

Higher National Certifications and the Scottish Index of Multiple Deprivation



2009-10 to 2014-15

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The Optima Building, 58 Robertson Street, Glasgow G2 8DQ
Lowden, 24 Wester Shawfair, Dalkeith, Midlothian EH22 1FD
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Contents

Introduction	3
Scottish Index of Multiple Deprivation	3
Methodology and Notes on the Data	3
Findings	4
Overall Higher National Certifications	4
Certifications by Level	5
Certifications by Gender	6
Articulation	7
Certifications by Sectoral Group	8
Appendix - Certifications by Sectoral Group	8
Endnotes	22



Introduction

This paper looks at candidates with Higher National (HN) certifications over the past six years with reference to the Scottish Index of Multiple Deprivation (SIMD)¹.

Scottish Index of Multiple Deprivation

The SIMD is the Scottish Government's official tool for identifying those places in Scotland suffering from deprivation. It incorporates several different aspects of deprivation, combining them into a single index. These different aspects are: employment, income, health, education, access to services, crime, and housing. That is, this measure of deprivation is far wider than just poverty².

The SIMD divides Scotland into 6,505 small areas, called datazones, each containing around 350 households or 800 people. The index provides a relative ranking for each datazone, from 1 (most deprived) to 6,505 (least deprived).

This paper generally refers to rankings in terms of their quintiles. That is, the rankings are grouped into five groups of 20% - the first quintile is the most deprived 20% of datazones and the fifth quintile the least deprived 20% of datazones.

Methodology and Notes on the Data

Records of HN certifications from Scottish centres were extracted from SQA's data and the candidates' postcodes matched with SIMD datazones and quintiles. Around 5% of the records were removed from the data for reasons including a centre's or employer's postcode being used instead of a candidate's or an incorrect candidate postcode being held³.

HN data for the years 2009-10, 2010-11, and 2011-12 was matched with the SIMD 2009 data, while HN data for the years 2012-13, 2013-14, and 2014-15 was matched with the SIMD 2012 data.

It should be borne in mind that this data refers to HN certifications (or completions) rather than entrants to HN programmes.

Please also bear in mind that, throughout the tables in this document, percentages may not always total to 100%, due to rounding.

Findings

Overall Higher National Certifications

Overall, SQA's HNs serve all of Scotland's communities well – especially, perhaps, Scotland's more deprived communities. Over the past six years, the 20% most deprived communities have provided slightly more than 20% of HN certifications and the 20% least deprived somewhat less than 20% of HN certifications.

It is also encouraging to note that in each of the past six years, there have been HN certifications from Scotland's most deprived datazone. That is, datazone 1 out of 6,505. (In 2009-10, 2010-11, and 2011-12, this was a datazone in Parkhead West and Barrowfield and in 2012-13, 2013-14, and 2014-15, this was a datazone in Paisley Ferguslie.)

The table below shows the proportion of HN certifications each year by quintile.

Table 1 HN certifications by quintile, 2009-10 to 2014-15

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total HN certs	17,457	18,949	20,302	21,353	21,096	21,708
1 (most deprived)	20.3%	21.3%	21.5%	21.7%	21.2%	22.6%
2	21.2%	20.8%	21.4%	21.0%	21.0%	20.3%
3	19.9%	19.9%	20.3%	20.6%	20.3%	20.7%
4	20.2%	20.2%	19.5%	19.3%	20.0%	19.7%
5 (least deprived)	18.5%	17.8%	17.4%	17.4%	17.5%	16.7%

