



## **REPORT TO EDUCATION AND CHILDREN'S SERVICES COMMITTEE – 21 MARCH 2019**

### **ANALYSIS OF TRENDS IN ATTAINMENT IN NATIONAL QUALIFICATIONS IN ABERDEENSHIRE 2009-2018**

#### **1 Recommendations**

**The Committee is recommended to:**

- 1.1 Note the conclusions set out in paragraph 2.10 about overall levels of attainment in Aberdeenshire, based on the data and analysis in this report.**
- 1.2 Consider and comment on the contents of this report to the Education and Children's Service, to support its ongoing strategies to improvement attainment levels across Aberdeenshire.**

#### **2 Background / Discussion**

- 2.1** At its meeting on 11 October, 2018, the Committee considered a report on attainment and achievement of young people in Aberdeenshire in accredited awards (year ending June, 2018). As a result, the Committee requested that officers submit a report to a future meeting of the Committee, providing statistical trends, over a period of years, in order to assess the Council's performance over that period, against relevant Council priorities. The present report is intended to fulfil that request.
- 2.2** The annual report on attainment and achievement which the Committee considers provides a summary of levels of attainment and achievement for the most recent school session, based on a number of key measures. The report also sets the most recent session's attainment in the context of the previous 2 years' data to allow a picture of the recent trend in attainment across the measures. In order to assist in benchmarking Aberdeenshire's performance, the data for Aberdeenshire is also presented alongside that for its Virtual Comparator and for Scotland as a whole. However, in order to take a more strategic assessment of Aberdeenshire's performance, it is necessary to extend the timescale over which the data is considered.
- 2.3** The need for a longer term, more strategic assessment is further emphasised when the period of time being considered incorporates significant changes made to the structure and practice of the underlying learning and teaching practices in school. From session 2013-14 on, the changes resulting from the national Curriculum for Excellence (CfE) programme began to have an impact on the senior phase of secondary education (S4-S6), which is the stage of education at which young people are entered for national qualifications, the outcomes from which provide the raw data for the attainment measures reported in the aforementioned annual reports considered by the Committee.



Whilst CfE has brought fundamental changes at all stages within schools, impacting on curriculum design and delivery and learning and teaching practice, from the perspective of the present report, the key areas of change that were implemented from session 2013-14 were:

- New National Qualifications (NQs) began to be introduced (at National 1-5, Higher and Advanced Higher levels), replacing the previous NQs (at Access 1-3, Intermediate 1-2, Higher and Advanced Higher levels);
- Linked to these new NQs, new arrangements for assessment for certification were introduced. The arrangements have subsequently been subject to further amendment (involving the removal of the need to complete Unit level internal assessments as mandatory elements of the assessment arrangements for each course at National 5, Higher and Advanced Higher levels).
- The introduction of a new range of attainment measures available via the Scottish Government's new senior phase benchmarking tool "Insight".

It is therefore timely to take a look at attainment over a longer time frame, which incorporates these changes and which allows an assessment to be made of their impact (if any) on the overall trend in levels of attainment in Aberdeenshire over the period, and also Aberdeenshire's performance in relation to the rest of the country.

- 2.4 In order to conduct such an analysis, it is necessary to determine the time frame over which to look at the data and also to determine an appropriate set of measures to use. So far as the time frame is concerned, the introduction of CfE into the senior phase from session 2013-14 provides an obvious marker point from which to measure attainment. There are 5 years of data available since then and it is reasonable, therefore, to consider the 5 years prior to this point as the "other half" of the time frame to be considered in this report. The report will therefore consider data on attainment in two periods: first, the five years from session 2008-09 until session 2012-13 (referred to hereafter as the "earlier period"), and second, the 5 years from session 2013-14 until session 2017-18 (referred to hereafter as the "recent period").
- 2.5 There are many measures of attainment that could be considered as part of this analysis. However, the time frame chosen does imply certain constraints on the choice of measure, which arise from the range of measures that are available during both the earlier and recent periods. In order to make comparisons between the two periods meaningful, it is necessary to choose measures that were available under both systems. Taking this into account, and also the need to try to cover attainment across the senior phase (at S4, S5 and S6), as well as the need to keep the number of measures manageable within a report of this nature, the following measures have been selected:

