

## REPORT TO EDUCATION AND CHILDREN'S SERVICES COMMITTEE – 11 OCTOBER 2018

### ANALYSIS OF ATTAINMENT AND ACHIEVEMENT OF YOUNG PEOPLE IN ABERDEENSHIRE SECONDARY SCHOOLS IN ACCREDITED AWARDS, YEAR ENDING JUNE, 2018

#### 1 Recommendations

The Committee is recommended to:

- 1.1 Consider and comment on the contents of this report.
- 1.2 Agree that Area Committees receive a subsequent report on attainment and achievement, which provides information at school level.
- 1.3 Recognise and congratulate young people, their parents and carers, teachers and support staff and the wider children's services across Aberdeenshire, on the level of success and achievement outlined within this report.

#### 2 Background / Discussion

- 2.1 Each year, young people in secondary schools in Aberdeenshire are presented for National Courses and Units certificated by the Scottish Qualifications Authority (SQA), as well as a smaller number presented for a range of qualifications and awards accredited by bodies other than SQA. Since September, 2014, young people's achievements in these awards are collated, analysed and presented through the Scottish Government's benchmarking system, "Insight". The data and analysis presented in this report are sourced from Insight.
- 2.2 A significant change, which affects how young people can achieve national qualifications at National 5 Level, was introduced during session 2017-18. This arose as a result of the decision of the Scottish Government, in September, 2016, to remove the need to complete and pass the internally assessed Unit assessments as part of the mandatory requirements for gaining an award in a course at National 5. From session 2017-18, achievement of a course award at National 5 depends only on performance in the externally assessed component (usually an exam) of the course. Unit assessments will also be removed as a mandatory requirement for achieving a course at Higher Level in session 2018-19, and in Advanced Higher Level in session 2019-20.
- 2.3 As a consequence of this decision, SQA has reviewed the content of the externally assessed components of each course to ensure that national standards have not been compromised by the removal of the internally assessed Unit components of each course. In most cases, this has resulted in some increase in the level of demand expected to complete the external assessment – for example, an increase in the length of the external exam. A second consequence of this decision has been to reduce the pass mark required to achieve an award at Grade D at National 5. This is to ensure that young people will have a greater chance of receiving some credit at National 5 Level through their performance in the external assessment

(previously, where they failed to achieve an award at grade D, they would have still have had credit at National 5 through the internally assessed Units that they had passed). These changes have had some impact on the levels of attainment at National 5 across Scotland, which means that some care needs to be exercised in comparing the 2018 attainment data with previous years. It is also likely that there will be some differences between schools and between local authorities arising from the national changes, in terms of their practice and procedures for presentation of young people for courses at different levels which will have had some impact on reported attainment levels.

2.4 Insight presents attainment data in a number of forms, most importantly in the form of four key national benchmarking measures, as follows:

- Improving attainment in Literacy and Numeracy
- Improving attainment for all
- Increasing post-school participation
- Tackling disadvantage by improving the attainment of lower attainers relative to higher attainers.

The measures are based both on the achievement of each year group stage (S4, S5 or S6) and on cohorts of school leavers. The cycle of when new data becomes available to refresh Insight means that each year's stage data is refreshed in September (following the release of SQA exam results in August), and the Leaver's data is refreshed each February (once the full analysis of destinations of each cohort of school leavers has been completed). The analysis presented in this report largely reflects the update of Insight published on 18 September, 2018, which incorporates the 2018 SQA exam results. For this reason, this report focuses on measures based on year group stages, in order that it can reflect the most recent set of exam results.

2.5 Insight also provides a wide range of additional measures (referred to as "Breadth and Depth" measures) that can also be used to measure performance (see paragraph 2.8.3). The Insight measures used to illustrate attainment levels in this report are of two types: (1) Measures of attainment that focus on the key skills of Literacy and Numeracy; (2) general measures of attainment, based on the Insight tariff point score, which allocates a number of points to each award achieved, with more points being awarded for more advanced awards; and (3) the aforementioned "Breadth & Depth" measures. Insight provides the facility to examine attainment, using each type of measure, by filtering it according to a number of categories: e.g. most/least deprived, most/least able, gender etc.

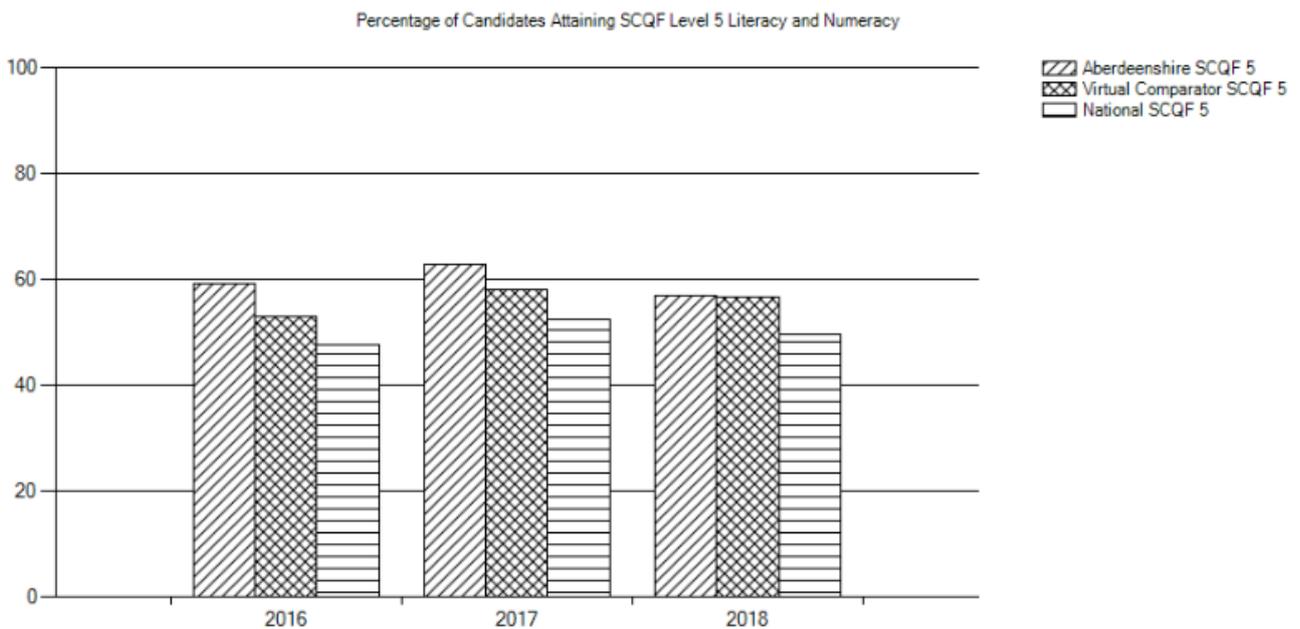
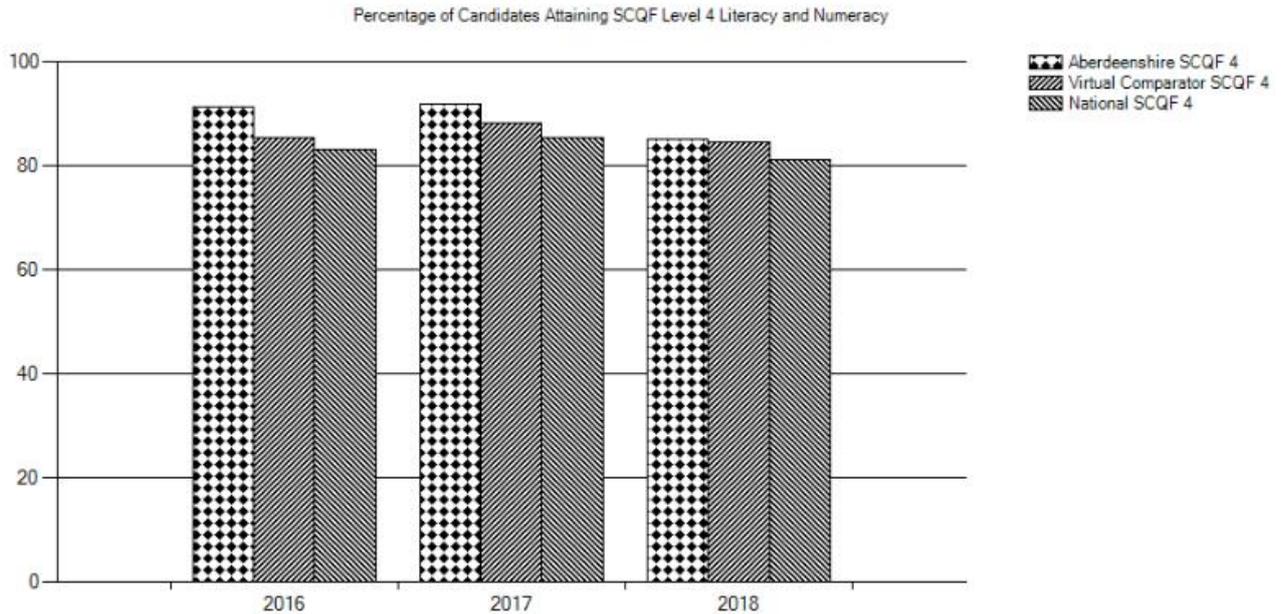
2.6 The key benchmark for performance in Insight is provided by the "Virtual Comparator". The data that underlies performance of the Virtual Comparator for Aberdeenshire is generated by randomly selecting young people from across Scotland that match the characteristics of the Aberdeenshire young people whose performance is being evaluated. Insight also allows performance to be compared against appropriate national level measures.