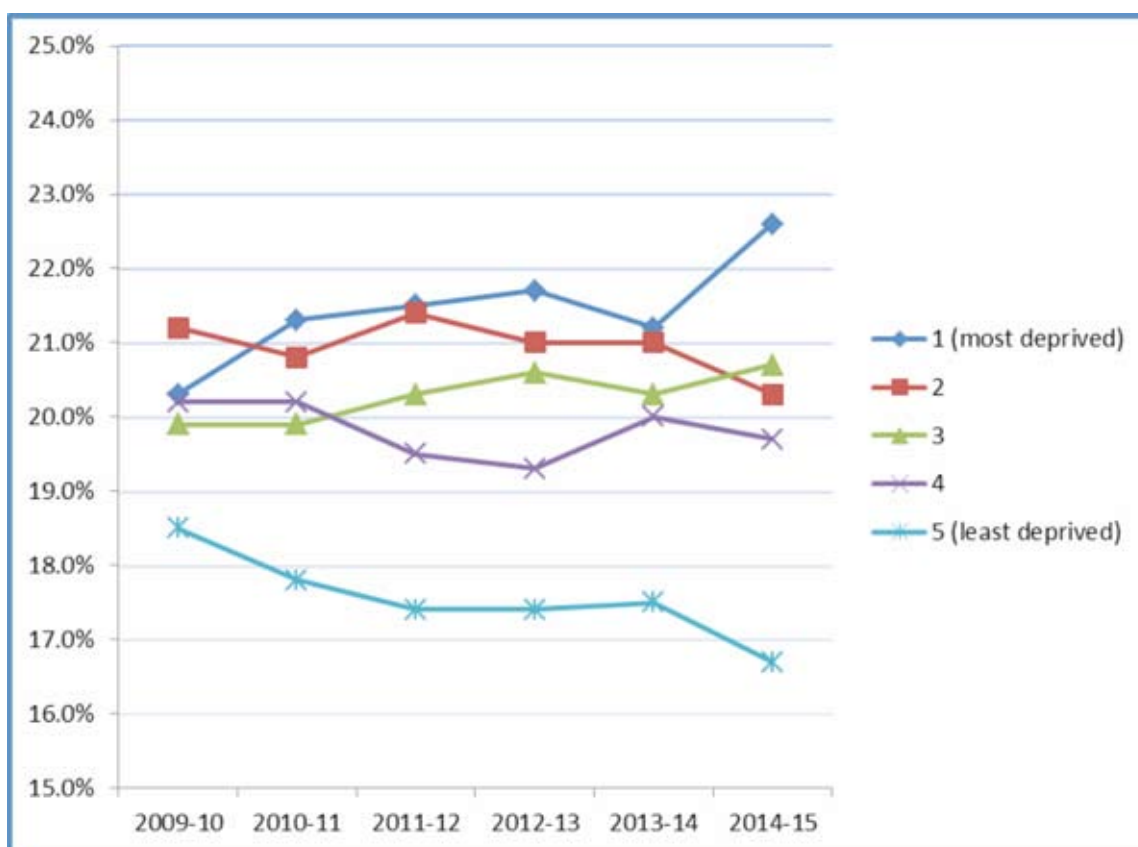
In the most recent year, 2014-15, then, the most deprived 20% of Scottish communities provided 22.6% of HN certifications, while the least deprived 20% of Scottish communities provided 16.7% of HN certifications. While the proportions have varied over the six-year period, this pattern of certifications has generally remained constant.

It is interesting to note that when the total number of HN certifications is at its highest, so too is the proportion of certifications from the most deprived quintile. Conversely, the proportion of certifications from the least deprived quintile has decreased as absolute numbers of certifications have increased.

The chart below shows the same data in chart form. (Please note that, for clarity, the scale on the axis of this graph runs from 15% to 25%.)

This chart makes it clearer that while the proportions of certifications from each quintile have varied over the six-year period, there appears to be a longer-term trend towards a smaller proportion of HN certifications from the least deprived quintile and a higher proportion of HN certifications from the most deprived quintile.

Figure 1 *HN certifications by quintile, 2009-10 to 2014-15*



Certifications by Level

The tables below look at certifications by quintile over the past six years by level – that is, HNC and HND.

Table 2 *HNC certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total HNC certs	11,742	12,940	13,514	14,061	13,454	13,792
1 (most deprived)	20.1%	21.6%	21.1%	21.6%	21.3%	22.9%
2	21.5%	21.6%	21.9%	21.2%	21.2%	21.0%
3	20.2%	20.1%	20.7%	20.4%	20.7%	20.9%
4	20.3%	20.3%	19.6%	19.6%	20.3%	19.6%
5 (least deprived)	17.9%	16.5%	16.7%	17.1%	16.5%	15.6%

Findings

Table 3 *HND certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total HND certs	5,715	6,009	6,788	7,292	7,642	7,916
1 (most deprived)	20.9%	20.8%	22.1%	21.9%	21.0%	22.1%
2	20.6%	19.2%	20.4%	20.6%	20.6%	19.1%
3	19.4%	19.4%	19.4%	20.8%	19.7%	20.4%
4	19.5%	20.0%	19.3%	18.7%	19.3%	19.9%
5 (least deprived)	19.5%	20.7%	18.8%	18.0%	19.3%	18.6%

The tables show that both HNCs and HNDs generally follow the overall HN trend, with proportionally more certifications from the more deprived quintiles and fewer from the less deprived quintiles.

