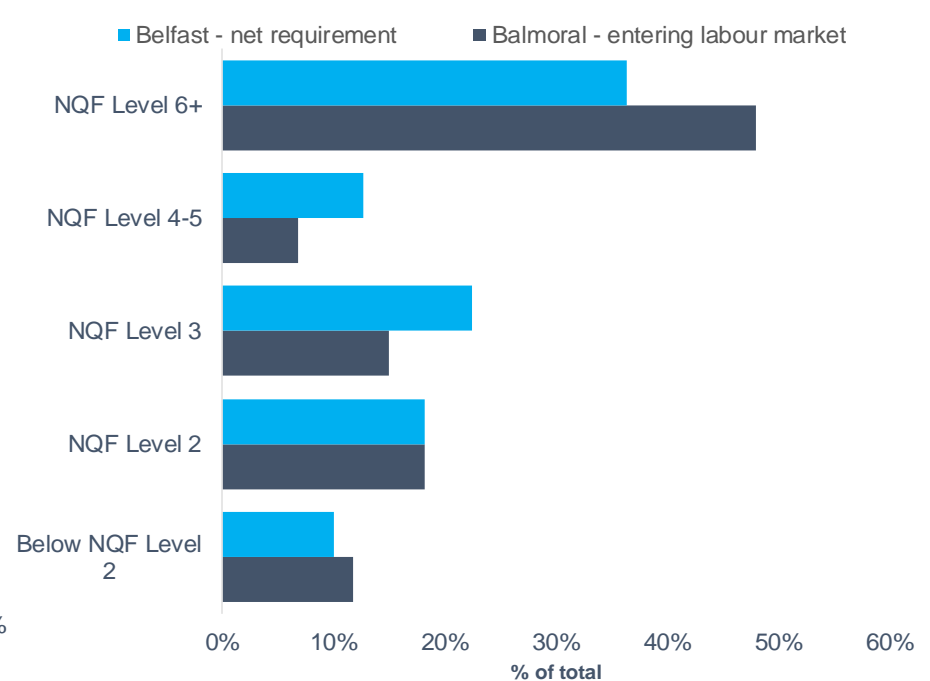
Net requirement versus qualification profile of labour market entrants, Court and Balmoral, (2017-2027)

Net requirement (BCC) vs skills profile of labour market entrants (Court) (2017-2027)



Source: UUEPC

Net requirement (BCC) vs skills profile of labour market entrants (Balmoral), (2017-2027)



Source: UUEPC

Localised labour markets within BCC specialise in producing qualifiers at differing ends of the skills spectrum and therefore BCC produces labour market entrants associated with very different types of jobs. In Court 28% of individuals due to enter the labour market over the coming decade have below NQF level 2 qualifications, compared to 12% in Balmoral.

Understanding what works is of critical importance

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

		Black Mountain	Oldpark	Court	Titanic	Castle	Ormiston	Balmoral	Botanic	Lisnasharragh	Collin
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	76	79	80	77	51	17	5	52	11	70
	% of school enrolments entitled to FSM	77	79	80	76	64	13	12	72	20	74
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	75	74	76	68	67	1	13	61	26	70
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	66	74	80	78	75	54	53	73	67	35
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	69	68	78	76	73	59	66	80	64	44
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	76	77	79	78	57	13	6	80	15	62
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	78	66	69	7	23	6	2	1	3	39
% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	68	65	80	18	61	57	31	53	64	71	
Skills stock	% of 16-64 population with low qualifications (Below level 2)	76	79	80	67	32	7	3	2	5	59
	% of 16-64 population with high qualifications (NQF level 4+)	78	79	80	25	16	5	2	7	3	69
	% of 16-34 population with low qualifications (Below NQF level 2)	75	78	80	64	54	14	5	1	3	61
	% of 16-34 population with high qualifications (NQF level 4+)	76	79	80	7	20	6	2	4	1	69
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	77	79	78	71	67	11	17	16	10	75
	Social security clients (client group analysis) as a % of the population (16-34)	73	80	79	74	63	18	13	7	26	75
	Housing benefit claimants as a % of the population (16-64)	75	79	78	76	72	24	31	56	21	73
	Housing benefit claimants as a % of the population (16-34)	64	80	79	76	69	25	21	32	24	71
	% of households with no adults in employment	77	78	79	67	69	48	46	24	28	63
	% of households with no adults in employment with dependent children	75	77	76	65	58	11	12	28	8	78
	% of households with lone parents with dependent children	77	78	76	72	68	19	25	22	11	80
	% of people employed who are either managers/senior officials or professionals	80	79	78	75	48	7	9	76	40	73
Employment rate (% 16-74 population)	77	78	79	55	59	15	28	48	5	71	
Unemployed who have never worked (% of unemployed)	79	76	77	69	64	20	30	65	38	75	

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

Note: Due to disclosure of data for % of school leavers entitled to FSM achieving 5 GCSE's (including English and maths) Collin has been placed in the bottom 10 DEAs with available data.

It is concerning that areas that have performed poorly with regard to the skills stock are also performing poorly on metrics related to the flow of skills. By implication, these areas are falling behind more affluent parts of the city and in all likelihood will continue to rank amongst the lowest performing DEA's for many years to come without some form of policy intervention.

Summary of skill balances

BCC 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 which is consistent with the relative underperformance of BCC school leavers and the relatively high proportion of residents studying low NQF level courses in FE and training courses.

Diverse labour market - There are significant differences in the qualification profile across BCC. Given the skill profiles across DEA's* within BCC 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 BCC DEA's highlights a need to upskill individuals in order to meet demand where required.

Understanding what works – It is evident that many of the lowest performing areas across a range of skills indicators have consistently scored poorly on a range of other socioeconomic indicators. In an inclusive growth agenda any policy intervention should prioritise tackling these poorly performing indicators, or such areas will continue to fall behind better performing areas.

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

Conclusions

Belfast's resident and workplace skills challenges are very different policy areas

The data review and modelling undertaken in this research paints two very different pictures of the city.

Belfast's workplace: Belfast is the key regional driver of the NI economy. It is home to many of NI's high productivity and high skilled jobs, and has a high concentration in sectors forecast to experience the most rapid growth over the coming decade.

Belfast residents: The skills stock in Belfast compares unfavourably to the NI average. However, it is more concerning that Belfast ranks consistently amongst the lowest performing LGD's on education measures relating to young people such as school performance and participation in tertiary education. Low performance is highly concentrated within certain areas of the city.

The difference in the skills profile of residents and workplace employment within Belfast is partially explained by commuting flows. A high proportion of Belfast's workplace employment is taken up by people outside the BCC area (most of whom live in the wider BCR area). Belfast is a net importer of skills, with in-commuters working in Belfast having a higher average level of qualification than Belfast residents. Unless the qualification profile of Belfast residents is improved this will have implications for infrastructure planning.

Aligning the skills supply in Belfast to the likely future demand is particularly challenging. It is a challenge that many cities and countries are facing, and few have achieved an optimal balance. In Belfast, **improving the skills of residents is particularly challenging as the issues affecting skills transverse a range of social and economic issues that are deeply entrenched within certain areas in Belfast.**

Demand side growth of the Belfast economy

Recent performance: Job growth in BCC was the second fastest amongst NI LGD's over the 2012-17 period, accounting for 36% of job growth in NI. Job growth has been particularly fast in admin and support, other services, accommodation, professional services and ICT.

Future growth: Under a high growth scenario, future job growth (expansion demand) over the coming decade in BCC will be driven by high skill sectors such as ICT and 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: Although Belfast is forecast to experience rapid employment growth in the UUEPC high growth scenario, net replacement demand provides 1.5 times as many job opportunities (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 health, retail and public administration will have relatively large levels of replacement demand in the BCC 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: Administration and support services is forecast to provide the most job opportunities in BCC. This is a useful example relating to the importance of replacement demand. Although administration and support services are forecast to create less than half as many additional jobs as professional services, it creates more job opportunities overall through higher replacement demand.

Labour demand is increasingly qualifications hungry: Of the net requirement from education and migration over the coming decade, 36% of job opportunities will require a degree level qualification (NQF level 6+). Only 10% 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 maths and computer science; business and finance; and medical related subjects. At sub-degree level (NQF level 4-5) the most in-demand subjects are health, public services and care; art, media and publishing; and ICT.

Underachievement in schools

Underachievement in schools: The data for Belfast's school leavers is concerning. In BCC 61.5% of school leavers achieved at least five GCSE's A*-C (including English and maths). This is below the NI average (67.7%) and is the lowest proportion of the 11 NI LGD's.

Tackling low achievement is a significant spatial challenge: Low education achievement is geographically concentrated, and BCC contains a disproportionately large number of low achieving areas. For example, 13% of the wards in NI are in BCC. However, 26% of the wards in the lowest performing quartile are in BCC, and 52% of the wards in the lowest performing decile are in BCC.

Children in deprived households face significant challenges: Children in deprived households are identified by their FSME. Around two-fifths of FSME children achieve 5 GCSE's A*-C (including English and Maths), compared to almost three quarters (74%) of non-FSME pupils. Although the outcomes for FSME pupils has improved, the gap with non-FSME pupils has narrowed only marginally.

Literacy and numeracy: Given the importance that employers put on literacy and numeracy skills the mix of GCSE subjects is worth consideration. In BCC 79.0% of school leavers achieve at least five GCSE's, yet only 61.5% 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:** A high number of small areas within BCC perform poorly with regard to participation in HE. Of all SOA's in NI, 19% are in BCC. However, 38% of the SOA's in the quartile with the lowest HE participation are in BCC, and 53% of the SOA's in the lowest performing decile are in BCC. 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 the geographic concentration of low achievement in discrete areas within the city. There is no single policy initiative that will solve the spatial concentration of skills deficits within BCC. 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 BCC the demand and supply of graduates are broadly aligned. Approximately 33% of BCC residents enter the labour market with an NQF level 6+ qualification compared to 36% of the net requirement. BCC will also attract additional graduates to work in BCC who are resident in surrounding council areas via commuting inflows.

Mid-level skills (NQF level 3-5): There is some misalignment between the profile of demand and supply for mid-level skills. Very few people enter the labour market with this level of qualification. In BCC 35% of the net requirement is related to NQF level 3-5, yet only 23% of BCC residents entering the labour market are qualified to NQF level 3-5. In particular, there is a deficit of people qualifying with professional and technical qualifications. Therefore, the challenge is to encourage greater numbers of people who leave education at NQF level 2 and below to remain in education for longer and achieve a higher skill level.

Low-level skills (NQF level 2 and below): There is an oversupply of qualifications associated with low NQF level qualifications. For example, 38.5% of BCC school leavers did not achieve 5 GCSE's including English and Maths, which is equal to 2,274 qualifiers. Similarly, almost two-thirds (64%) of qualifications achieved by BCC residents at an FE college were at NQF level 2 or below, equal to 4,316 people. 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 individuals 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 the 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 with lower expansion demand, a larger component of labour demand comes from replacing workers who have left their position. Therefore the net replacement demand is forecast to be 3.7 times larger than expansion demand. On average over the 2017-2027 period annual the annual net requirement from education and migration is forecast to be 2,410 lower compared to the high growth scenario.

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

Demand category	High growth (2017-2027 per annum)	Baseline (2017-2027 per annum)
Gross demand	24,000	20,860
Expansion demand	3,540	1,400
Replacement demand	20,460	19,460
Filled from within the existing labour market	15,050	14,310
Net replacement demand	5,420	5,140
Net requirement from education and migration	8,960	6,540

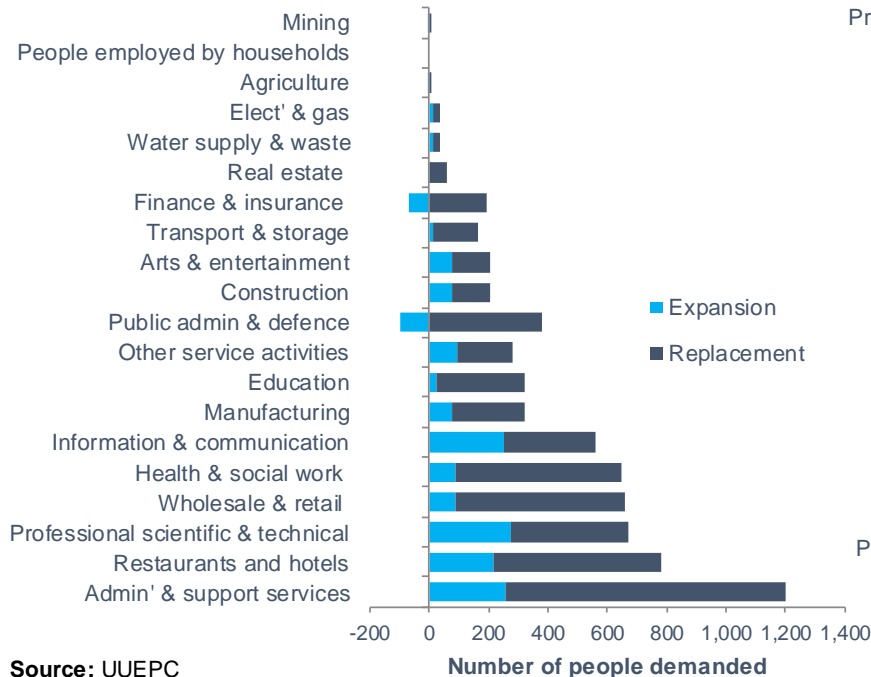
Source: UUEPC

Note: Data may not sum due to rounding.