2.7 It should be noted that Insight is primarily an online resource that presents data in both graphical and tabular form. Reproductions of some of the graphical presentations from Insight have been provided below. To assist in interpretation of graphs from Insight, tables of data are also provided for some of the measures.

### 2.8.1 Local Benchmarking Measure: Literacy and Numeracy

#### The % of pupils at S4 achieving Level 4 or Level 5 Awards in Literacy and Numeracy

This measure is important as it focuses on the key core skills of Literacy and Numeracy. The data below focuses on achievements at SCQF<sup>1</sup> Levels 4 and 5 at S4, the last stage before which young people may consider whether or not to opt to stay on at school. Graphs illustrating attainment at SCQF Levels 4 and 5 are presented below:



% S4 Achieving at:	SCQF Level 4			SCQF Level 5		
	2016	2017	2018	2016	2017	2018
Aberdeenshire	91.4	91.9	85.2%	59.1	62.7	57.1%

<sup>1</sup> Scottish Credit and Qualifications Framework – a national framework within which most accredited awards can be placed at different levels. For example, awards at Higher are at Level 6; those at National 5 at Level 5.

Virtual Comparator	85.4	87.9	84.6%	53.1	57.6	56.6%
National	83.3	85.3	81.1%	47.6	52.3	49.5%

**Analysis:**

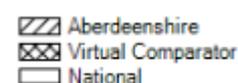
Whilst these figures illustrate that Literacy and Numeracy levels across Aberdeenshire are in line with the Virtual Comparator and continue to significantly exceed the national level, it is also true that they indicate a notable fall in the levels achieved at both Levels 4 and 5. At Level 5, this is largely attributable to the national changes referred to in paragraphs 2.2 and 2.3 above, and is reflected in the fact that there is also a fall in the figures for the Virtual Comparator and the national cohort. Recognition of achievement of an award in Literacy and Numeracy at Level 5 is possible through a variety of routes, one of which was the achievement of the internally assessed component Units, which formed part of the National 5 courses in English and Maths. This route was no longer available during session 2017-18, due to the removal of internally assessed Units as mandatory components of National 5 courses. The fact that the fall is greater in Aberdeenshire than for the national cohort may be due to a larger proportion of young people in Aberdeenshire relying on this route than was the case nationally.