However, it is also noticeable that the proportion of HNC certifications from the least deprived quintile is consistently lower than the proportion of HND certifications from the least deprived quintile.

Certifications by Gender

The tables below look at HN certifications by quintile over the past six years by gender. There are consistently more female HN certifications than male.

Table 4 *Female HN certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total HN certs	9,770	10,514	11,072	11,622	11,430	12,035
1 (most deprived)	21.1%	22.3%	22.9%	23.2%	23.4%	24.5%
2	21.8%	21.8%	22.3%	21.6%	21.5%	20.9%
3	20.1%	19.8%	20.2%	20.2%	20.2%	20.5%
4	20.0%	19.8%	19.1%	18.6%	19.0%	18.8%
5 (least deprived)	16.9%	16.2%	15.4%	16.5%	16.0%	15.2%

Table 5 *Male HN certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total HN certs	7,687	8,435	9,230	9,731	9,666	9,673
1 (most deprived)	19.4%	20.1%	19.7%	19.9%	18.7%	20.2%
2	20.5%	19.6%	20.3%	20.3%	20.3%	19.5%
3	19.7%	19.9%	20.3%	21.0%	20.6%	20.9%
4	20.0%	20.6%	19.9%	20.2%	21.1%	20.8%
5 (least deprived)	20.4%	19.8%	19.8%	18.5%	19.3%	18.6%



These tables demonstrate quite significant differences between female and male certification patterns. While male certifications are generally split fairly even across quintiles, female certifications are much more skewed towards the more deprived quintiles. In 2014-15, for instance, almost a quarter of female HN certifications were from the most deprived quintile, while only 15% were from the least deprived.

Articulation

As mentioned above, this data confirms that HNs serve all of Scotland's communities well. They allow learners from right across Scotland to achieve a higher education qualification when this otherwise may not be the case. They then provide learners with a way into employment or on to the second or third year of a university course. We know that this is a valuable route for those in Scotland's more deprived areas (and who are over-represented in this HN certification data).

Although the Scottish Funding Council is currently working to improve college leaver destination information⁴, at the moment we have no way of looking at HN graduate destinations in relation to SIMD unless the leavers articulate onto a degree course at a Scottish higher education institution.

Over the years 2009-10 to 2013-14, an average of 23% of advanced standing⁵ entrants to Scottish higher education institutions were from the 20% most deprived communities.

Table 6 *Proportion of advanced standing entrants to Scottish HEIs from 20% most deprived areas*

2009-10	2010-11	2011-12	2012-13	2013-14
23.9%	22.8%	22.5%	23.6%	23.2%



Findings

Certifications by Sectoral Group

It was decided to split the HNs into 24 separate sectoral groups to see how the proportion of certifications by quintile varied across different subject types. Analysis by gender at sectoral level was also undertaken to see if there were differences between female and male certifications within subject areas.

The breakdown by gender and sector throws up some interesting differences. For instance, we know that HNs widen access to higher education (whether as a higher education qualification in their own right or as an articulation route into a degree programme) in Scotland's more deprived communities⁶, but, on the other hand, in some sectors it seems that HNs are used as an alternative to going to university for those who we may ordinarily expect to take the school to university route⁷.

Information about individual sectoral areas is given in the appendix, but specific observations from the data possibly worth noting here include:

- Certifications for subjects in the computing, software & IT and finance & accounting sectors are dominated by the first two (more deprived) quintiles
- Certifications for subjects in the hair & beauty, health & social care, and hospitality, travel & tourism sectors are dominated by the most deprived quintile and by females
- Conversely, certifications for subjects in the engineering and oil & gas sectors are dominated by the less deprived quintiles and by males

Appendix

Certifications by Sectoral Group

It should be borne in mind that some of these sectoral groups do not have particularly high numbers of certifications (for instance, in some sectors, individuals are more likely to undertake qualifications such as SVQs). Likewise, the total number of certifications in a sector can fluctuate over time.

Therefore, caution is urged when drawing conclusions from the following data.

1. Building Engineering

Unlike the overall HN trend, certifications from the most deprived 20% of communities for building engineering have consistently been lower than 20% over the past few years. This has ranged from 16.6% in 2009-10 to a low of 13.6% in 2013-14.

Table 7 *Building engineering certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	435	435	415	343	301	313
1 (most deprived)	16.6%	16.6%	14.7%	15.5%	13.6%	15.3%
2	18.9%	18.9%	21.4%	23.3%	19.3%	16.6%
3	21.6%	21.6%	22.2%	21.9%	20.6%	19.8%
4	22.5%	22.5%	20.0%	24.8%	26.9%	27.5%
5 (least deprived)	20.5%	20.5%	21.7%	14.6%	19.6%	20.8%

Less than a fifth of building engineering certifications in each of the past six years have been for females. Nonetheless, it may be worth noting that, in general, a lower proportion of female certifications come from the most deprived 20% of datazones than males.