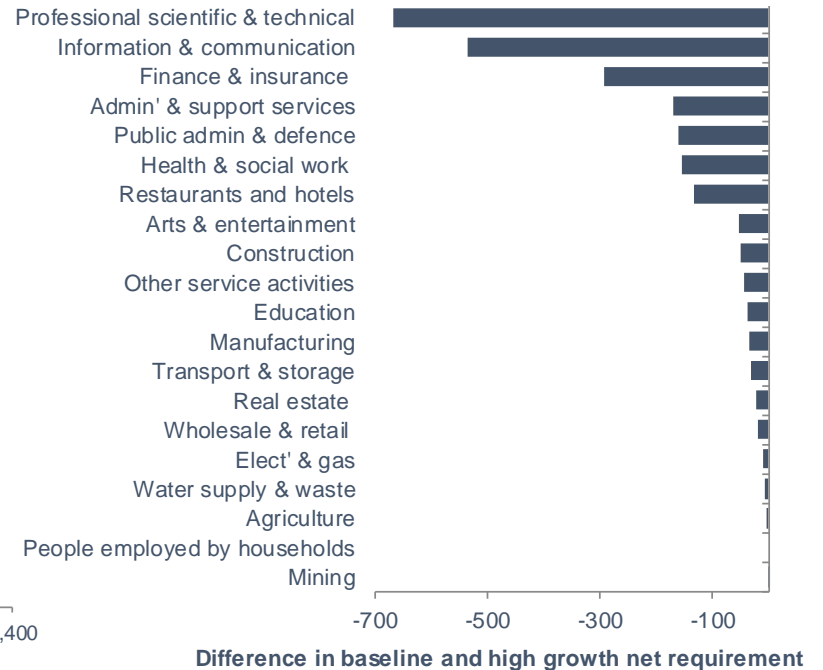
Differences between the baseline and high growth scenarios are largest in forecast high growth sectors

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

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



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



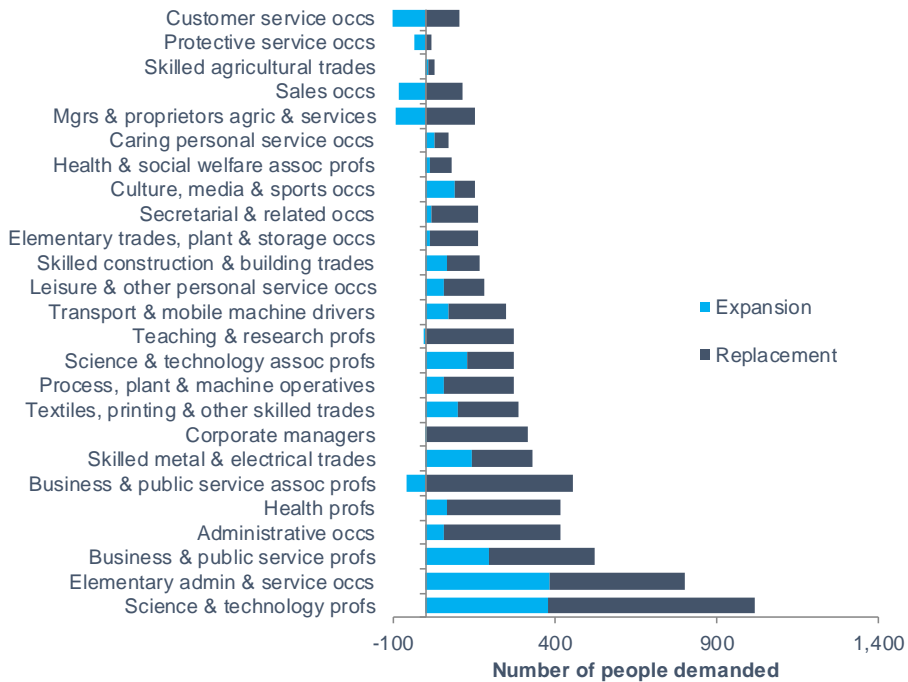
Source: UUEPC

Under the baseline scenario the sectors with the largest net requirement from education and migration are administration and support services (1,200 per annum) and restaurants and hotels (780 per annum). The largest differences between the two sectors are in information and communication (8.1k additional jobs in high growth compared to 2.6k in baseline) and professional services sectors (10.3k additional jobs in high growth compared to 3.4k in baseline).

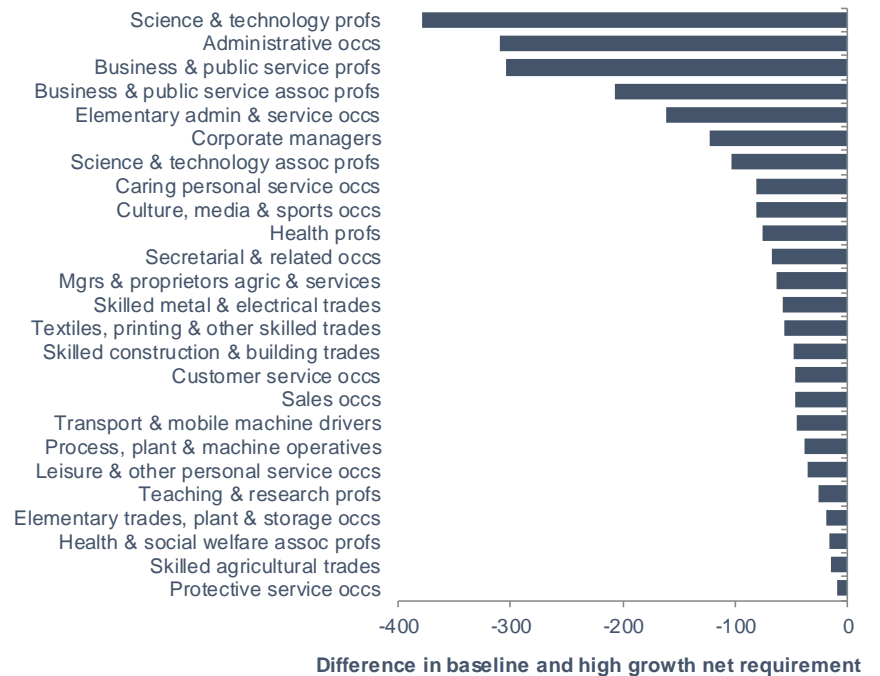
Replacement demand represents a higher proportion of labour demand the baseline scenario

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

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



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

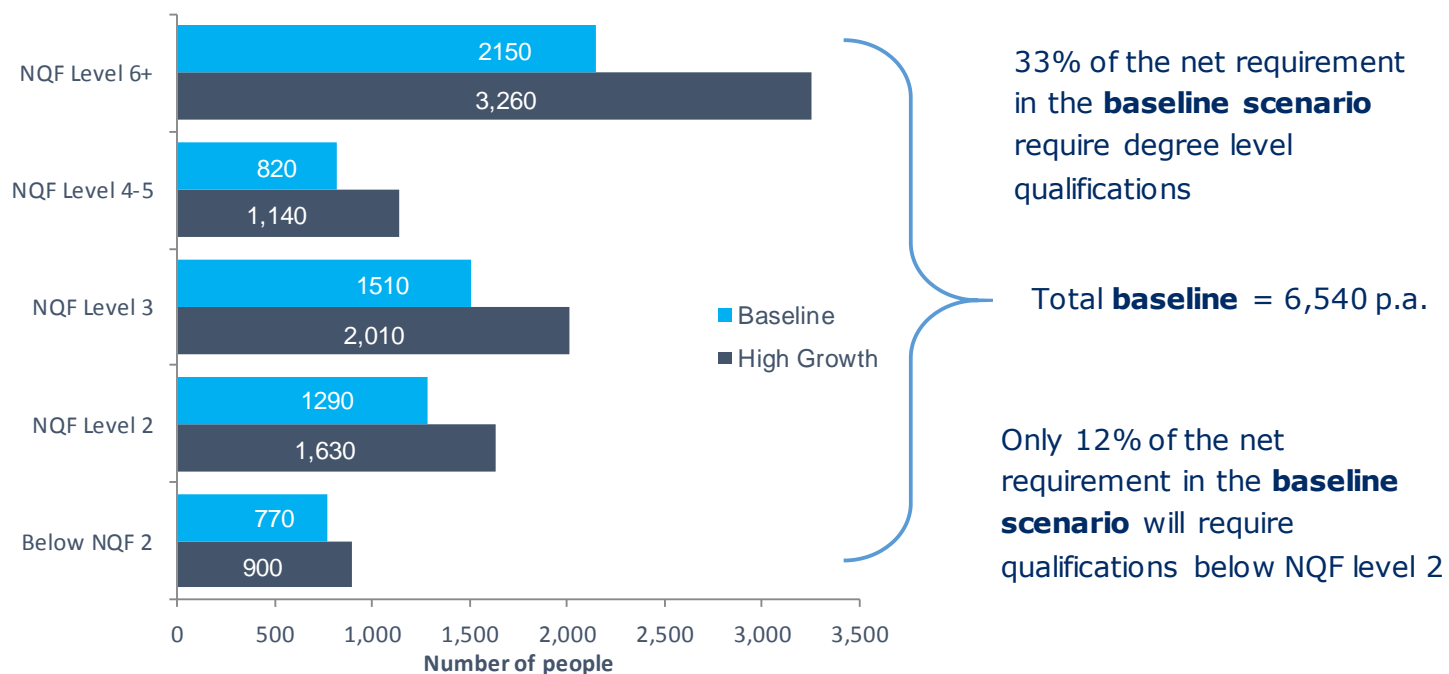


Source: UUEPC

Under baseline conditions the largest demand from the education system and migration is concentrated in science and technology professionals and elementary and administration service occupations. The largest differences are recorded in science and technology professionals (difference of -378 persons) and administrative occupations (difference of -309 persons).

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, BCC (2017-2027)



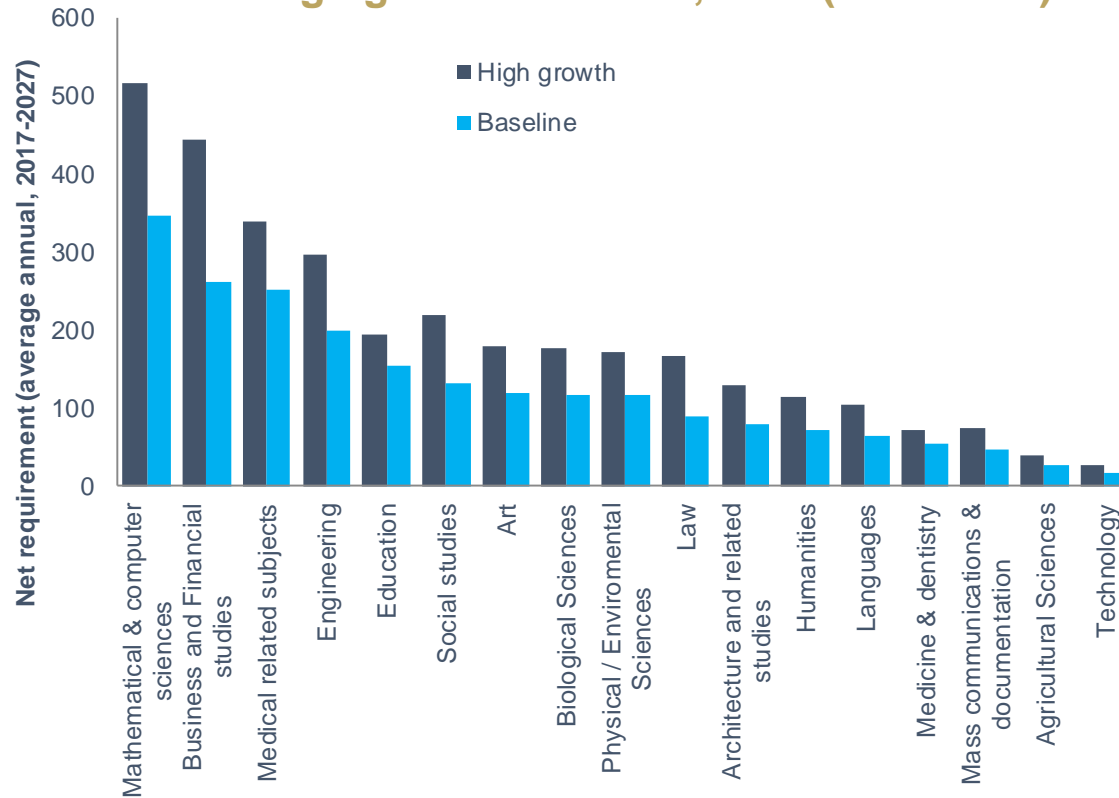
Source: UUEPC

Note: Data may not sum due to rounding.

The profile of skills demand across the two scenarios is relatively similar. Under the baseline scenario 33% of the net requirement is associated with qualifications at NQF level 6+, compared to 36% in the high growth scenario. However, in absolute terms there are 1,110 fewer people demanded at NQF level 6+ under the baseline scenario. Similarly, although the proportions of people demanded below NQF level 2 are relatively similar under both scenarios (12% and 10% respectively), the absolute number of people demanded is 18% lower in the baseline scenario.