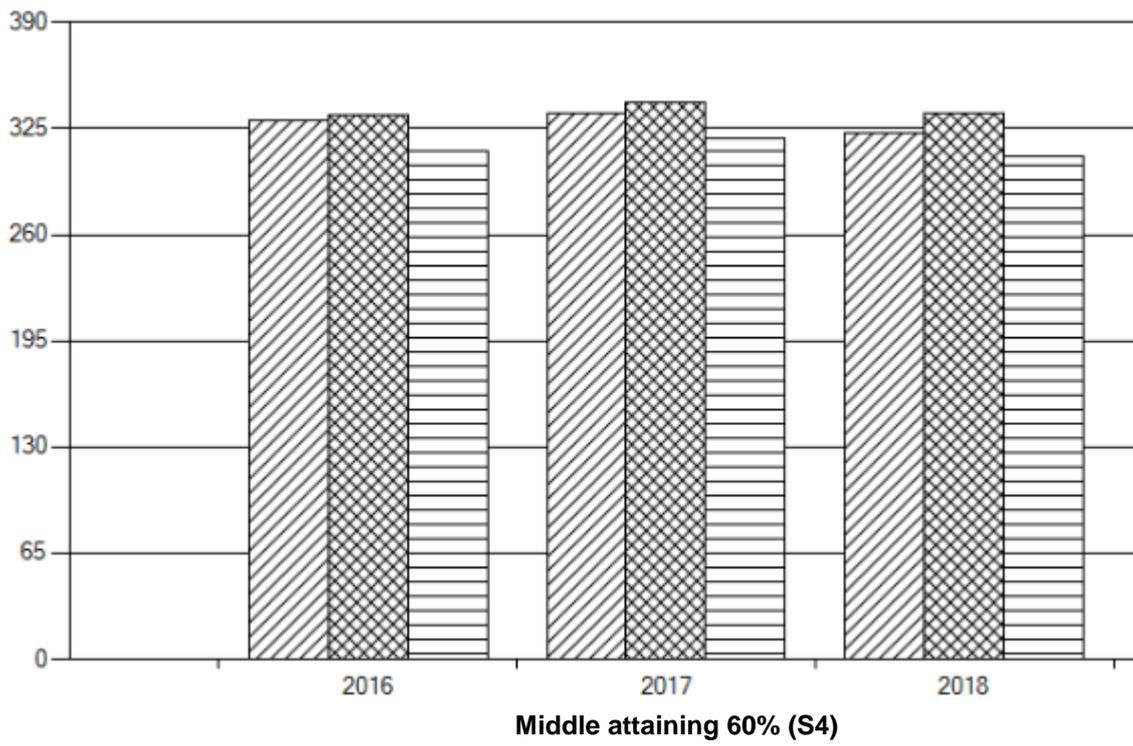
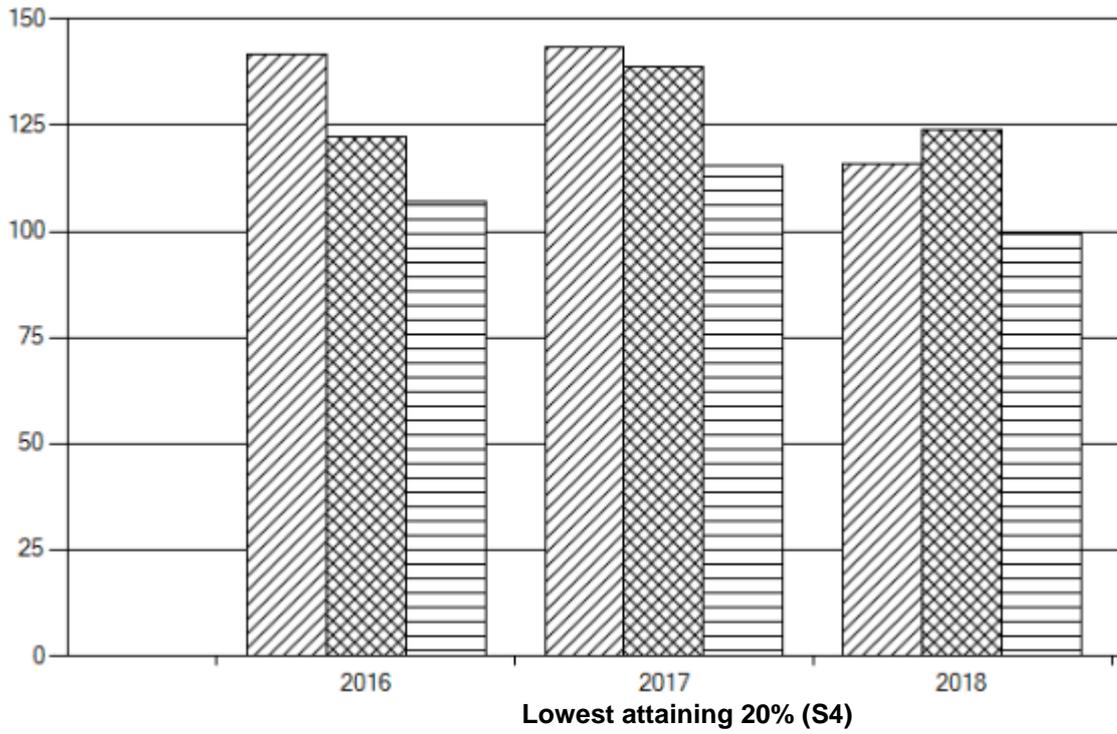
The national changes also form part of the explanation for the fall at Level 4. Through the “Recognising positive achievement” process, young people were able to achieve credit at the level below the one they were presented for, provided they had achieved the internally assessed Units at the higher level (along with additional Units at the lower level). Through this mechanism a proportion of young people achieved awards in English and/or Mathematics which qualified them for awards in Literacy and/or Numeracy at Level 4. Whilst this mechanism was technically still available in 2017-18, national advice was that it would only be so for an “interim period” and that it should only be employed in “exceptional circumstances”. There is again a variation in the extent to which the Aberdeenshire figures have fallen at Level 4 compared with the national picture and this may be attributable to the extent to which this national advice has been implemented across the country. It is also the case that the fall is largely attributable to a fall in those achieving Numeracy at level 4, with the Literacy figures only falling by a very small amount.

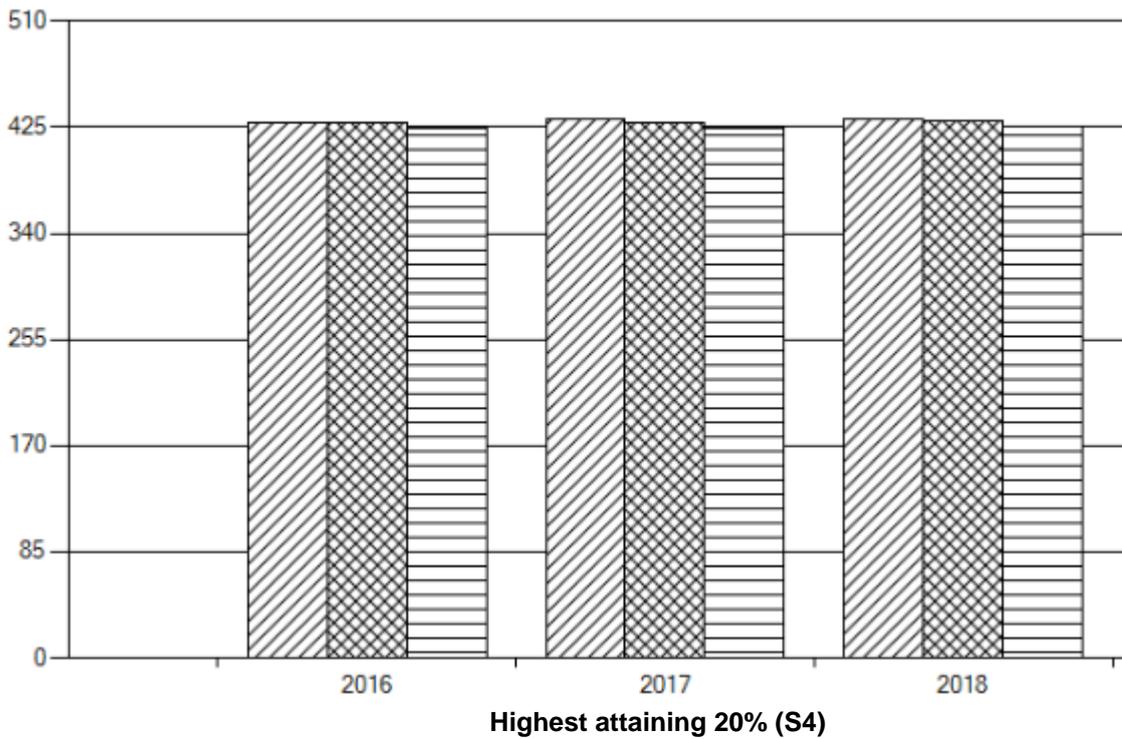
**2.8.2 Local Benchmarking Measure: Improving Attainment for All**

This is a general measure of the level of attainment of the cohort at S4, S5 and S6. It is based on the Insight Tariff Point Scale which allocates points to each qualification, depending on the level of difficulty and volume of work involved. It is presented for each stage as the average tariff point score for each of three sub-cohorts: the least able 20%, the most able 20% and the 60% in the middle, in terms of ability.