2. Business Skills

Certifications in business skills subjects over the past six years generally follow the overall HN trend, with more than 20% of certifications from the most deprived 20% of areas and less than 20% from the least deprived areas.

Table 8 *Business skills certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	1,744	1,968	2,162	2,220	2,095	2,160
1 (most deprived)	20.6%	22.7%	22.7%	20.6%	22.2%	22.3%
2	22.0%	20.5%	21.8%	21.0%	21.1%	22.0%
3	20.0%	19.9%	18.7%	19.9%	19.9%	20.5%
4	19.3%	21.4%	19.3%	20.3%	19.1%	19.0%
5 (least deprived)	18.2%	15.5%	17.4%	18.2%	17.7%	16.3%

Appendix

Business skills certifications are dominated by females – between 69% and 75% of certifications have been for females over the six-year period. Although, in general, there are not large differences in the proportion of certifications by quintile according to gender, there are a higher proportion of certifications from the least deprived quintile for males than for females. This is shown in the table below.

Table 9 *Business skills certifications from the least deprived quintile, 2009-10 to 2014-15*

Quintile	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
5 - female	16.9%	14.2%	15.5%	16.8%	15.5%	13.8%
5 - male	22.2%	19.6%	22.4%	21.7%	22.5%	21.7%

3. Computing, Software & IT

Over the period, computing, software & IT subject certifications have been dominated by the most deprived two quintiles. On the other hand, in 2014-15, only 13% of certifications came from the least deprived quintile.

Table 10 *Computing, software & IT certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	1,629	1,740	1,794	1,968	1,789	1,823
1 (most deprived)	24.6%	24.9%	25.4%	25.4%	22.6%	26.5%
2	25.3%	24.5%	23.3%	22.2%	23.8%	21.3%
3	18.6%	19.2%	20.0%	21.4%	22.0%	21.0%
4	15.6%	16.3%	15.2%	15.5%	16.0%	17.9%
5 (least deprived)	16.0%	15.1%	16.2%	15.5%	15.5%	13.3%

The vast majority of certifications in the computing, software & IT sector are for males, and the proportion of female certifications has been decreasing over recent years: in 2014-15, 11% of HN certifications in this sector were for females. Nonetheless, females consistently have a higher proportion of certifications from the most deprived quintile than males.

4. Construction

Construction subject certifications over the past six years have tended not to follow a particular pattern, with variations in the proportion of certifications from each quintile. In 2014-15, more than a quarter of certifications in this sector were from the most deprived quintile.

Table 11 *Construction certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	363	337	352	378	408	370
1 (most deprived)	14.3%	18.1%	17.0%	20.6%	20.1%	25.1%
2	24.0%	27.3%	23.9%	19.8%	19.9%	16.5%
3	21.8%	17.5%	24.4%	22.0%	19.9%	22.4%
4	21.2%	19.0%	17.9%	16.7%	20.6%	17.3%
5 (least deprived)	18.7%	18.1%	16.8%	20.9%	19.6%	18.6%

With 51 female certifications in 2014-15, there are too few construction certifications to look at the quintile split by gender.

5. Creative & Cultural

Certifications for creative & cultural subjects have been split fairly evenly between females and males over the past five years. The certification pattern for females and males by quintile is not markedly different.

Meanwhile, the overall certification split by quintile shows that certifications are spread relatively evenly across the quintiles. However, 2014-15 was the first year over the past six where the proportion of certifications from the most deprived quintile exceeded 20%.

Table 12 *Creative & cultural certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	2,805	3,170	3,402	3,581	3,649	3,566
1 (most deprived)	19.9%	19.6%	19.6%	18.8%	18.7%	21.7%
2	18.8%	18.5%	19.9%	20.9%	20.8%	19.1%
3	18.3%	18.7%	19.0%	20.4%	19.9%	20.0%
4	20.9%	22.0%	20.5%	19.5%	20.2%	19.6%
5 (least deprived)	22.2%	21.3%	21.0%	20.5%	20.4%	19.6%

Appendix

6. Engineering

Certifications for engineering subjects have been relatively low from the 20% most deprived areas over the period – quintiles 3 and 4 have generally had the highest proportion of certifications.