The largest NQF level 6+ subject in demand under baseline conditions is mathematical and computer sciences

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

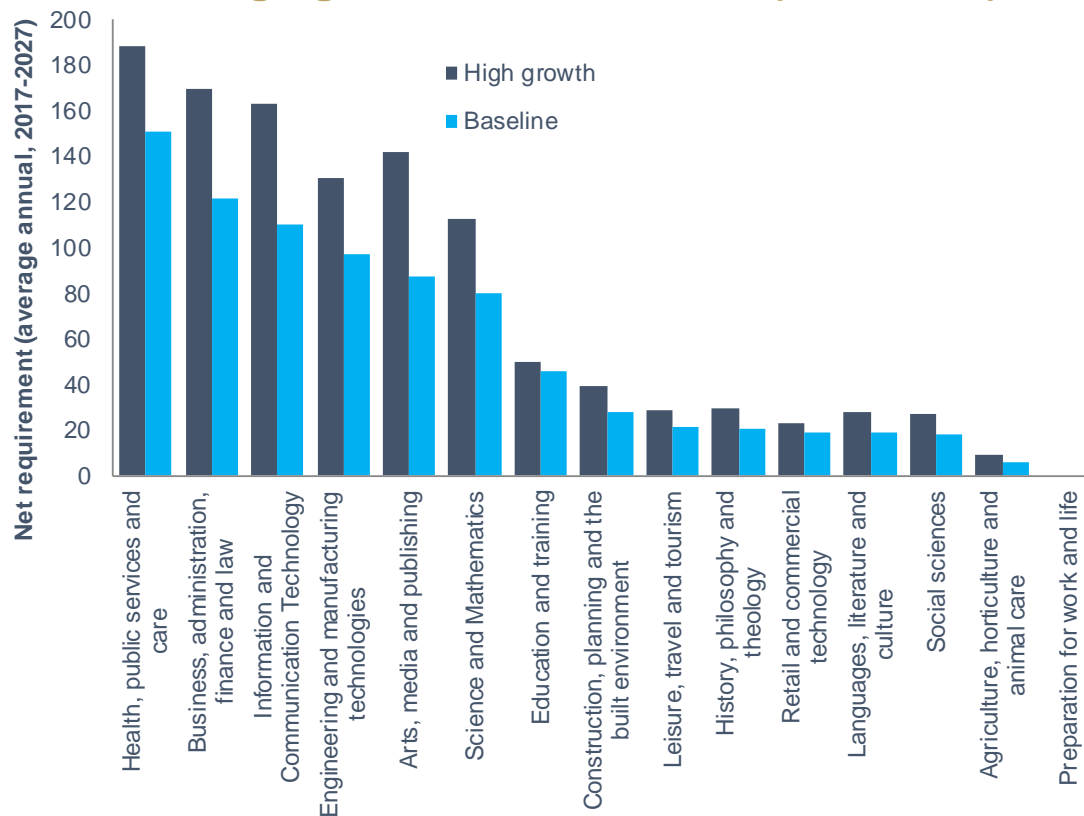


Source: UUEPC

Under baseline conditions, over the next decade the largest subject in demand for NQF level 6+ degree programmes is mathematical and computer sciences, representing 16% of the NQF level 6+ demand. Compared to the high growth scenario the absolute number of people demanded from mathematical and computer science degrees under the baseline scenario is 49% lower.

Health, public services and care 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, BCC (2017-2027)

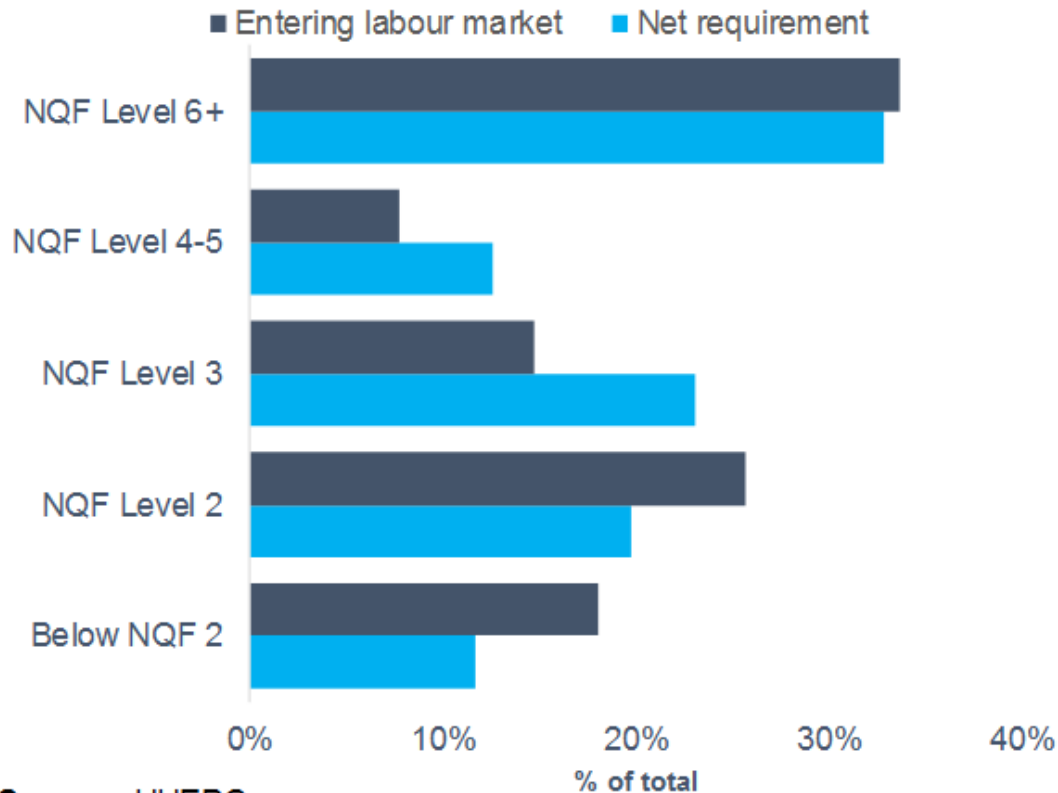


Source: UUEPC

Under baseline conditions, over the next decade the largest subject in demand for sub-degree programmes is health, public services and care at 150 persons per annum, representing 18% of the NQF level 4-5 demand. This is relatively similar to the high growth scenario as labour demand in the health sector is largely driven by replacement rather than expansion demand.

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

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



Source: UUEPC

Areas of misalignment appear to be an oversupply of low-level skills at NQF level 2 and below, linked to under performance of BCC school leavers. There is also a shortage of mid-level skills at NQF level 3-5, driven by the majority of such individuals proceeding to further study as opposed to entering the labour market. In absolute terms there are 1.1k less graduates demanded in the baseline compared to the high growth scenario.

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 (-16 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, BCC (2017-2027)

	% distribution of BCC qualifiers (2015)	% distribution of net requirement (2017 - 2027)	p.p. difference
Medicine, dentistry, subjects allied to medicine	17%	14%	2%
Biological, veterinary, agricultural & physical sciences	11%	12%	-1%
Maths, computing, engineering and technology	10%	26%	-16%
Social studies & law	19%	10%	9%
Business, administration, mass communication and documentation	15%	14%	1%
All other disciplines	28%	23%	5%

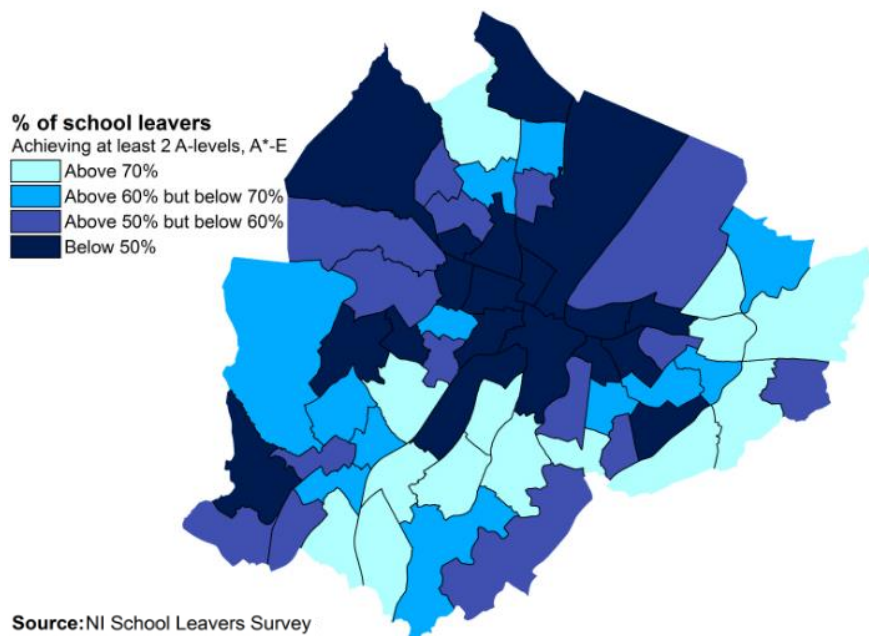
Source: NINIS & UUEPC

Annex B: Maps

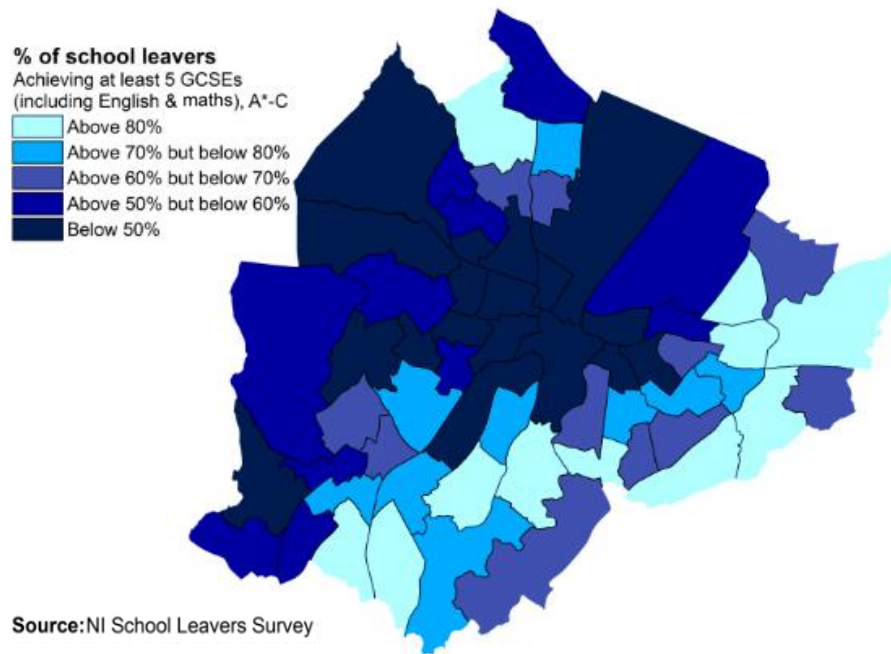
Annex B1: School leaver attainment by BCC wards (2013/14-2015/16)

School leaver attainment, BCC wards (2013/14-2015/16)

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



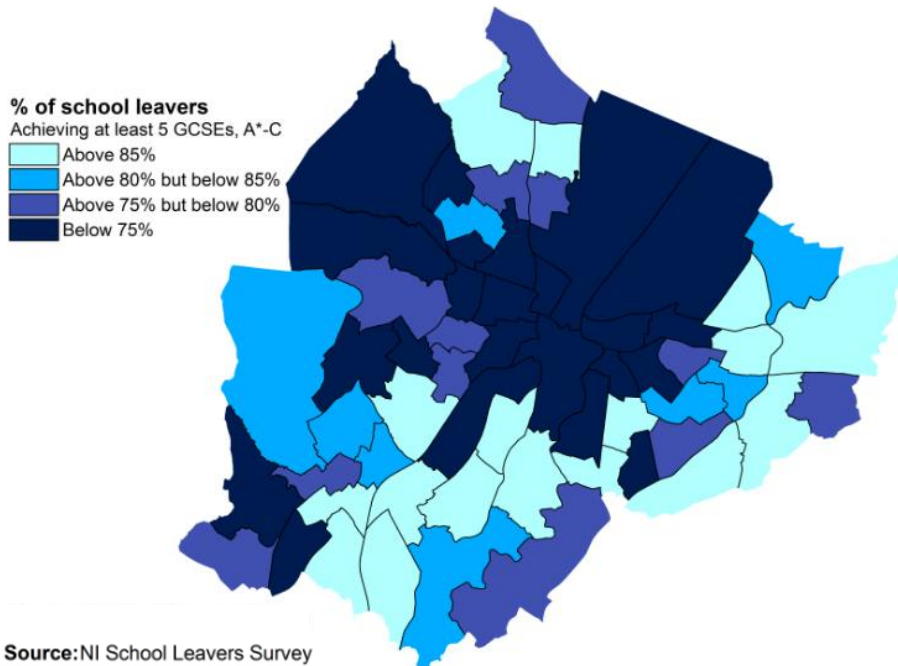
School leavers (%) achieving 5+ GCSEs A*-C including English & maths, BCC wards (2013/14-2015/16)