**The average total tariff points achieved at S4 by the lowest attaining 20%, the middle attaining 60% and the highest attaining 20%**



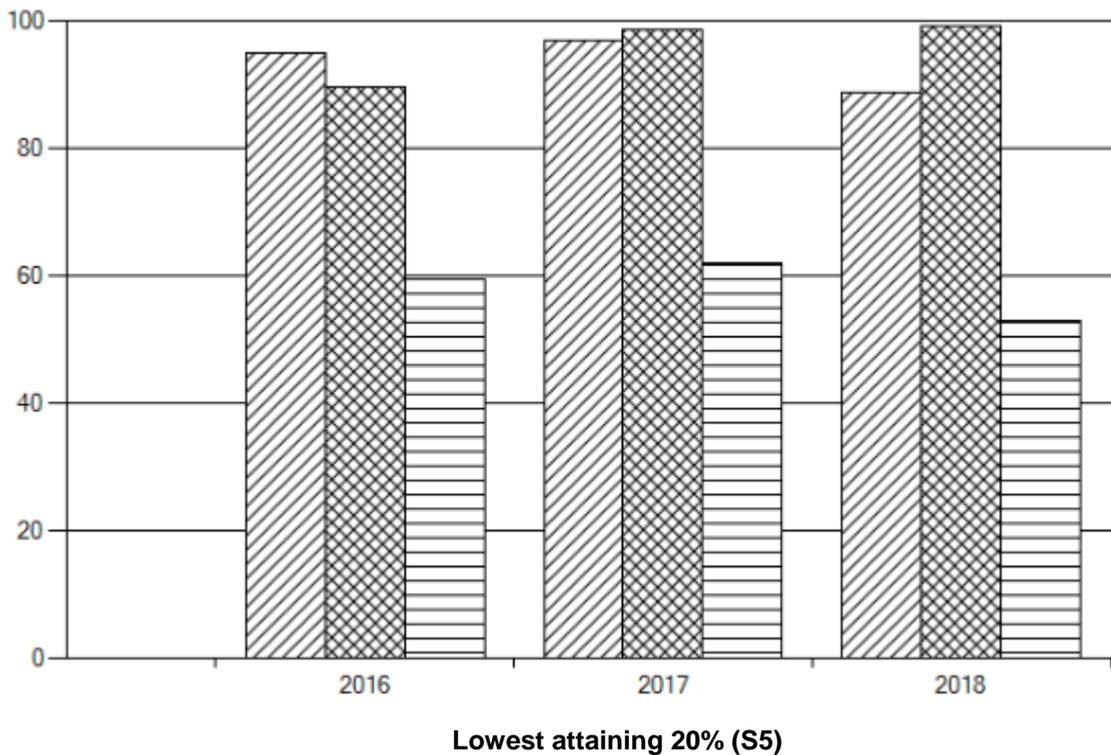


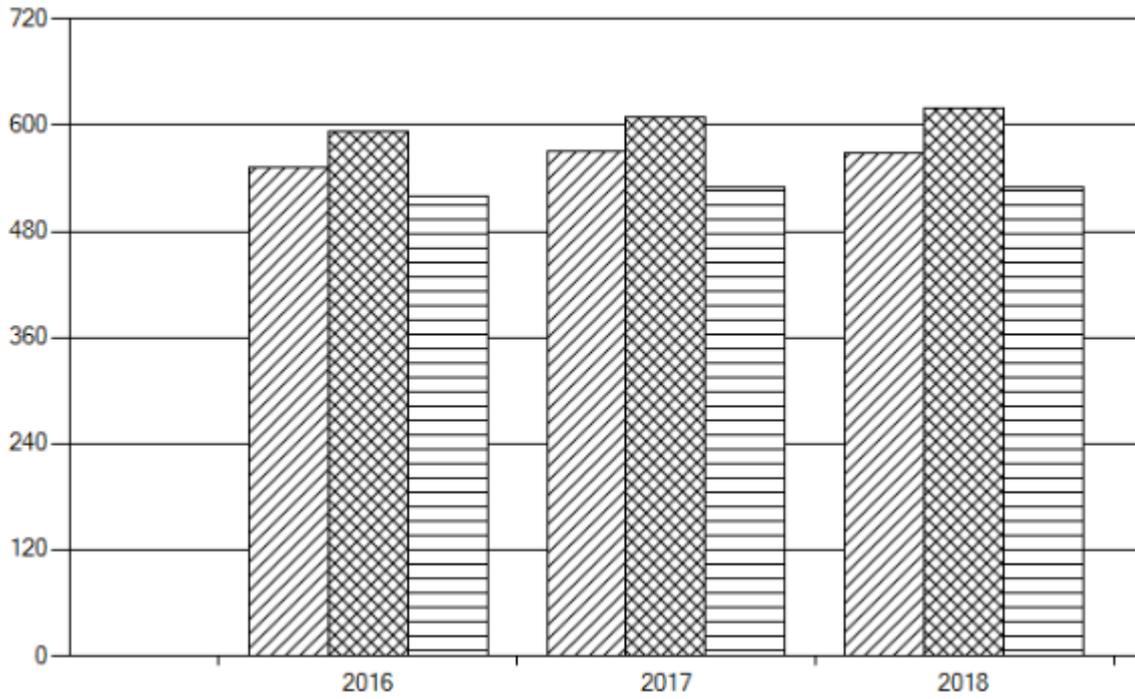


S4	Lowest attaining 20%			Middle attaining 60%			Highest Attaining 20%		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Aberdeenshire	142	143	116	330	335	323	428	431	432
Virtual Comparator	122	139	124	333	341	335	428	429	430
National	107	115	100	312	319	308	424	425	425

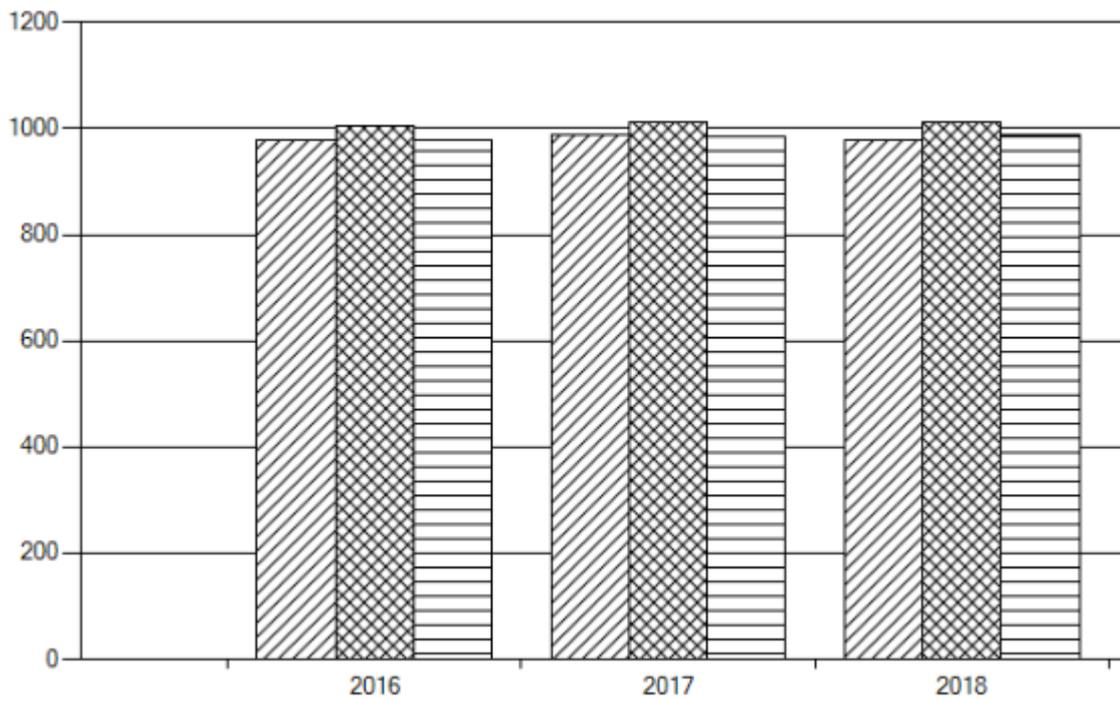
The average total tariff points achieved at S5 by the lowest attaining 20%, the middle attaining 60% and the highest attaining 20%