Table 13 *Engineering certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	1,520	1,654	1,859	1,913	2,020	2,119
1 (most deprived)	15.7%	15.5%	14.2%	16.5%	14.6%	16.1%
2	18.9%	18.1%	20.7%	20.0%	19.1%	18.1%
3	23.6%	22.1%	22.9%	22.7%	22.9%	22.4%
4	21.3%	23.0%	21.6%	23.0%	24.6%	24.0%
5 (least deprived)	20.5%	21.2%	20.6%	17.8%	18.8%	19.4%

Only around 7% of engineering subject certifications in 2014-15 were for females, but the pattern of certification by quintile for both genders is broadly similar to the overall picture in the table above.

7. Fashion & Textiles

Although the proportion of certifications by quintile for fashion & textile subjects has varied over the period, it is noticeable that the proportion from the least deprived quintile is relatively high, and higher than for many other subject groups.

Table 14 *Fashion & textiles certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	233	218	207	253	261	231
1 (most deprived)	13.3%	17.9%	16.9%	22.5%	21.1%	16.9%
2	21.9%	17.0%	17.4%	18.6%	16.5%	16.9%
3	18.5%	16.5%	22.2%	14.2%	18.0%	22.1%
4	21.0%	21.1%	22.2%	21.3%	20.7%	20.3%
5 (least deprived)	25.3%	27.5%	21.3%	23.3%	23.8%	23.8%

Male certifications accounted for only 1% of the total in 2014-15. There are, therefore, too few male certifications to look at the quintile split by gender.

8. Finance & Accounting

Finance & accounting subject certifications are dominated by those from quintiles 1 and 2, with relatively few certifications from the least deprived 20% of areas.

Table 15 *Finance & accounting certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	905	1,084	1,076	1,094	1,028	1,154
1 (most deprived)	25.5%	27.4%	28.4%	27.1%	25.0%	27.1%
2	22.8%	22.8%	23.8%	22.1%	24.0%	23.9%
3	18.9%	17.9%	17.6%	19.5%	19.0%	18.8%
4	17.3%	17.4%	17.2%	15.6%	16.5%	18.2%
5 (least deprived)	15.5%	14.5%	13.0%	15.6%	15.5%	12.0%

Around a third of certifications for finance & accounting subjects are for males. It is noticeable that there are proportionally more male certifications from the least deprived 20% of datazones than female. This is shown in the table below.

Table 16 *Finance & accounting certifications from the least deprived quintile, 2009-10 to 2014-15*

Quintile	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
5 - female	14.6%	13.2%	10.2%	13.8%	10.8%	9.9%
5 - male	17.5%	17.3%	18.9%	19.4%	23.9%	15.8%

9. Food & Drink

There have only been a total of 30 HN food & drink subject certifications over the past five years, so not enough for an analysis by quintile.

Appendix

10. Hair & Beauty

In the more recent years, especially, there have been relatively few hair & beauty subject certifications from the less deprived quintiles; 32% of certifications in 2014-15 were from the most deprived quintile.

Table 17 *Hair & beauty certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	1,091	995	1,067	1,099	1,164	1,230
1 (most deprived)	24.7%	23.4%	21.9%	26.9%	29.0%	31.5%
2	19.6%	22.3%	24.9%	24.7%	21.2%	20.9%
3	20.5%	19.2%	19.2%	19.1%	20.5%	18.5%
4	18.1%	17.9%	17.5%	15.2%	14.8%	16.0%
5 (least deprived)	17.1%	17.2%	16.4%	14.0%	14.4%	13.0%

There have been too few male certifications (between 1% and 2%) over the past few years to look at the quintile split by gender.

11. Health & Social Care

Like hair & beauty, health & social care subject certifications are dominated by the most deprived quintile. The least deprived quintile provided only 12% of certifications in 2014-15.

Table 18 *Health & Social Care certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	2,865	3,048	3,126	3,315	3,099	3,257
1 (most deprived)	23.0%	25.6%	25.4%	25.8%	25.7%	27.1%
2	24.1%	23.6%	22.4%	22.7%	22.4%	23.8%
3	20.0%	19.9%	21.6%	19.9%	20.6%	20.0%
4	18.5%	17.8%	17.8%	18.1%	18.6%	16.7%
5 (least deprived)	14.4%	13.1%	12.9%	13.5%	12.8%	12.4%

The proportion of male certifications in this sector has varied between 14% and 11% over the six-year period. The pattern of certifications by quintile is very similar for males and females.