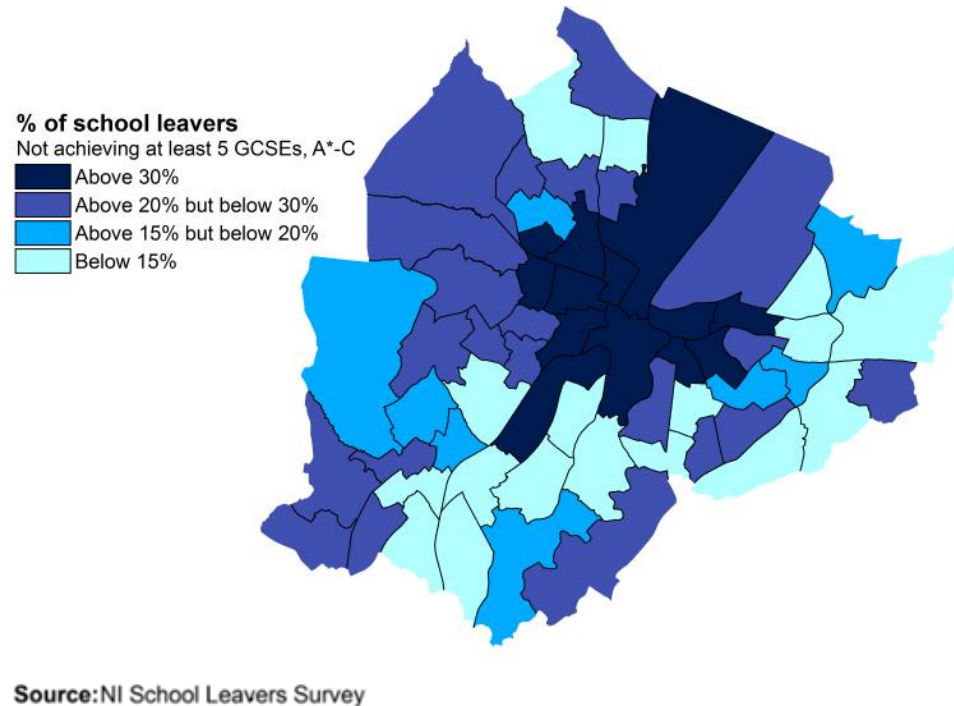
Annex B2: School leaver attainment by BCC wards (2013/14-2015/16)

School leaver attainment, BCC wards (2013/14-2015/16)

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



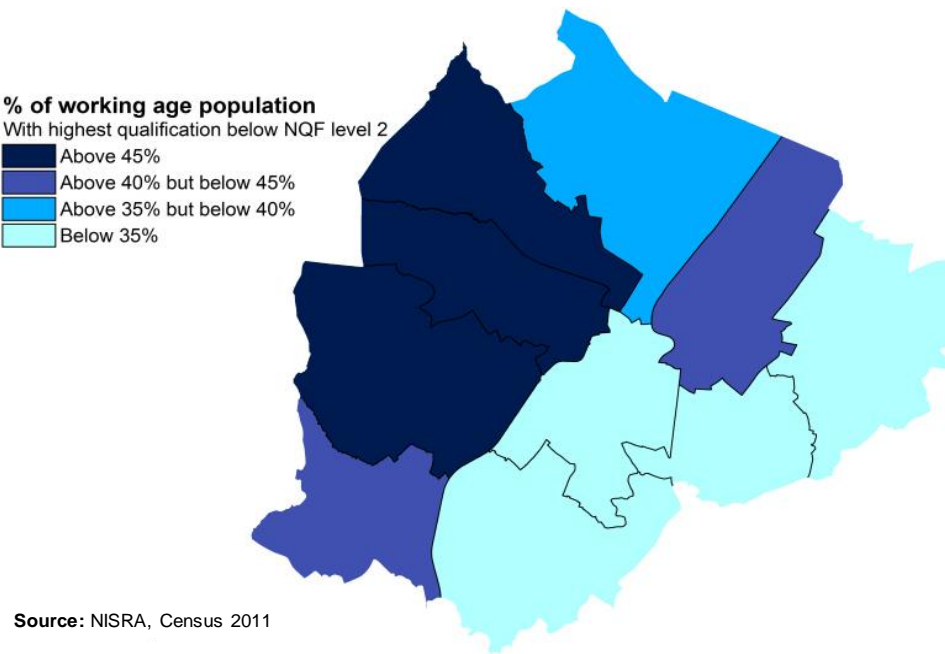
School leavers (%) not achieving 5+ GCSEs A*-C, BCC wards (2013/14-2015/16)



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

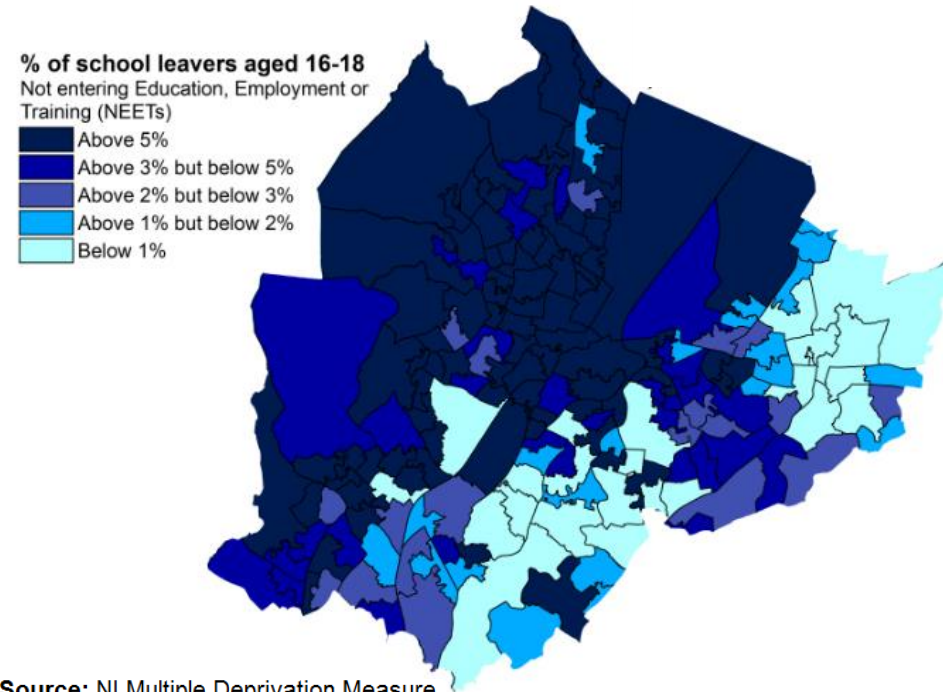
Highest qualification below NQF level 2 (2011) versus school leavers not entering education, employment or training (2013/14 to 2014/15), BCC DEA's/SOA's

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



Source: NISRA, Census 2011

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

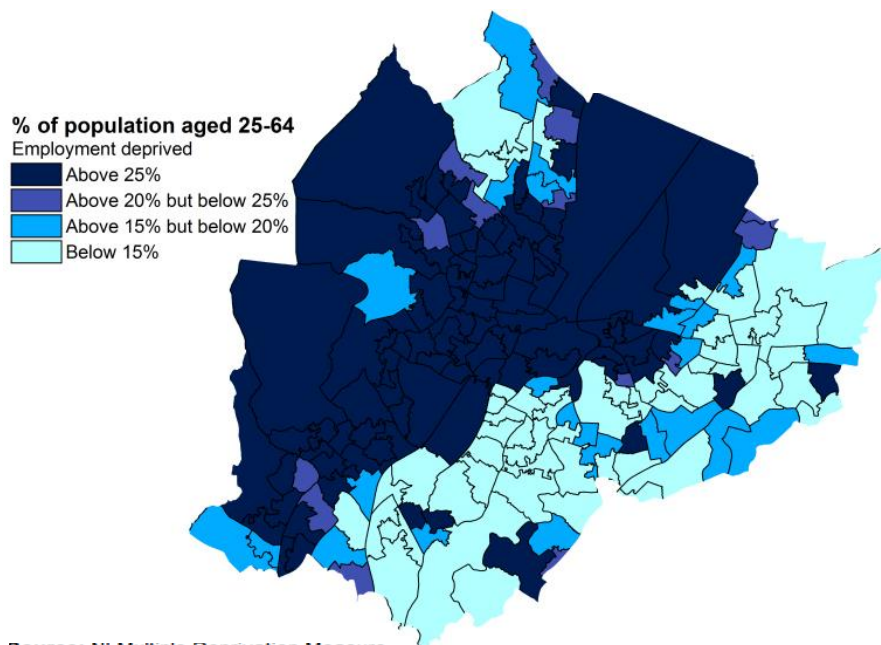


Source: NI Multiple Deprivation Measure

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

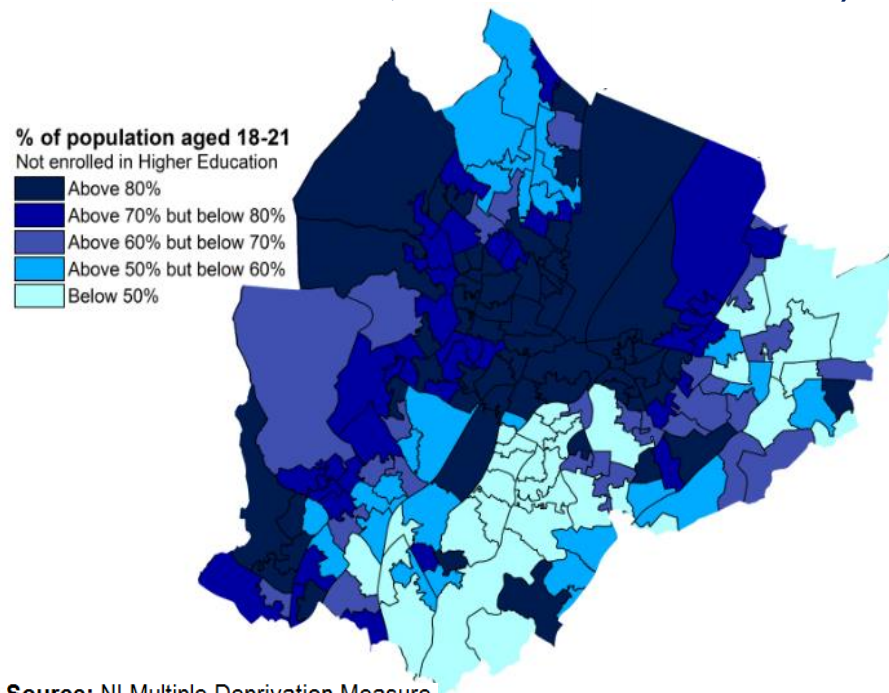
Proportion (%) of population aged 25-64 who are employment deprived, BCC SOA's (2015/16)



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, BCC SOA's (2012/13-2015/16)



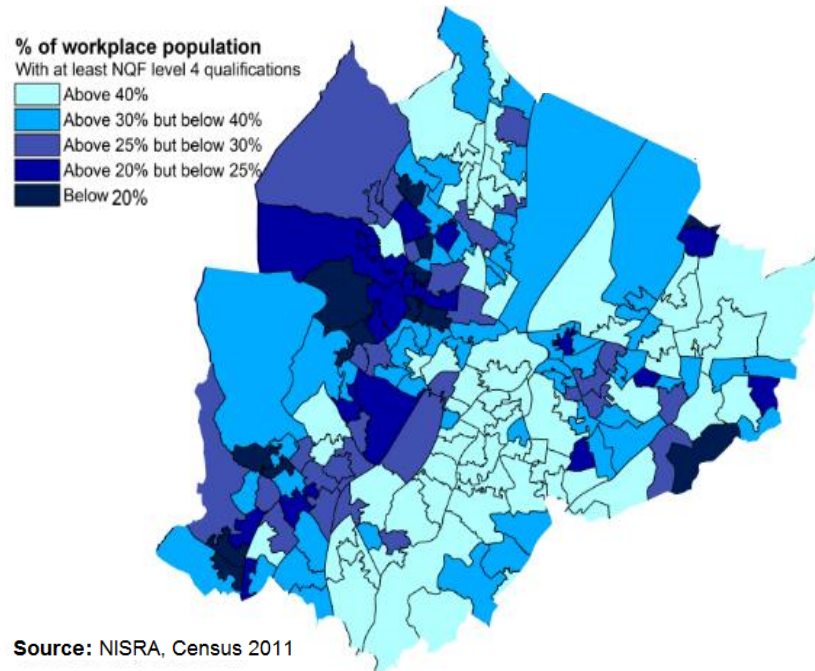
Source: NI Multiple Deprivation Measure

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

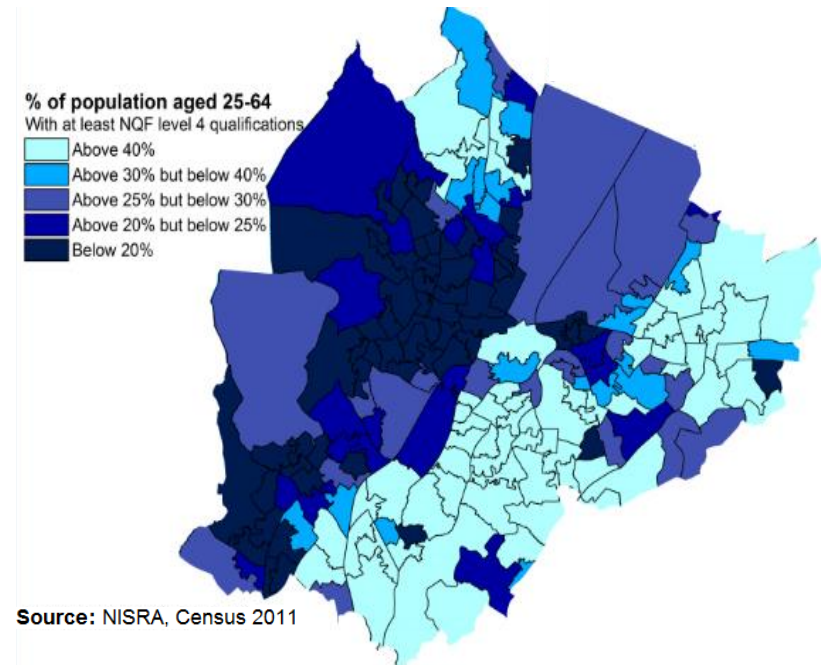
Annex B5: NQF level 4+ qualifications, workplace versus resident, East SOA's (2011)