Aberdeenshire  
 Virtual Comparator  
 National





**Middle attaining 60% (S5)**

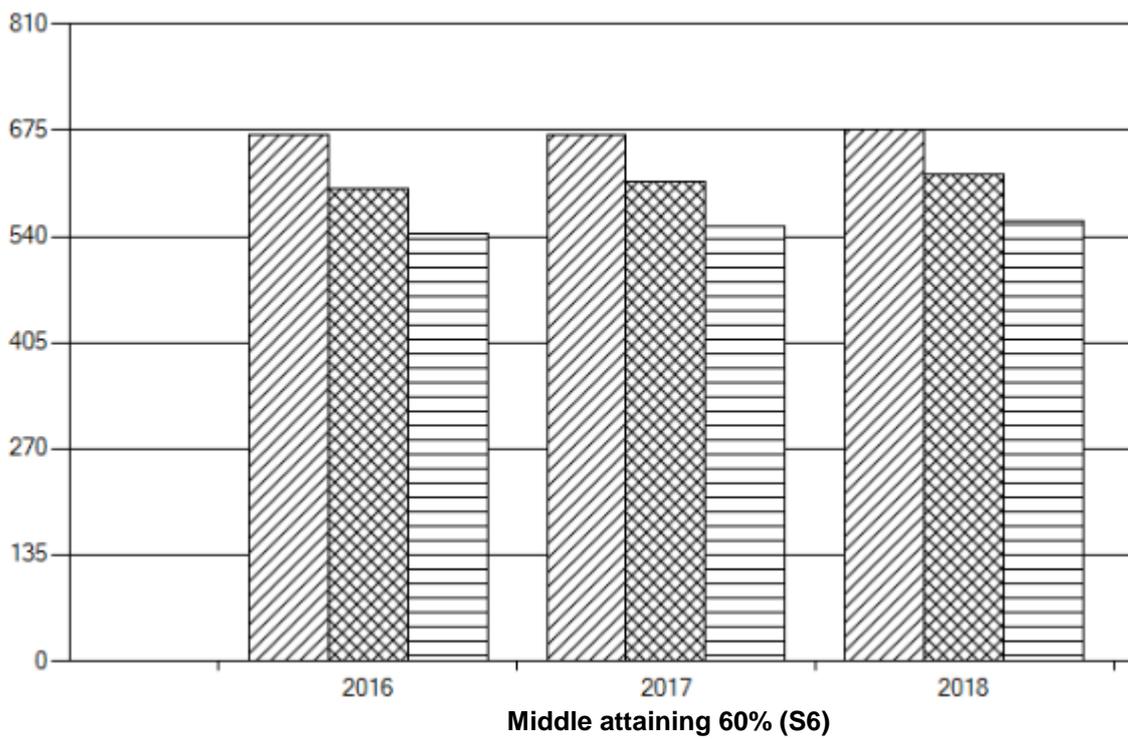
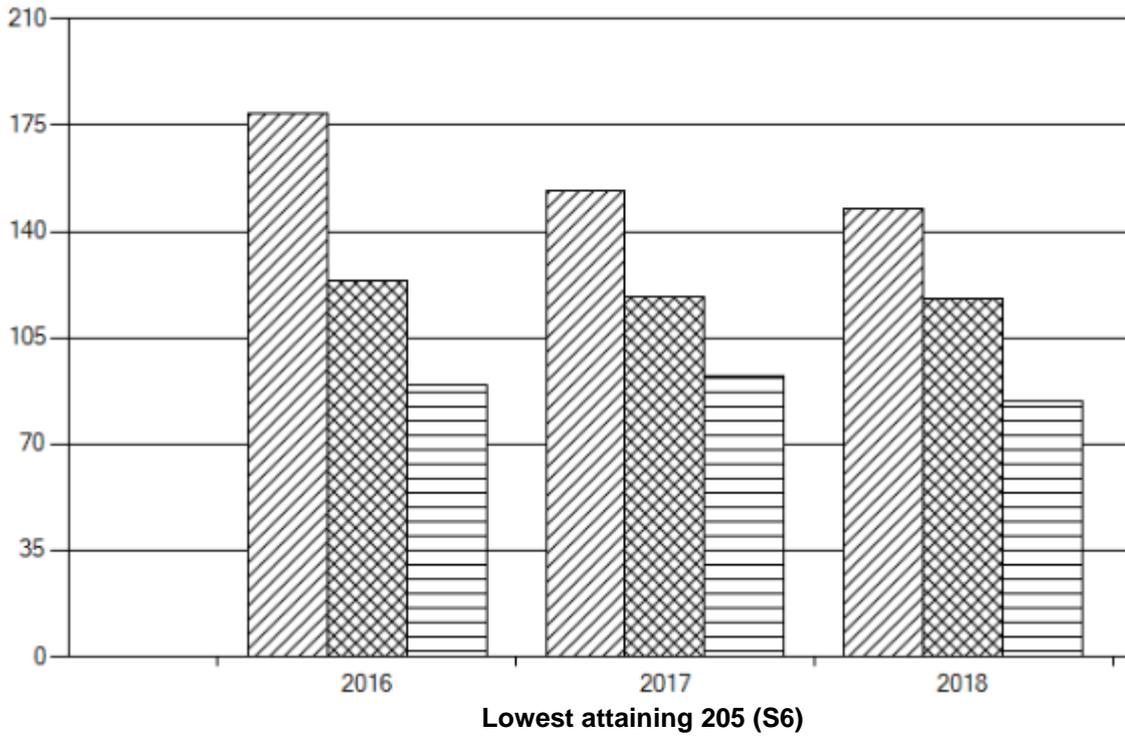