12. Hospitality, Travel & Tourism

Over recent years, HN certifications from the most deprived quintile have dominated the hospitality, travel & tourism subject area.

Table 19 *Hospitality, travel & tourism certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	737	803	952	1,032	995	1,112
1 (most deprived)	22.4%	22.4%	24.1%	25.3%	24.8%	24.3%
2	18.0%	21.0%	21.5%	21.1%	17.7%	19.5%
3	19.4%	18.4%	19.0%	20.6%	17.7%	20.6%
4	20.1%	18.8%	17.4%	15.5%	20.2%	19.3%
5 (least deprived)	20.1%	19.3%	18.0%	17.4%	19.6%	16.3%

Between 21% and 28% of HN certifications for hospitality, travel & tourism subjects have been for males. There is no discernible difference in pattern by quintile according to gender.

13. Justice & Legal

As the table below shows, there is no real trend by quintile in the justice & legal subject area over the past six years, although certifications from the fourth quintile have been consistently high and the past couple of years have seen high proportions of certifications from the most deprived quintile.

Table 20 *Justice & legal certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	291	261	309	264	212	252
1 (most deprived)	17.5%	19.9%	23.9%	18.9%	23.6%	23.0%
2	20.6%	20.3%	18.4%	18.9%	15.1%	19.0%
3	18.6%	17.2%	18.8%	20.8%	18.4%	20.2%
4	24.1%	23.8%	22.0%	22.0%	22.6%	21.0%
5 (least deprived)	19.2%	18.8%	16.8%	19.3%	20.3%	16.7%

Male certifications account for between a third and a half over the six-year period. Although it is noticeable that there are a higher proportion of male certifications from the least deprived quintile than female, it is difficult to draw any firm conclusions from the relatively small numbers.

Appendix

14. Land Based & Environmental

Land based & environmental subjects have had proportionally fewer certifications from the first two quintiles than from the others – particularly the most deprived quintile. This is liable to be because more deprived areas are more likely to be in urban areas. Certifications are dominated by quintiles three and four.

Table 21 *Land based & environmental certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	591	618	642	684	624	610
1 (most deprived)	6.4%	6.6%	7.9%	9.9%	9.9%	8.7%
2	13.2%	13.6%	14.5%	15.2%	17.5%	14.9%
3	23.7%	24.9%	25.4%	24.1%	23.7%	27.2%
4	33.5%	34.1%	34.6%	33.2%	33.2%	31.8%
5 (least deprived)	23.2%	20.7%	17.6%	17.5%	15.7%	17.4%

Female certifications have accounted for between 54% and 59% of the total across the period. The above pattern of certifications is repeated when we look at the split by gender.

15. Learning & Teaching

Possibly because of its relatively low uptake, there is no pattern by quintile for certifications in the learning & teaching area over the five-year period.

Table 22 *Learning & teaching certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	84	131	111	98	111	107
1 (most deprived)	25.0%	22.9%	21.6%	18.4%	26.1%	20.6%
2	27.4%	19.8%	18.0%	25.5%	24.3%	15.0%
3	16.7%	22.9%	18.9%	19.4%	16.2%	26.2%
4	14.3%	21.4%	26.1%	16.3%	17.1%	18.7%
5 (least deprived)	16.7%	13.0%	15.3%	20.4%	16.2%	19.6%

There have been too few male learning & teaching certifications to carry out an analysis by gender – males accounted for only 3% of certifications in this area in 2014-15.

16. Manufacturing Engineering

Certifications by quintile in the manufacturing engineering area do not show a consistent trend over the past few years – again, this is possibly because of the relatively small certification numbers.

Table 23 *Manufacturing engineering certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	116	193	182	171	176	184
1 (most deprived)	25.0%	22.3%	19.8%	21.6%	26.1%	22.8%
2	21.6%	26.4%	20.3%	20.5%	19.9%	15.8%
3	15.5%	16.1%	20.9%	18.7%	13.1%	23.4%
4	23.3%	16.6%	20.9%	20.5%	19.9%	17.9%
5 (least deprived)	14.7%	18.7%	18.1%	18.7%	21.0%	20.1%

Female certifications have made up between 25% and 42% of the total over the period. No conclusions can be drawn looking at certifications by gender.

17. Maritime

Maritime is also a relatively small sector – no real conclusions can be drawn from the quintile split below, although the sector has tended to have a high proportion of certifications from quintiles 3 and/or 4.