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

Proportion (%) of 16-74 population with NQF level 4+ qualifications (workplace based), BCC (2011)



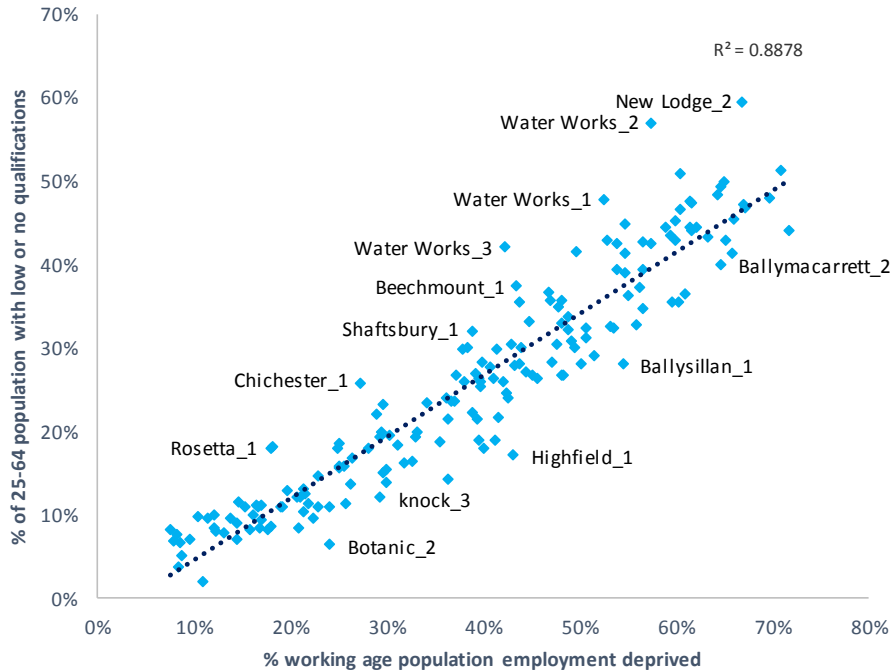
Proportion (%) of 25-64 population with NQF level 4+ qualifications (resident based), BCC (2011)



Annex C: Scatter plots

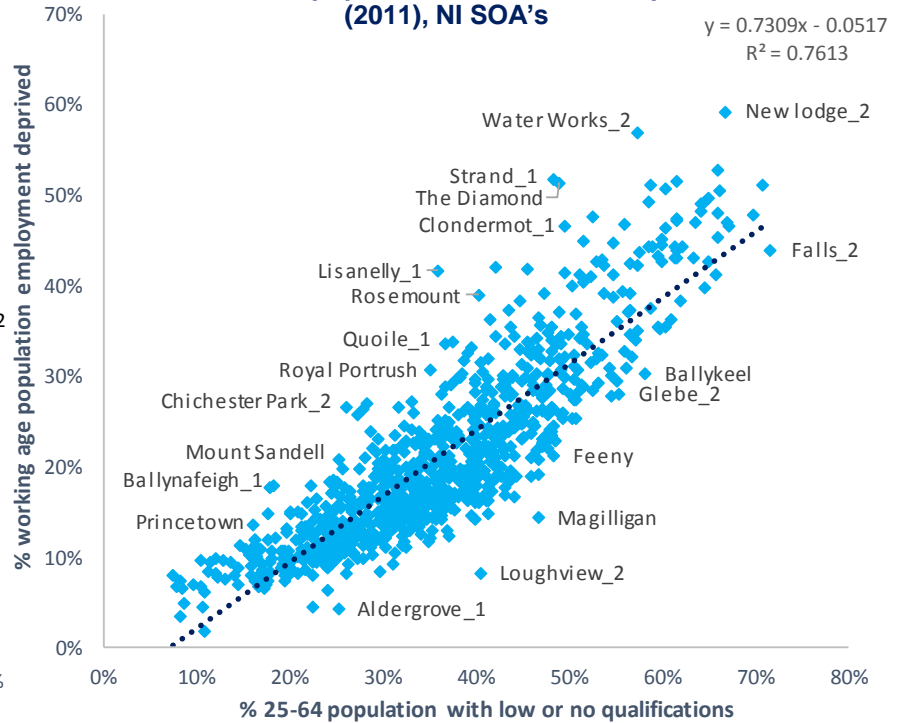
Annex C1: Employment deprivation (2015/16) versus low or no qualifications (2011), BCC and NI SOA's

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



Source: NI Multiple Deprivation Measure

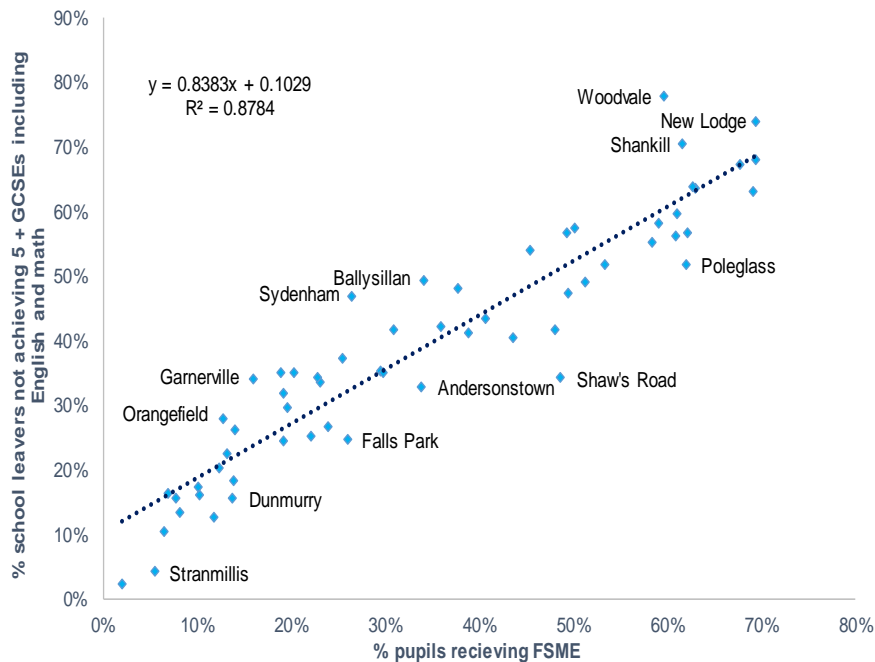
% working age population employment deprived (2015/16) versus % of 25-64 population with low or no qualifications (2011), NI SOA's



Source: NI Multiple Deprivation Measure

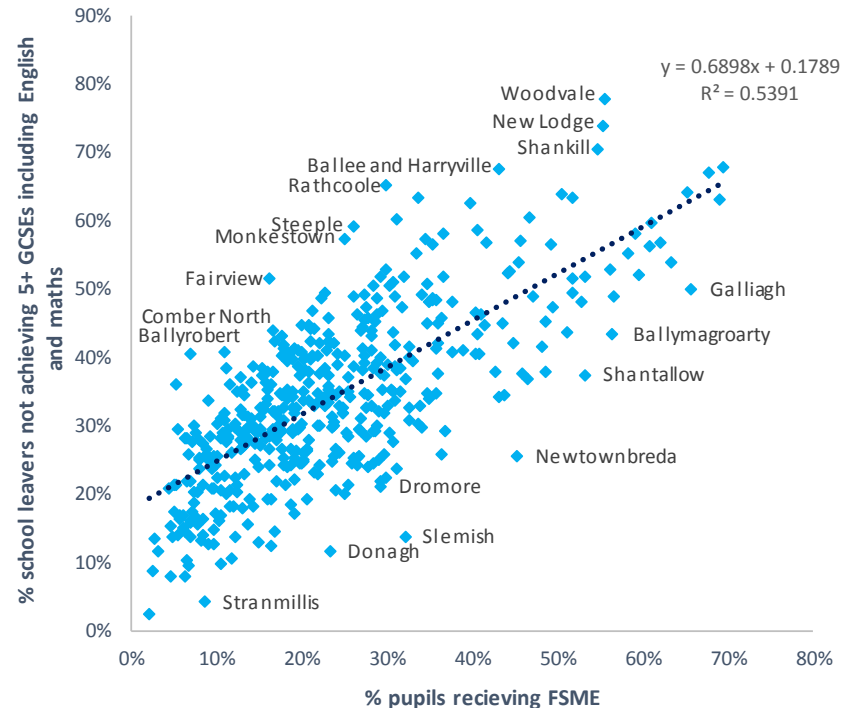
Annex C2: Educational attainment (2013/14-2015-16) versus proportion of pupils entitles to free school meals (2013/14-2015/16), East and NI wards

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

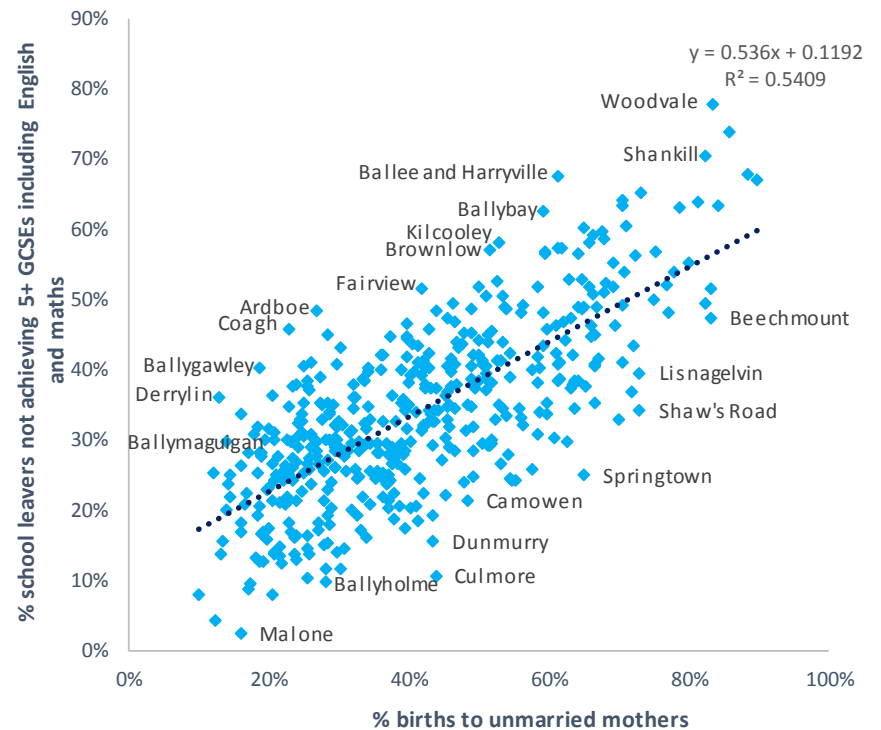
Annex C3: Educational attainment (2013/14-2015/16) versus proportion of births to unmarried mothers (2014-15), BCC and NI wards

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



Source: NINIS and NI School Leavers Survey

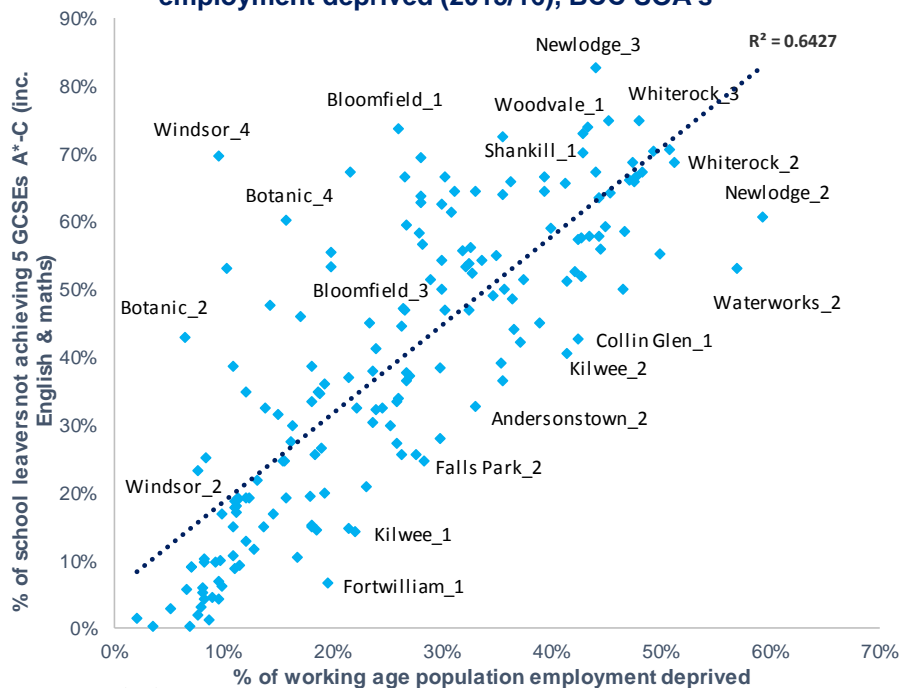
% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of births to unmarried mothers (2014-2015) , NI Wards