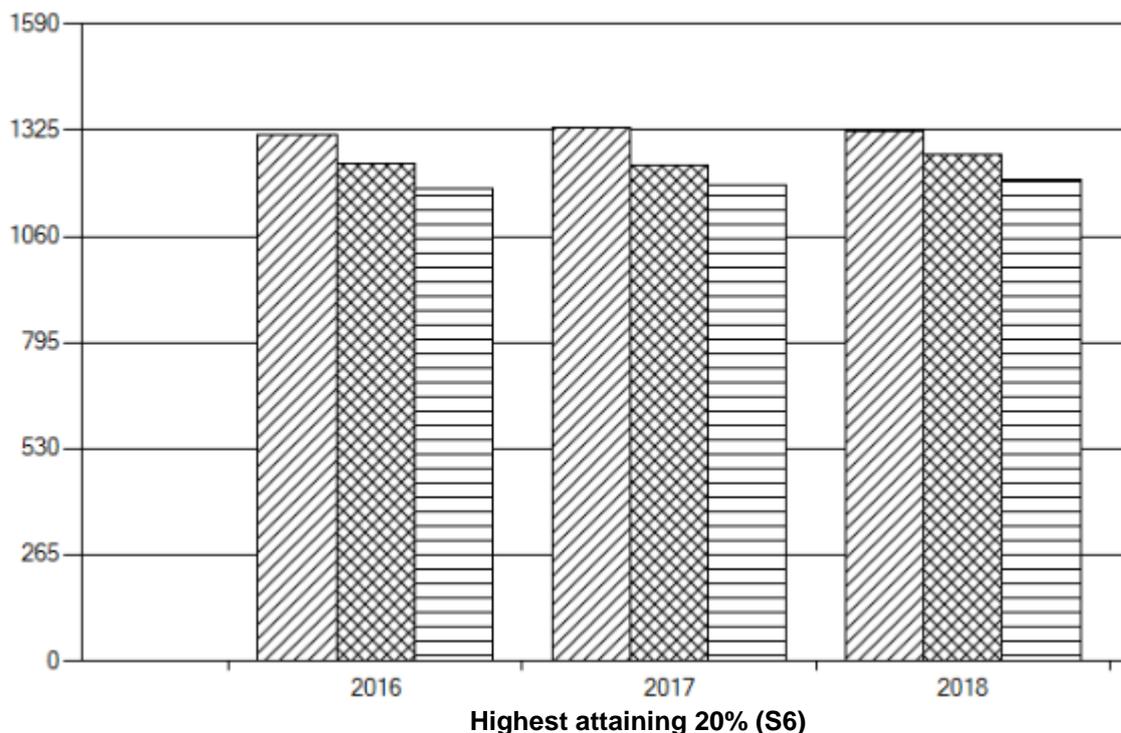
**Highest attaining 20% (S5)**

S5	Lowest attaining 20%			Middle attaining 60%			Highest Attaining 20%		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Aberdeenshire	95	97	89	553	570	569	978	989	979
Virtual Comparator	90	99	99	592	609	618	1004	1013	1013
National	60	62	53	519	530	529	979	986	987

The average total tariff points achieved at S6 by the lowest attaining 20%, the middle attaining 20% and the highest attaining 60%

 Aberdeenshire  
 Virtual Comparator  
 National





S6	Lowest attaining 20%			Middle attaining 60%			Highest Attaining 20%		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Aberdeenshire	179	153	147	669	669	675	1313	1333	1320
Virtual Comparator	124	118	118	600	609	618	1240	1238	1264
National	89	92	84	544	552	560	1180	1188	1203

### Analysis:

At S4, whilst both the Lowest 20% and Middle 60% cohorts were down compared with last year, in neither case is the difference between Aberdeenshire and its Virtual Comparator highlighted as being statistically significant. In both cases, the figure remains above that achieved across Scotland. For the most able cohort, the attainment level was maintained and is in line with the Virtual Comparator and ahead of the national figure.

At S5, the attainment levels of the middle 60% and highest 20% cohorts remained below that of the corresponding Virtual Comparator cohorts and the progress that had been made on these measures last year was not sustained into 2018.

At S6, attainment levels were broadly maintained, with Aberdeenshire's levels exceeding that of the Virtual Comparator and of the national cohort across all three ability groupings.

### 2.8.3 Breadth and Depth Measures

There are a large number of these measures available within Insight and focus within this report is restricted to those that are identified as having an important role in monitoring attainment and setting targets at each stage within all secondary schools during session 2017-18. The following table presents data for three Breadth and Depth measures over the past three years:

	% achieving 5+ Awards at SCQF Level 5 by S4			% achieving 3+ Awards at SCQF Level 6 by S5			% achieving 5+ Awards at SCQF Level 6 by S6		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Aberdeenshire	48.7	50.1	53.3	38.3	41.9	40.2	32.1	32.4	35.6
Virtual Comparator	51.5	53.5	56.6	45.0	47.1	48.2	38.7	39.8	41.2
National	44.5	46.0	48.3	38.8	39.6	40.4	32.6	33.6	34.1

**Analysis:**

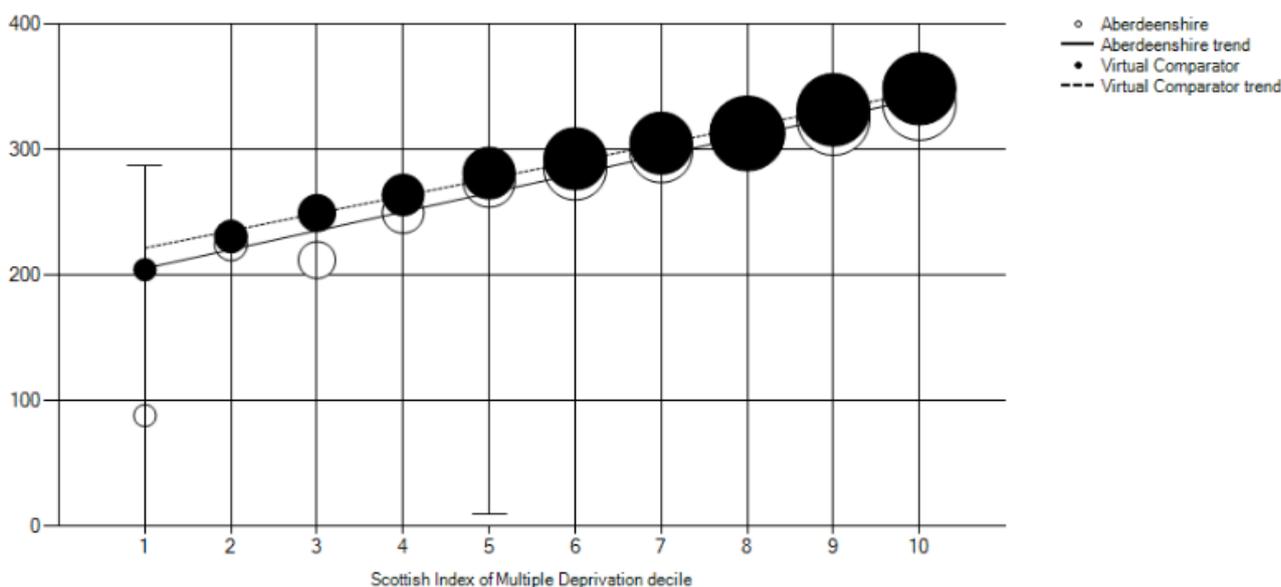
At S4 and S6, these measures demonstrate continued improvement, and in both cases, the attainment level for Aberdeenshire exceeds the national figure, with the S6 figure doing so for the first time for five years. However, in both cases further improvement is required to match the Virtual Comparator.

At S5, as was noted in relation to the Improving Attainment for All measure, the progress made in recent years was not sustained in 2018, and attainment was down slightly compared to last year and remains well below the Virtual Comparator.

**2.8.4 Local Benchmarking Measure: Attainment versus Deprivation**

This measure seeks to provide an insight into the relationship between attainment and relative deprivation and, in terms of the current national priorities, is therefore an important measure.