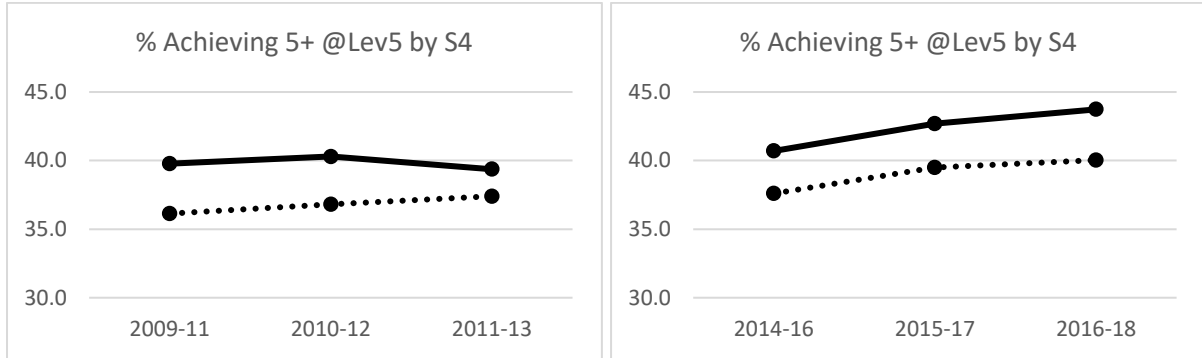


Measure	Description
1	The percentage of young people achieving at least 5 passes (A-C) at SCQF Level 5 or better by the end of S4
2	The percentage of young people achieving at least 5 awards at SCQF Level 4 or better by the end of S4
3	The percentage of young people achieving at least passes (A-C) at SCQF Level 6 or better by the end of S5
4	The percentage of young people achieving at least pass (A-C) at SCQF Level 6 or better by the end of S5
5	The percentage of young people achieving at least 1 pass (A-C) at SCQF Level 7 or better by the end of S6
6	The percentage of young people achieving at least 5 passes (A-C) at SCQF Level 6 or better by the end of S6

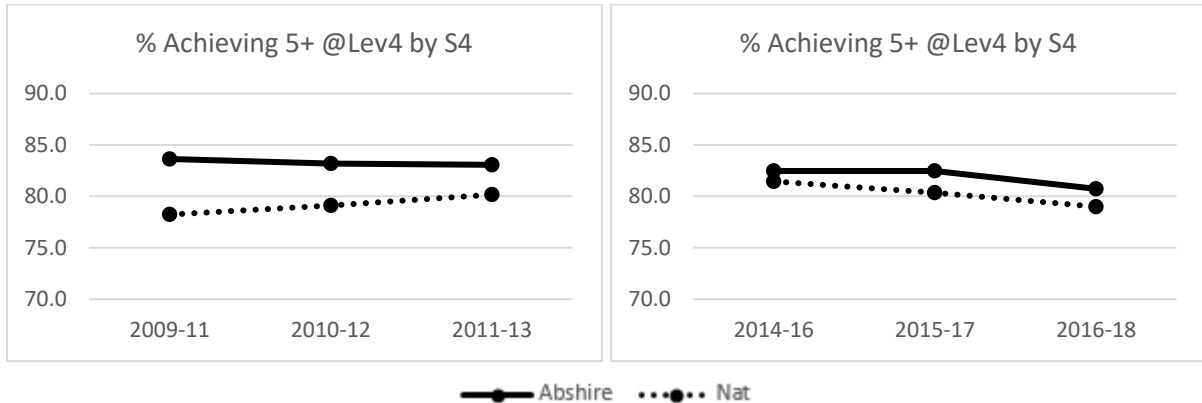
- 2.6 It should be noted that none of the 4 new national benchmark measures available within Insight (and reported on within the annual report on attainment considered by the Committee) can be utilised as part of this report because they were only introduced from session 2013-14 and have not been calculated for the earlier period covered by this report.
- 2.7 The data for each of the above measures, for each of the years covered in the earlier and recent periods, are provided as Appendix 1 to this report. Because this report is concerned primarily with the trend within and between the two periods, rather than what may have occurred within any individual year, “3 year moving averages” have also been calculated for each of the three year intervals 2009-11, 2010-12 and 2011-13 within the earlier period, and for 2014-16, 2015-17 and 2016-18 within the recent period. These statistics have the effect of “smoothing out” the effect of any single year that may be unusually high or low and provide a better basis for looking at, and comparing trends.
- As a single indicator of whether the measures signify an overall improvement or deterioration in performance over the five year period, the average rate of change across the 5 year period (based on the 3 year rolling average statistics) has also been calculated. This shows the average number of percentage points of improvement (shown by a positive figure) or deterioration (shown by a negative figure) in attainment.
- 2.8 The data presented within Appendix 1 is also summarised in the following graphs. The data is presented in pairs of graphs for each of the measures, the graph on the left hand side covering the earlier period (2009-2013) and the graph on the right hand side, the recent period (2014-2018). Each graph shows attainment for Aberdeenshire (solid line) and for Scotland (the national cohort) as a whole (dotted line), plotting the three 3 year moving averages available within each 5 year period.