Source: NI School leavers survey

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

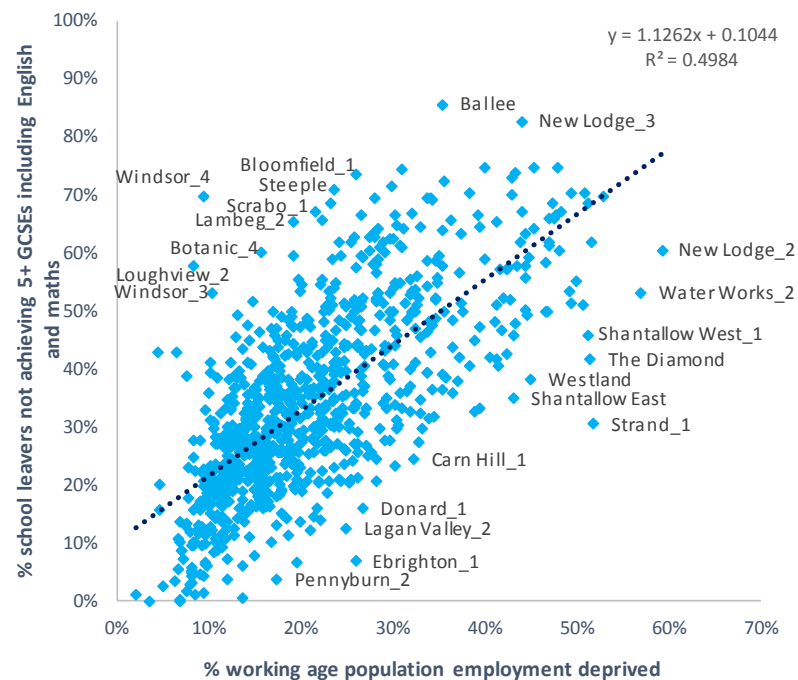
% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of working age population employment deprived (2015/16), BCC SOA's



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

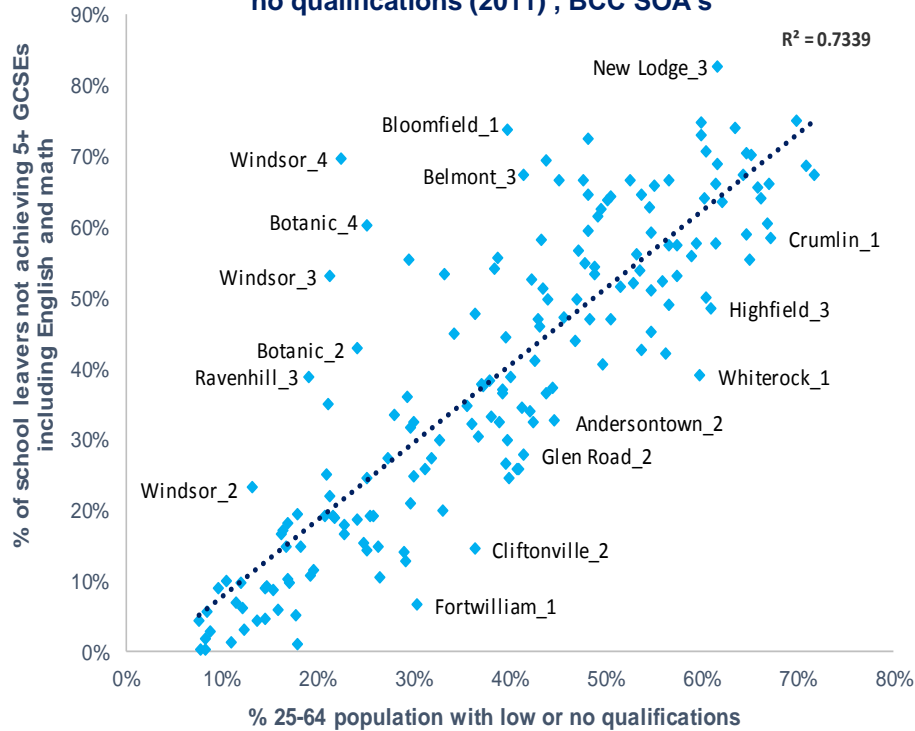


Source: NI Multiple Deprivation Measure

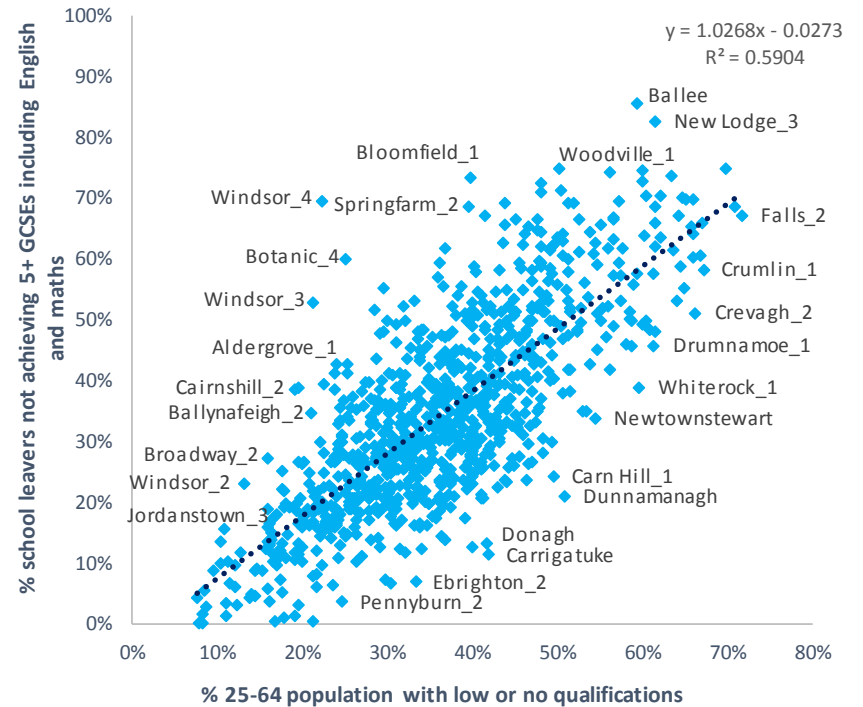
Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

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

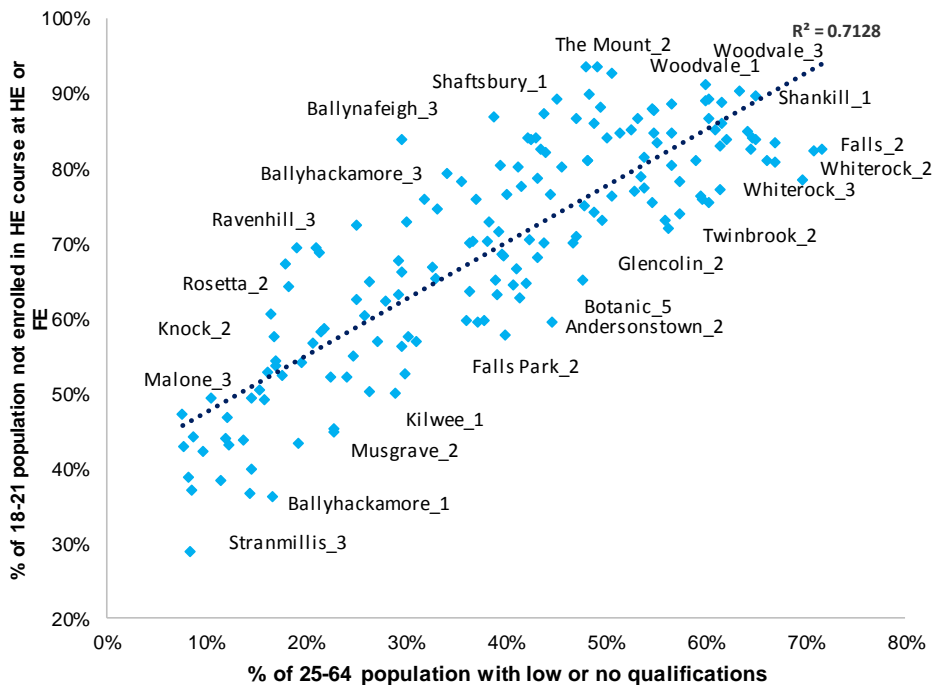


Source: NI Multiple Deprivation Measure

Source: NI Multiple Deprivation Measure

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

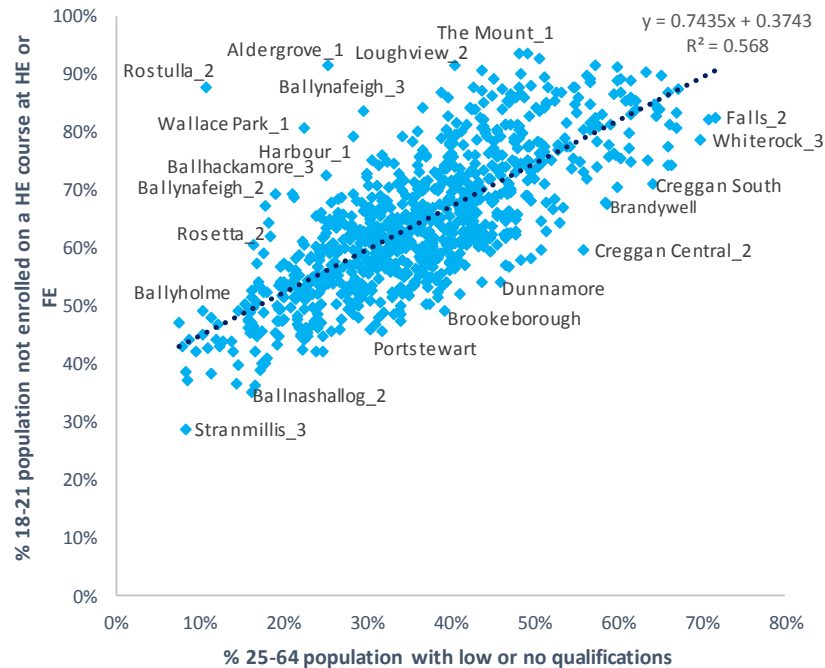
% 18-21 population not enrolled in HE course at HE or FE (2015/16) versus % of 25-64 population with low or no qualifications (2011), BCC SOA's



Source: NI Multiple Deprivation Measure

Note: SOAs where no data is available have been excluded

% 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

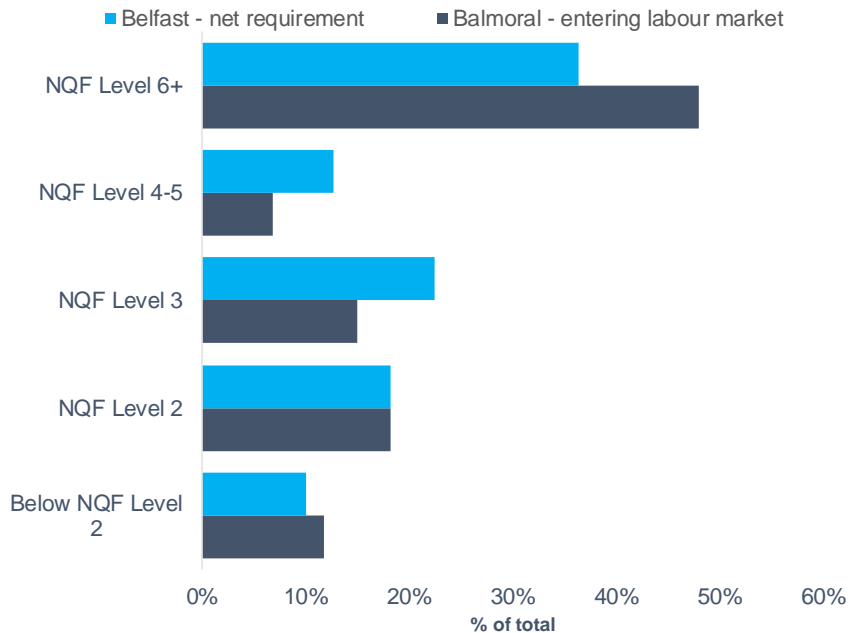


Source: NI Multiple Deprivation Measure

Annex D: DEA Score cards

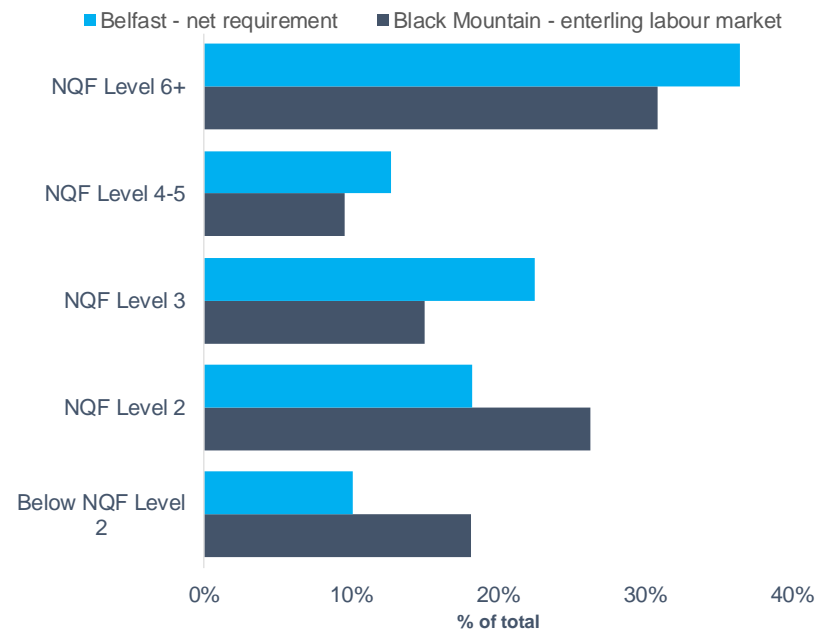
Annex D1: DEA Net Requirement (Balmoral and Black Mountain)