**Average total tariff score at S4 for Aberdeenshire and Virtual Comparator by SIMD Decile (2017)**



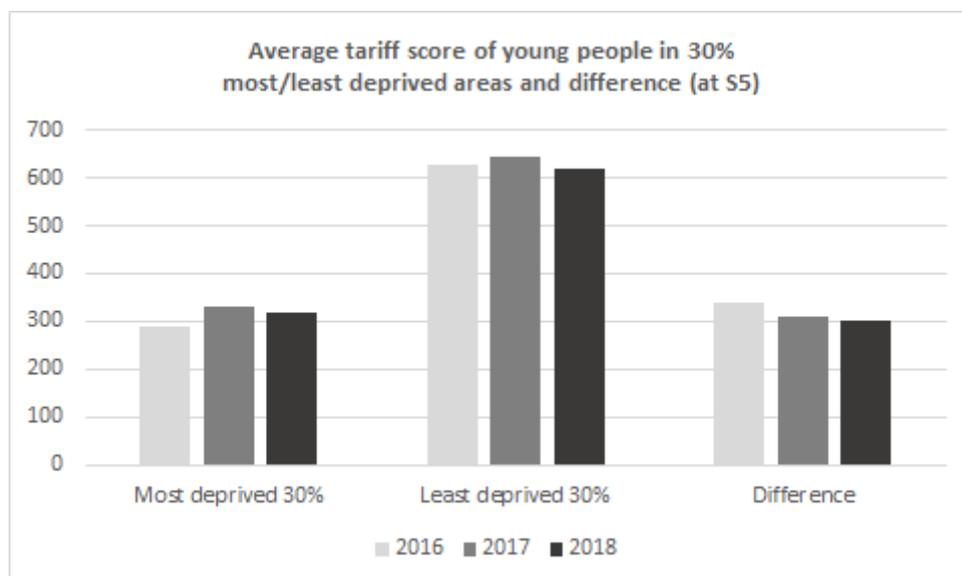
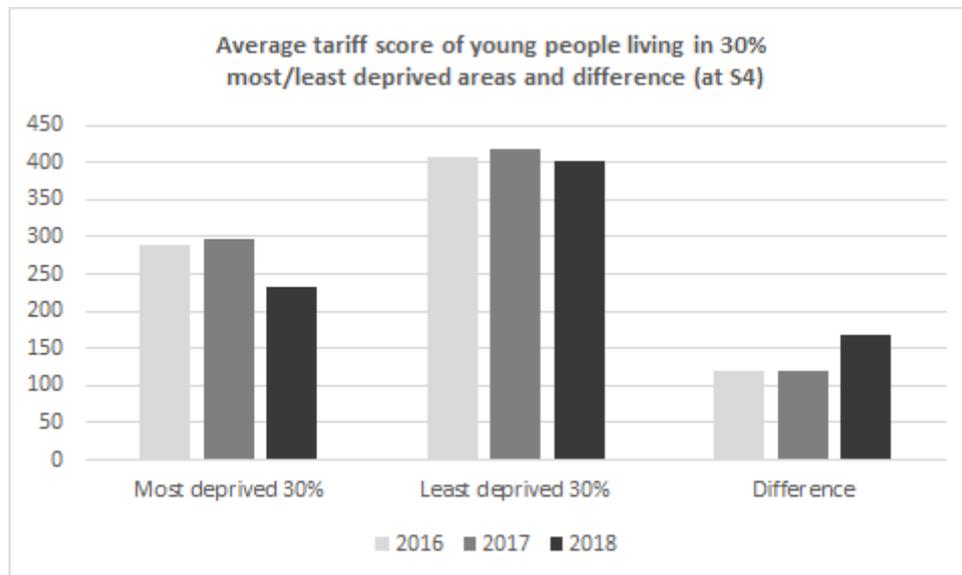
This graph illustrates that, when broken down by SIMD decile, attainment in Aberdeenshire at S4 is broadly in line with that of the Virtual Comparator across most of the deciles. The exceptions are deciles 1 and 3 where the Aberdeenshire figure lies below that of the Virtual Comparator. Whilst this suggests that, in Aberdeenshire in 2018, it is young people in more deprived areas who are likely to have attained at levels lower than the Virtual Comparator, this is not a consistent picture across the years. Over the past five years, deciles 1 and 3 have been broadly in line with the Virtual Comparator and in 2014/15, decile 2 was highlighted as being above the Virtual Comparator.

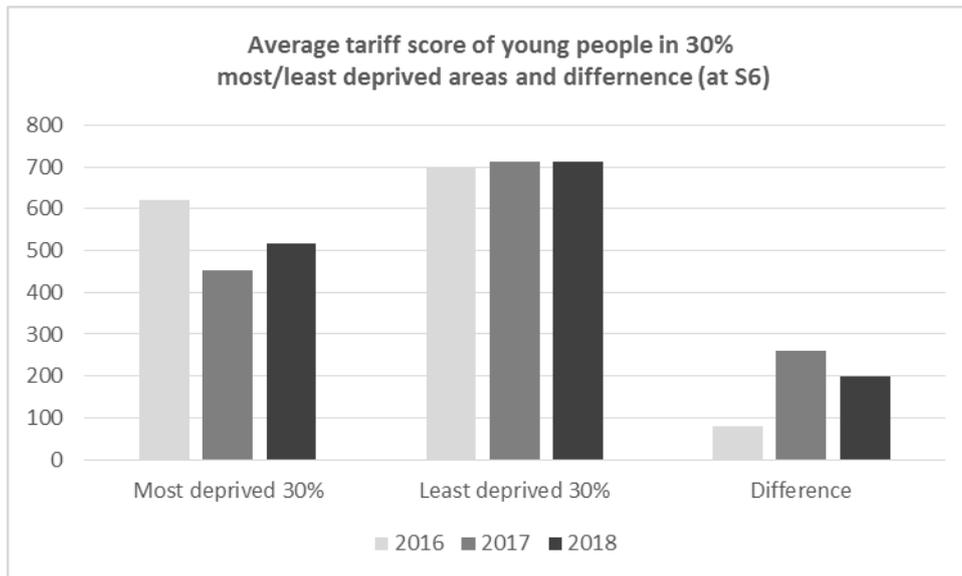
**2.8.5 The deprivation related attainment gap**

The slope of the line in the graph referred to in paragraph 2.8.4 indicates a gap in attainment between young people in the most and least deprived areas in Aberdeenshire. This slope has been evident in this graph over a number of years for Aberdeenshire, its Virtual Comparator and nationally, underlining the fact that closing this gap remains a national priority within the Scottish Government’s National Improvement Framework.

Because the number of young people in Aberdeenshire in the lower deciles is relatively small – e.g. there are only 8 young people counted within Decile 1 in the graph above – quantifying the size of the “gap” can be problematic. To track the “attainment gap” across Aberdeenshire more effectively, measures which aggregate a number of deciles together are to be preferred, as this helps to reduce the extent to which year to year variations are explicable only in terms of normal random statistical variation, rather than substantive changes in levels of attainment.

The following graphs illustrate the gap between the 30% most and least deprived young people over the past three years. For each group, it focuses on the attainment of the section of young people whose attainment is in the middle of the ability distribution (the middle 60%).