Table 24 *Maritime certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	55	70	107	170	261	192
1 (most deprived)	18.2%	17.1%	15.9%	10.6%	9.2%	13.5%
2	25.5%	14.3%	19.6%	22.4%	20.3%	19.3%
3	21.8%	22.9%	29.0%	28.8%	28.7%	25.5%
4	27.3%	25.7%	25.2%	25.3%	20.3%	24.0%
5 (least deprived)	7.3%	20.0%	10.3%	12.9%	21.5%	17.7%

At 5% in 2014-15, there are too few female certifications in this sector to do an analysis by gender.

Appendix

18. Oil & Gas

HN certifications for oil & gas subjects are dominated by quintiles 4 and 5. There are proportionally very few certifications from the more deprived areas, particularly quintile 1. This may be because the colleges that provide courses in oil & gas subjects (eg Forth Valley, North East Scotland) are in less deprived areas themselves. Again, however, this is a relatively small sector in terms of HN certifications.

Table 25 *Oil & gas certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	94	128	136	141	161	162
1 (most deprived)	2.1%	10.2%	11.8%	10.6%	7.5%	9.3%
2	17.0%	10.2%	11.8%	15.6%	13.0%	7.4%
3	13.8%	25.8%	22.1%	19.9%	18.6%	25.9%
4	39.4%	25.8%	31.6%	28.4%	36.6%	29.0%
5 (least deprived)	27.7%	28.1%	22.8%	25.5%	24.2%	28.4%

There were 23 female certifications in this sector in 2014-15 – too few for an analysis by gender.

19. Retail

The figures for retail subjects are given below, but they are relatively low (particularly for 2011-12), so should be treated with caution.

Table 26 *Retail certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	61	57	31	75	85	100
1 (most deprived)	18.0%	33.3%	25.8%	21.3%	22.4%	20.0%
2	18.0%	19.3%	32.3%	16.0%	18.8%	21.0%
3	16.4%	14.0%	6.5%	16.0%	16.5%	23.0%
4	26.2%	15.8%	22.6%	21.3%	21.2%	15.0%
5 (least deprived)	21.3%	17.5%	12.9%	25.3%	21.2%	21.0%

A quarter of certifications in 2014-15 were from males.

20. Science & Maths

Quintiles 1 and 2 were over-represented in the science & maths certification analysis in 2010-11, 2011-12, and 2012-13, but proportions of certifications by quintile have varied substantially over the years.

Table 27 *Science & maths certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	242	282	307	450	465	510
1 (most deprived)	19.4%	30.1%	26.4%	24.2%	21.3%	20.6%
2	29.3%	19.9%	23.1%	18.4%	24.1%	18.2%
3	19.8%	20.6%	17.3%	17.8%	19.6%	22.7%
4	19.0%	14.9%	15.6%	18.2%	18.7%	19.6%
5 (least deprived)	12.4%	14.5%	17.6%	21.3%	16.3%	18.8%

Around two-thirds of these certifications over the period are for females. In previous years, there have been a higher proportion of female certifications from the most deprived quintile than male, but this was no longer the case in 2014-15. This is shown below.

Table 28 *Science & maths certifications from the most deprived quintile, 2009-10 to 2014-15*

Quintile	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
1 - female	21.1%	33.7%	30.8%	27.4%	23.4%	20.4%
1 - male	16.8%	24.3%	18.8%	18.9%	17.9%	20.9%

Appendix

21. Social Sciences

Certifications in social sciences have tended to follow the overall HN pattern, with proportionally more at the more deprived quintiles and fewer at the less deprived quintiles. Certifications were more evenly split across the quintiles in 2014-15.

Table 29 *Social sciences certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	625	747	832	845	835	907
1 (most deprived)	21.6%	19.3%	25.1%	23.8%	21.7%	19.5%
2	21.6%	21.0%	22.1%	21.1%	22.4%	21.5%
3	22.6%	21.6%	18.8%	20.2%	20.7%	19.4%
4	18.1%	19.5%	17.8%	16.2%	17.2%	20.8%
5 (least deprived)	16.2%	18.6%	16.2%	18.7%	18.0%	18.7%

Across the six years, certifications in this sector for males have ranged between 28% and 32%. In 2014-15, 14% of male certifications were from the most deprived quintile, compared to 22% for females. On the other hand, 22% of male certifications were from the least deprived quintile, compared to only 17% for females.

22. Sport & Leisure

Certifications for sport & leisure HNs, while large, do not show any discernible pattern across the quintiles and are generally quite evenly split.