Net requirement (BCC) vs skills profile of labour market entrants (Balmoral) (2017-2027)



Source: UUEPC

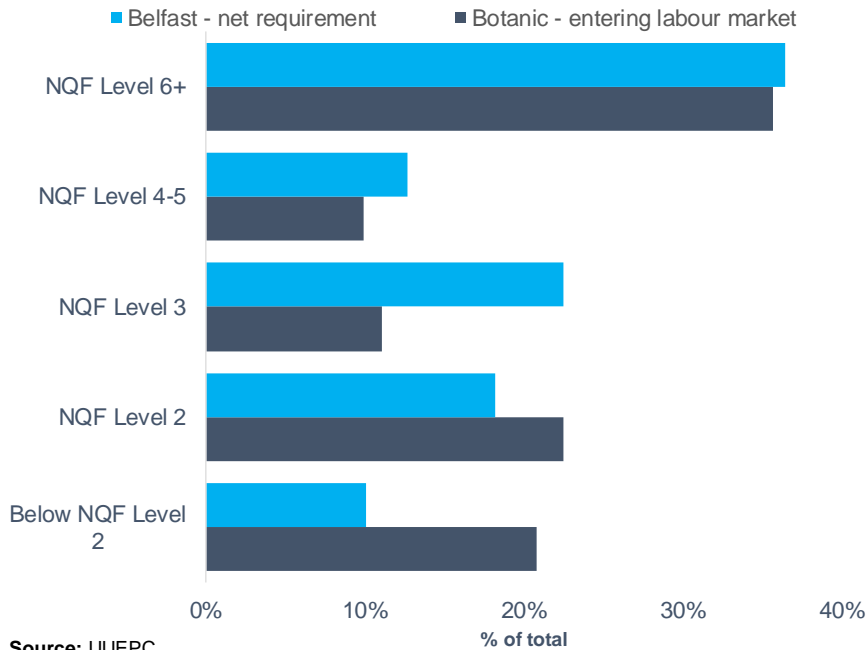
Net requirement (BCC) vs skills profile of labour market entrants (Black Mountain) (2017-2027)



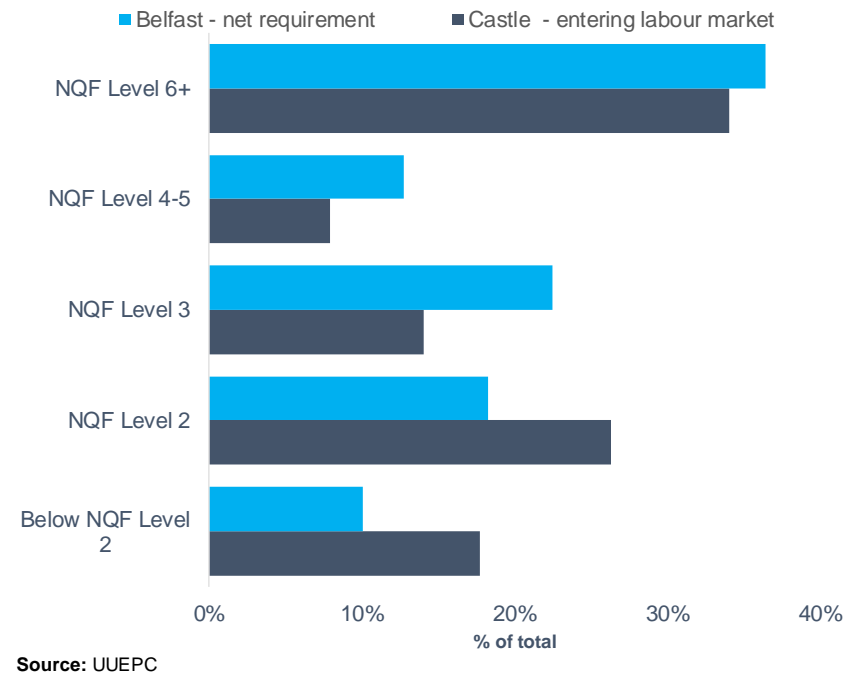
Source: UUEPC

Annex D2: DEA Net Requirement (Botanic and Castle)

Net requirement (BCC) vs skills profile of labour market entrants (Botanic) (2017-2027)

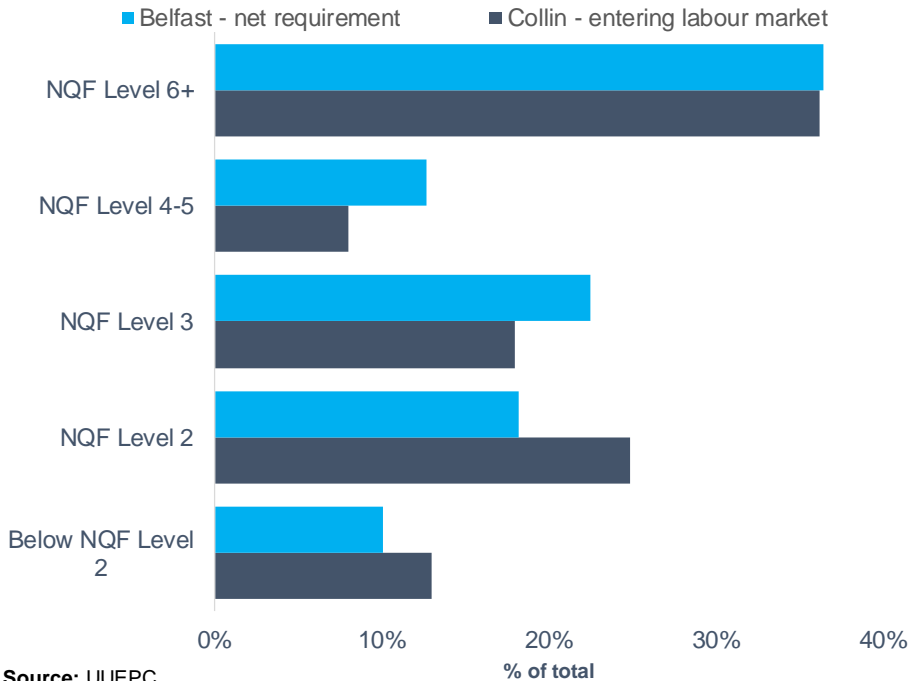


Net requirement (BCC) vs skills profile of labour market entrants (Castle) (2017-2027)

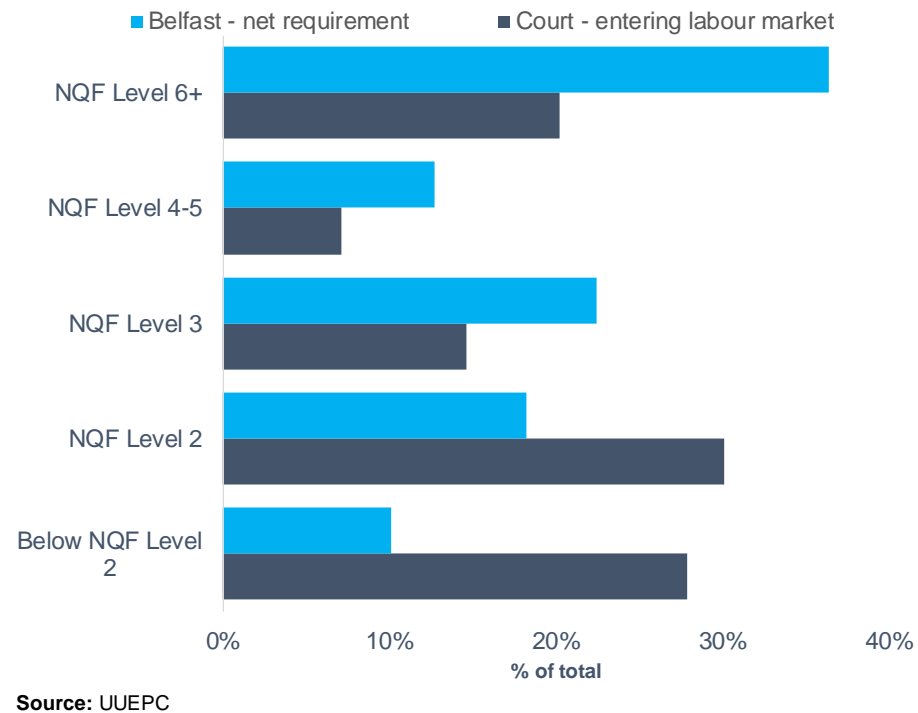


Annex D3: DEA Net Requirement (Colin and Court)

Net requirement (BCC) vs skills profile of labour market entrants (Collin) (2017-2027)

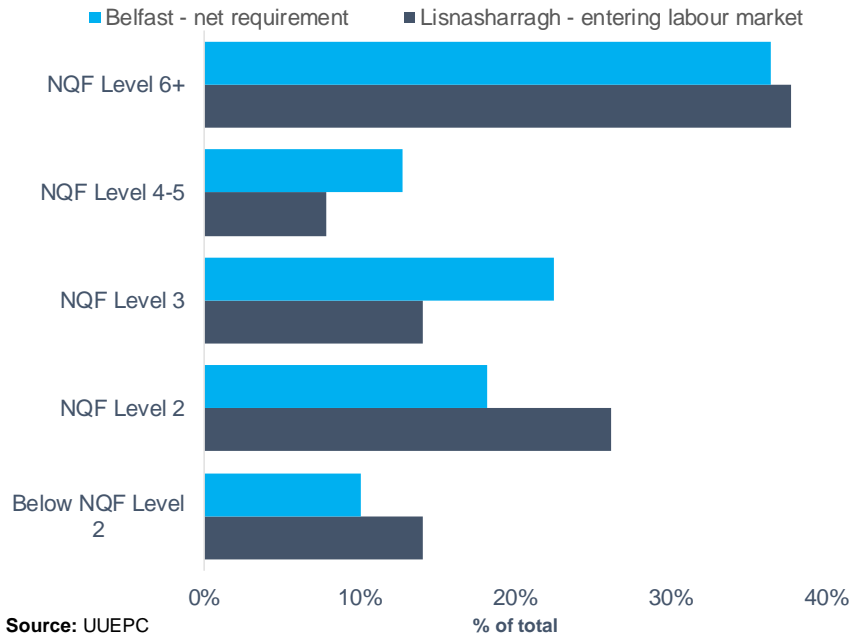


Net requirement (BCC) vs skills profile of labour market entrants (Court) (2017-2027)

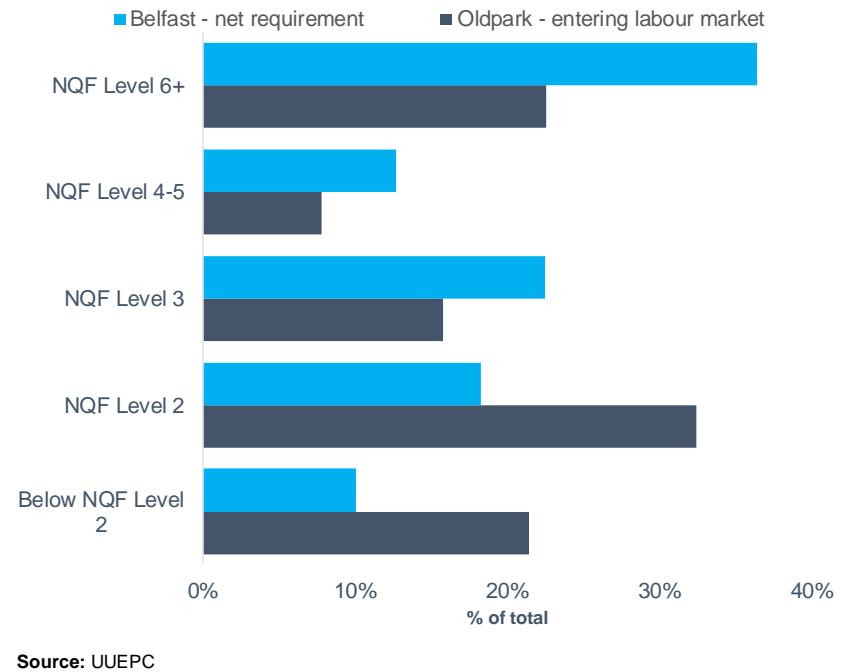


Annex D4: DEA Net Requirement (Lisnasharragh and Oldpark)

Net requirement (BCC) vs skills profile of labour market entrants (Lisnasharragh) (2017-2027)

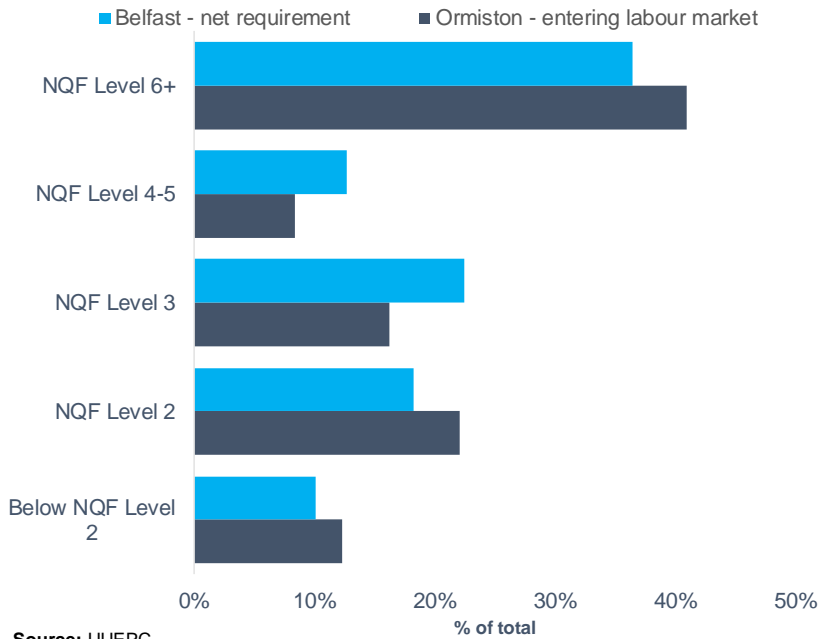


Net requirement (BCC) vs skills profile of labour market entrants (Oldpark) (2017-2027)