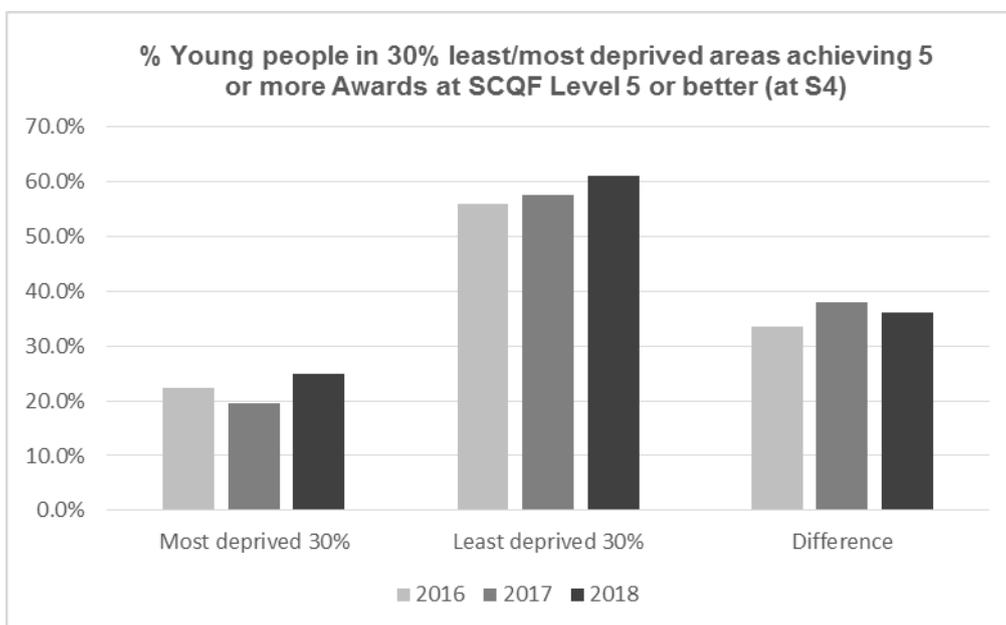


**Analysis:**

These graphs do not evidence consistent progress towards reducing the deprivation related attainment gap. At S6, there has been improvement with the gap reducing as a result of an increase within the most deprived cohort. At S5, the gap was marginally reduced, although this was a result of a slightly smaller fall in attainment within the most deprived cohort compared with the least deprived. At S4, the gap has increased, due largely to a significant fall within the most deprived group at this stage.

It is recognised that it is important to monitor a range of measures of the deprivation related attainment gap. The above analysis focuses on the general measure of attainment provided by the Insight tariff point score. It is also possible to identify gaps in attainment based on other measures such as the “Breadth & Depth measures” (see para. 2.8.3 above).

The following graph illustrates the gap using the Breadth & Depth measure, focusing on the % of S4 achieving 5 or more awards at SCQF Level 5 or better:

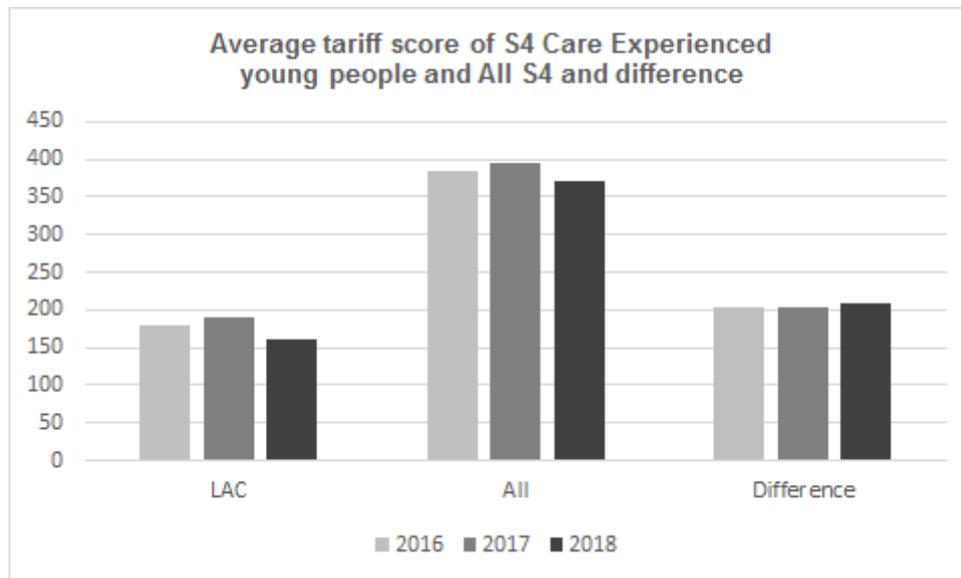


In contrast with the Improving attainment for all measure at S4 just discussed, this measure indicates an improvement within both most and least deprived, with the

improvement in 2018 within the former group being slightly greater than that for the latter, resulting in a small reduction in the gap.

Additionally, it is also possible to consider levels of attainment within particular groups of young people, where there may well be a deprivation link in an indirect sense.

As an example of this, the graph below compares the attainment between all “middle ability” young people at S4 and those “middle ability” young people that are Care Experienced:



This illustrates a gap between the attainment of young people who are Care Experienced and the population in general. It also indicates a small increase in this gap in 2018, with there being a drop in the attainment of both groups in 2018 compared with the previous year. However, since 22% of Aberdeenshire’s Care Experienced young people (at S4) live in areas which are within the 30% most deprived across Scotland, as opposed to 5% for young people who are not Care Experienced, it also provides another important way of monitoring the deprivation related attainment gap.

- 2.9 Insight also includes a key measure on positive post-school destinations. However, this data is not updated within Insight until leavers’ data is available later in the year and will then be published in Insight in February, 2019.
- 2.10 If the Committee agrees recommendation 1.2 to this report, school by school analysis will be provided in reports to Area Committees later this session, which will provide evidence of the extent to which the trends identified within this report reflect, or are in variance to, the situation in individual schools.

The overall picture of attainment across Aberdeenshire reflected in the 2018 SQA results is not clear-cut. For example, the measures based on Insight’s tariff points scale tend to suggest attainment is not as strong in 2018 as it was in 2017 at S4, yet the S4 Breadth & Depth measures shows continued improvement. It is likely that this discrepancy is linked to the national changes referred to in paragraphs 2.2 and 2.3 above, which have had implications for the volume of Unit based assessment (which is captured by the tariff point scale but not by the Breadth & Depth measures) that schools have presented young people for, as compared with the

number of courses. At S5, there is evidence that the recent progress made at this stage was not sustained in 2018, whilst at S6, there is evidence of reasonably steady progress.

The Service is continuing to analyse – both within Aberdeenshire and in conjunction with the Northern Alliance - the impact of the national changes as they continue to be implemented. The outcomes will inform discussions in schools about appropriate presentation pathways to adopt in the course of the performance review and target setting processes that will take place in each school next month and throughout the session.

- 2.11 The Head of Finance and Monitoring Officer within Business Services have been consulted in the preparation of this report and are satisfied that the report complies with the Scheme of Governance and relevant legislation.

### **3 Scheme of Governance**

- 3.1 The Committee is able to consider this item in terms of Section B.1.2 of the List of Committee Powers in Part 2A of the Scheme of Governance, as it relates to a matter of performance (school attainment and achievement).

### **4 Implications and Risk**

- 4.1 An equality impact assessment is not required because the report is to inform Committee on performance and there will be no differential impact, as a result of the report, on people with protected characteristics.
- 4.2 There are no immediate staffing or financial implications arising from this report, although it will inform subsequent strategies for improving attainment and achievement, which may have implications.
- 4.3 The following Risks have been identified as relevant to this matter on a strategic level:
- Failure to consistently apply best practice recommendations across all schools  
Mitigation: This report will be shared with Head Teachers and form part of the discussion at Attainment Review meetings in November, 2018, and March, 2019.
  - Inability to source appropriate data to measure and monitor the defined attainment  
Mitigation: This report enumerates examples of data and measures to be used for this purpose.

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Date Sept 2018