Table 30 *Sport & leisure certifications by quintile, 2009-10 to 2014-15*

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total certs	946	1,016	1,198	1,224	1,333	1,324
1 (most deprived)	17.8%	18.4%	19.5%	20.7%	21.4%	19.9%
2	20.9%	19.8%	19.5%	17.6%	20.3%	19.1%
3	18.8%	19.8%	20.9%	20.8%	17.6%	19.6%
4	20.9%	20.6%	20.3%	22.0%	20.6%	20.5%
5 (least deprived)	21.6%	21.5%	19.8%	19.0%	20.2%	20.8%

Over the past six years, females account for between 31% and 35% of certifications in this sector. There are no consistent differences when we look at the quintiles by gender.



23. Supply Chain & Logistics

There have not been enough certifications in the supply chain & logistics sector to do an analysis by quintile.

24. Utilities

There have not been enough certifications in the utilities sector to do an analysis by quintile.

25. Waste

There have not been enough certifications in the waste sector to do an analysis by quintile.

Endnotes

¹ Scottish Government The Scottish Index of Multiple Deprivation
<http://www.gov.scot/Topics/Statistics/SIMD/Publications>

² Equally, it is important to remember that the SIMD identifies multiply-deprived areas – not everyone in a deprived area is individually deprived, and not all deprived individuals live in multiply-deprived areas.

³ 5% of records were removed from the data for each year, apart from 2013/14, when 4% of records were removed.

Reasons for removal were:

- Candidate postcode was incorrect (eg contained a typographical error)
- Candidate postcode did not appear in the SIMD data – that is, it is an out-of-date or newer-than-2012 postcode
- Candidate postcode was not Scottish, despite the centre being Scottish
- Candidate postcode was the same as the centre postcode
- Candidate postcode was an employer's

It is likely, however, that there are still records in the data where the postcode held in the candidate postcode field is not accurate. However, all efforts have been made to mitigate this.

⁴ Work currently being undertaken by the SFC on graduate destinations will in future allow them to derive results for all full-time HN, NC, and SVQ candidates by SIMD.

⁵ Advanced standing = students entering the second year of a degree programme at university with an HNC or entering the third year of a degree programme with an HND. This is also referred to as true articulation or full credit.

Advanced progression (not referenced in this paper) = students entering the second year of a degree programme at university with an HND. It can also refer to some students receiving partial credit for an HNC but entering the first year of a degree programme. This is also referred to as partial credit.

⁶ In 2011-12, just under 10% of undergraduate students in Scottish universities came from the most deprived 20% of neighbourhoods.

Centre for Research in Education Inclusion and Diversity Widening Participation to Higher Education of Under- Represented Groups in Scotland February 2014 http://www.centreonconstitutionalchange.ac.uk/sites/default/files/papers/workingpaper1_performanceindicators_creid.pdf

Moreover, Scottish Government figures show that 36.4% of 2012-13 publicly-funded school leavers went on to HE the following year. However, there are wide disparities based on SIMD ranking: 18.1% of those from the most deprived decile and 22.3% of those from the second most deprived decile progressed to HE from school compared to 52.4% and 61.0% from deciles 9 and 10, respectively.

The same source shows that 24.5% of 2012-13 publicly-funded school leavers went on to FE the following year. For deciles 1 and 2, however, the figures were 31.9% and 32.6%, respectively, compared to 17.1% and 13.6% for deciles 9 and 10, respectively.


Scottish Government Attainment and Leaver Destinations, Supplementary Data, Table L2.2 June 2014 <http://www.gov.scot/Topics/Statistics/Browse/School-Education/leavedestla/follleavedestat/attainmentandleavers1213>

Finally, UCAS data shows that, in 2015, 15.1% of those from the most deprived quintile applied through UCAS to a higher education institution. (This does not include applications to study HE in colleges and, thus, excludes HNs.) While this has increased five percentage points since 2006, it is still far short of the 52.1% of those from the least deprived quintile who applied through UCAS in 2015.

UCAS Analysis Note 2015/03: Demand for HE by Scottish Index of Multiple Deprivation June 2015
<https://www.ucas.com/corporate/data-and-analysis/analysis-notes>

⁷ See Scottish Funding Council Participation Rates for Entrants to Scottish Higher Education in 2012/13 October 2014
http://www.sfc.ac.uk/web/FILES/Statistical_publications_SFCST072014_ParticipationRatesforEntrantstoScottish/Participation_Rates_for_Entrants_to_Scottish_Higher_Education_in_2012-13.pdf

Higher National Certifications and the Scottish Index of Multiple Deprivation



2009-10 to 2014-15