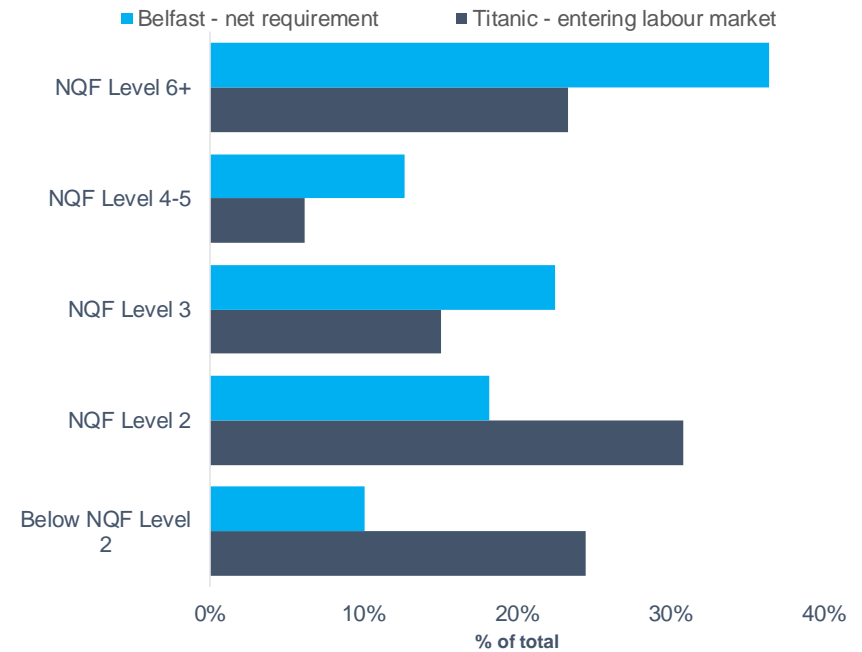
Annex D5: DEA Net Requirement (Ormiston and Titanic)

Net requirement (BCC) vs skills profile of labour market entrants (Ormiston) (2017-2027)



Source: UUEPC

Net requirement (BCC) vs skills profile of labour market entrants (Titanic) (2017-2027)




Source: UUEPC

Annex E: DEA Score cards

Annex E1: Balmoral scorecard (Belfast City Council)

	Balmoral	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	83%	5
	% of school enrolments entitled to FSM	16%	12
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	6%	13
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	58%	53
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	21%	66
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	22%	6
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	41%	2
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	13%	31
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	26%	3
	% of 16-64 population with high qualifications (NQF level 4+)	44%	2
	% of 16-34 population with low qualifications (below NQF level 2)	21%	5
	% of 16-34 population with high qualifications (NQF level 4+)	39%	2
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	17%	17
	Social security clients (client group analysis) as a % of the population (16-34)	10%	13
	Housing benefit claimants as a % of the population (16-64)	7%	31
	Housing benefit claimants as a % of the population (16-34)	5%	21
	% of households with no adults in employment	35%	46
	% of households with no adults in employment with dependent children	3%	12
	% of households with lone parents with dependent children	6%	25
	% of people employed who are either managers/senior officials or professionals	10%	9
	Employment rate (% , 16-74 population)	64%	28
Unemployed who have never worked (% of unemployed)	13%	30	

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: Black Mountain scorecard (Belfast City Council)

	Black Mountain	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	55%	76
	% of school enrolments entitled to FSM	57%	77
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	21%	75
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	63%	66
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	22%	69
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	9%	76
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	14%	78
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	9%	68
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	51%	76
	% of 16-64 population with high qualifications (NQF level 4+)	16%	78
	% of 16-34 population with low qualifications (below NQF level 2)	37%	75
	% of 16-34 population with high qualifications (NQF level 4+)	18%	76
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	39%	77
	Social security clients (client group analysis) as a % of the population (16-34)	23%	73
	Housing benefit claimants as a % of the population (16-64)	20%	75
	Housing benefit claimants as a % of the population (16-34)	12%	64
	% of households with no adults in employment	47%	77
	% of households with no adults in employment with dependent children	11%	75
	% of households with lone parents with dependent children	17%	77
	% of people employed who are either managers/senior officials or professionals	5%	80
	Employment rate (% , 16-74 population)	48%	77
Unemployed who have never worked (% of unemployed)	27%	79	

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: Botanic scorecard (Belfast City Council)

	Botanic	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	66%	52
	% of school enrolments entitled to FSM	42%	72
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	16%	61
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	66%	73
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	30%	80
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	4%	80
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	54%	1
Skills stock	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	11%	53
	% of 16-64 population with low qualifications (below NQF level 2)	23%	2
	% of 16-64 population with high qualifications (NQF level 4+)	38%	7
	% of 16-34 population with low qualifications (below NQF level 2)	15%	1
Labour market and socio-economic indicators	% of 16-34 population with high qualifications (NQF level 4+)	36%	4
	Social security clients (client group analysis) as a % of the population (16-64)	16%	16
	Social security clients (client group analysis) as a % of the population (16-34)	8%	7
	Housing benefit claimants as a % of the population (16-64)	12%	56
	Housing benefit claimants as a % of the population (16-34)	6%	32
	% of households with no adults in employment	32%	24
	% of households with no adults in employment with dependent children	4%	28
	% of households with lone parents with dependent children	6%	22
	% of people employed who are either managers/senior officials or professionals	6%	76
Employment rate (% , 16-74 population)	61%	48	
Unemployed who have never worked (% of unemployed)	18%	65	

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: Castle scorecard (Belfast City Council)

	Castle	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	66%	51
	% of school enrolments entitled to FSM	36%	64
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	17%	67
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	66%	75
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	24%	73
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	14%	57
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	27%	23
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	10%	61
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	38%	32
	% of 16-64 population with high qualifications (NQF level 4+)	29%	16
	% of 16-34 population with low qualifications (below NQF level 2)	31%	54
	% of 16-34 population with high qualifications (NQF level 4+)	27%	20
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	28%	67
	Social security clients (client group analysis) as a % of the population (16-34)	20%	63
	Housing benefit claimants as a % of the population (16-64)	17%	72
	Housing benefit claimants as a % of the population (16-34)	13%	69
	% of households with no adults in employment	40%	69
	% of households with no adults in employment with dependent children	6%	58
	% of households with lone parents with dependent children	11%	68
	% of people employed who are either managers/senior officials or professionals	8%	48
	Employment rate (% , 16-74 population)	59%	59
Unemployed who have never worked (% of unemployed)	18%	64	

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: Collin scorecard (Belfast City Council)

	Collin	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	61%	70
	% of school enrolments entitled to FSM	47%	74
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	19%	70
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	55%	35
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	14%	44
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	13%	62
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	24%	39
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	9%	71
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	43%	59
	% of 16-64 population with high qualifications (NQF level 4+)	21%	69
	% of 16-34 population with low qualifications (below NQF level 2)	33%	61
	% of 16-34 population with high qualifications (NQF level 4+)	21%	69
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	33%	75
	Social security clients (client group analysis) as a % of the population (16-34)	25%	75
	Housing benefit claimants as a % of the population (16-64)	17%	73
	Housing benefit claimants as a % of the population (16-34)	14%	71
	% of households with no adults in employment	39%	63
	% of households with no adults in employment with dependent children	14%	78
	% of households with lone parents with dependent children	21%	80
	% of people employed who are either managers/senior officials or professionals	6%	73
	Employment rate (% , 16-74 population)	54%	71
	Unemployed who have never worked (% of unemployed)	23%	75

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

Note: Due to disclosure of data for % of school leavers entitled to FSM achieving 5 GCSE's (including English and maths) Collin has been placed in the bottom 10 DEAs with available data.

Annex E6: Court scorecard (Belfast City Council)

	Court	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	46%	80
	% of school enrolments entitled to FSM	64%	80
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	22%	76
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	72%	80
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	30%	78
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	6%	79
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	18%	69
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	3%	80
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	58%	80
	% of 16-64 population with high qualifications (NQF level 4+)	12%	80
	% of 16-34 population with low qualifications (below NQF level 2)	46%	80
	% of 16-34 population with high qualifications (NQF level 4+)	14%	80
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	44%	78
	Social security clients (client group analysis) as a % of the population (16-34)	35%	79
	Housing benefit claimants as a % of the population (16-64)	29%	78
	Housing benefit claimants as a % of the population (16-34)	24%	79
	% of households with no adults in employment	53%	79
	% of households with no adults in employment with dependent children	12%	76
	% of households with lone parents with dependent children	17%	76
	% of people employed who are either managers/senior officials or professionals	5%	78
	Employment rate (% , 16-74 population)	46%	79
	Unemployed who have never worked (% of unemployed)	25%	77

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: Lisnasharragh scorecard (Belfast City Council)

	Lisnasharragh	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	77%	11
	% of school enrolments entitled to FSM	19%	20
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	8%	26
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	64%	67
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	20%	64
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	20%	15
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	38%	3
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	10%	64
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	27%	5
	% of 16-64 population with high qualifications (NQF level 4+)	43%	3
	% of 16-34 population with low qualifications (below NQF level 2)	20%	3
	% of 16-34 population with high qualifications (NQF level 4+)	44%	1
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	15%	10
	Social security clients (client group analysis) as a % of the population (16-34)	12%	26
	Housing benefit claimants as a % of the population (16-64)	6%	21
	Housing benefit claimants as a % of the population (16-34)	5%	24
	% of households with no adults in employment	32%	28
	% of households with no adults in employment with dependent children	3%	8
	% of households with lone parents with dependent children	6%	11
	% of people employed who are either managers/senior officials or professionals	8%	40
	Employment rate (% , 16-74 population)	69%	5
	Unemployed who have never worked (% of unemployed)	14%	38

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: Oldpark scorecard (Belfast City Council)

	Oldpark	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	48%	79
	% of school enrolments entitled to FSM	63%	79
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	21%	74
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	66%	74
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	22%	68
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	8%	77
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	18%	66
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	10%	65
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	54%	79
	% of 16-64 population with high qualifications (NQF level 4+)	14%	79
	% of 16-34 population with low qualifications (below NQF level 2)	41%	78
	% of 16-34 population with high qualifications (NQF level 4+)	16%	79
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	44%	79
	Social security clients (client group analysis) as a % of the population (16-34)	37%	80
	Housing benefit claimants as a % of the population (16-64)	30%	79
	Housing benefit claimants as a % of the population (16-34)	25%	80
	% of households with no adults in employment	51%	78
	% of households with no adults in employment with dependent children	13%	77
	% of households with lone parents with dependent children	18%	78
	% of people employed who are either managers/senior officials or professionals	5%	79
	Employment rate (% , 16-74 population)	47%	78
Unemployed who have never worked (% of unemployed)	25%	76	

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: Ormiston scorecard (Belfast City Council)

	Ormiston	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	75%	17
	% of school enrolments entitled to FSM	16%	13
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	3%	1
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	59%	54
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	18%	59
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	20%	13
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	33%	6
% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	11%	57	
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	29%	7
	% of 16-64 population with high qualifications (NQF level 4+)	39%	5
	% of 16-34 population with low qualifications (below NQF level 2)	24%	14
	% of 16-34 population with high qualifications (NQF level 4+)	34%	6
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	15%	11
	Social security clients (client group analysis) as a % of the population (16-34)	11%	18
	Housing benefit claimants as a % of the population (16-64)	7%	24
	Housing benefit claimants as a % of the population (16-34)	5%	25
	% of households with no adults in employment	35%	48
	% of households with no adults in employment with dependent children	3%	11
	% of households with lone parents with dependent children	6%	19
	% of people employed who are either managers/senior officials or professionals	10%	7
	Employment rate (% , 16-74 population)	66%	15
Unemployed who have never worked (% of unemployed)	12%	20	

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: Titanic scorecard (Belfast City Council)

	Titanic	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and Maths)	54%	77
	% of school enrolments entitled to FSM	52%	76
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and Maths)	17%	68
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	68%	78
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	27%	76
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	7%	78
	% of HE qualifiers achieving a postgraduate qualification (L7-8)	32%	7
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	18
Skills stock	% of 16-64 population with low qualifications (Below level 2)	44%	67
	% of 16-64 population with high qualifications (Level 4+)	27%	25
	% of 16-34 population with low qualifications (Below level 2)	34%	64
	% of 16-34 population with high qualifications (Level 4+)	32%	7
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	29%	71
	Social security clients (client group analysis) as a % of the population (16-34)	23%	74
	Housing benefit claimants as a % of the population (16-64)	20%	76
	Housing benefit claimants as a % of the population (16-34)	17%	76
	% of households with no adults in employment	40%	67
	% of households with no adults in employment with dependent children	7%	65
	% of households with lone parents with dependent children	12%	72
	% of people employed who are either managers/senior officials or professionals	6%	75
	Employment rate (% , 16-74 population)	60%	55
	Unemployed who have never worked (% of unemployed)	20%	69

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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