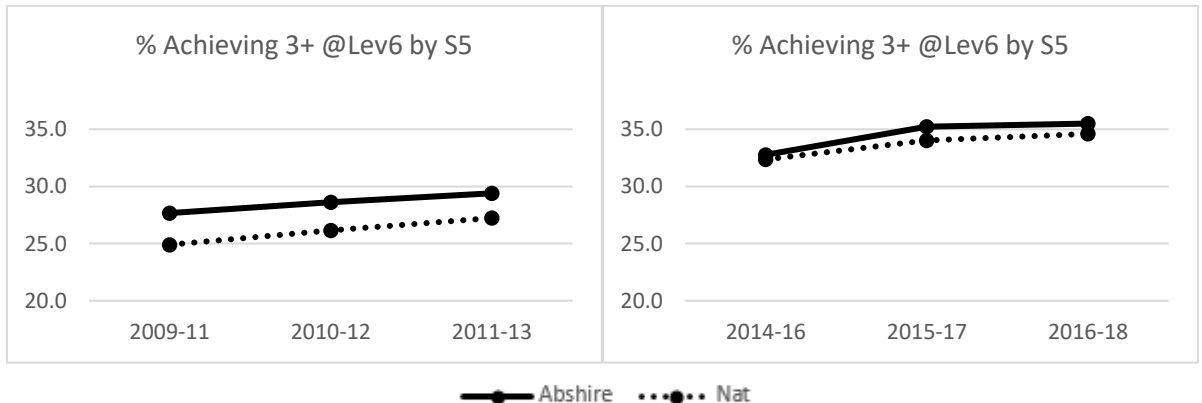
Measure 1:



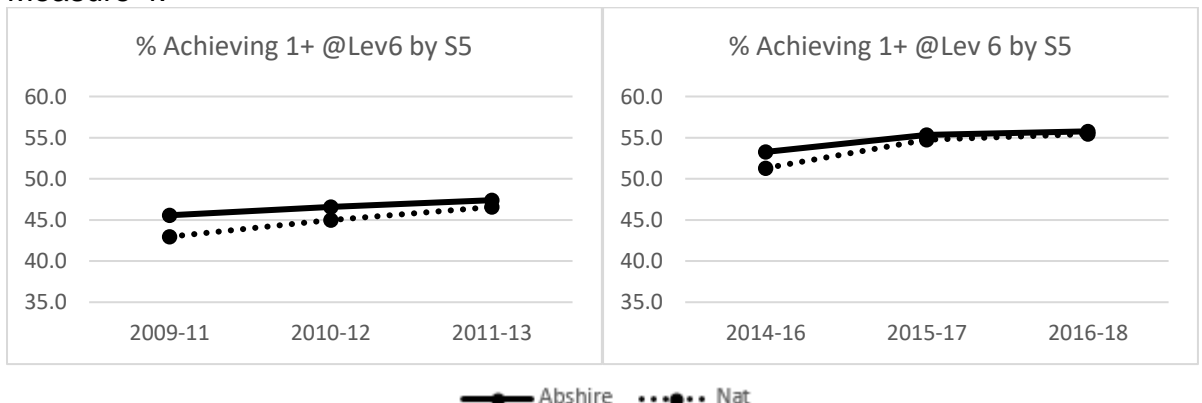
Measure 2:



Measure 3:

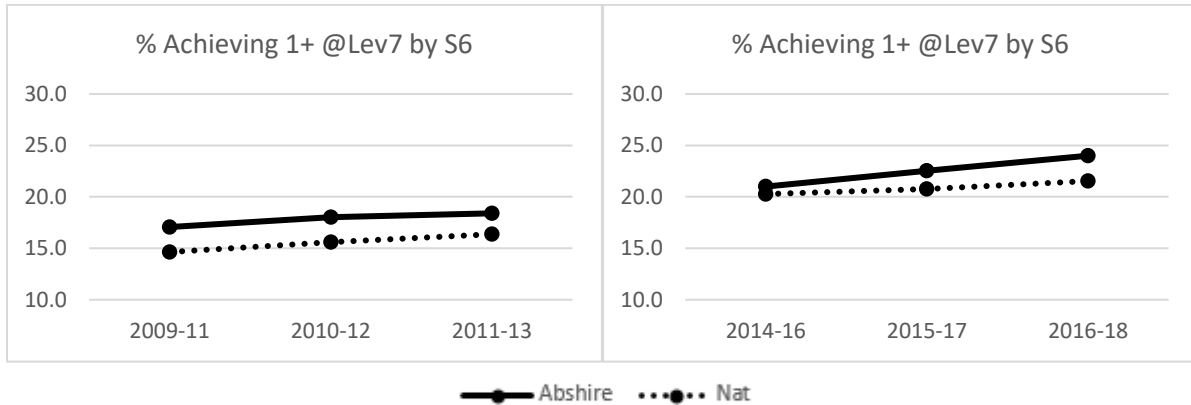


Measure 4:

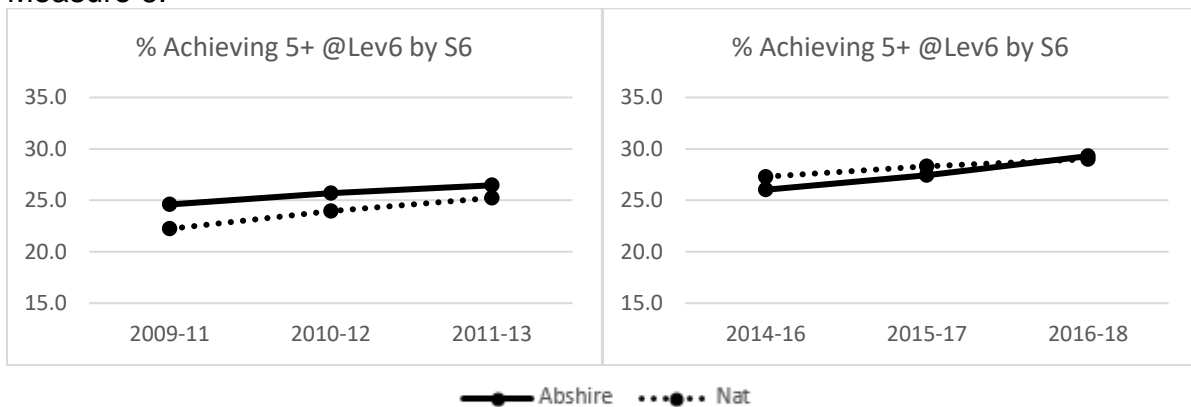




Measure 5:



Measure 6:



2.9 Analysis of the above graphs and the data in Appendix 1

Looking at data for Aberdeenshire:

- Apart for Measure 2\*, all measures show a small improvement over the recent period.
- Apart from Measures 1 & 2, all other measures show a small improvement over the earlier period.
- Apart from Measure 2, attainment in the recent period tends to exceed attainment during the earlier period.
- The average rate of improvement in the recent period tends to be greater than that in the earlier period.

\*It should be noted that the fall in attainment observed in respect of Measure 2 during the recent period is largely attributable to the 2018 figure, which was down 8% compared with the previous year. There was also a notable fall in the national figures 2017 to 2018, (down 5%). This is thought to be attributable to a structural change introduced nationally, which has affected the number of SCQF Level 4 awards.

Looking at Aberdeenshire attainment in relation to the national cohort:

- For all measures in the earlier period, Aberdeenshire attainment levels exceed that of the national cohort.
- For all measures in the earlier period, there was a degree of narrowing in the gap between Aberdeenshire and national levels (although in the cases of Measures 3 & 5, this was marginal).
- In the recent period, Aberdeenshire's attainment tends to be either broadly in line with, or slightly above, the national level.
- In the recent period, Aberdeenshire's average rate of improvement tends to be slightly greater than that of the national cohort. The opposite was the case during the earlier period.

## 2.10 Conclusions

- Aberdeenshire's overall levels of attainment have shown improvement over the recent period, but the rate of improvement tends to be small.
- Aberdeenshire's attainment levels tend to either exceed, or be broadly in line with, that of the national cohort.
- Although the gap between Aberdeenshire's levels of attainment and that of the national cohort did tend to reduce over the earlier period, this trend has not continued during the recent period, with Aberdeenshire's attainment tending to show slightly better average rates of improvement than is the case nationally.
- To the extent that this limited analysis provides the basis for making an assessment of the impact of CfE on overall levels of attainment, it suggests that CfE has resulted in some improvements in attainment, but that the magnitude of these have tended to be small and not significantly greater than those improvements that were observable prior to its introduction.

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 E.1.1.b of the List of Committee Powers in Part 2A of the Scheme of Governance, as it relates to a matter of Educational performance (school attainment and achievement).

## 4 Implications and Risk

4.1 An equality impact assessment is not required because the report is to inform the 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, 2019, and March, 2020.
  - 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.  
<http://www.aberdeenshire.gov.uk/media/21265/directorate-risks.pdf>

**Laurence Findlay**  
**Director of Education & Children's Services**

Report prepared by Gordon Lennon, Education Support Officer  
Date 18 February, 2019





## APPENDIX 1

## ATTAINMENT DATA FOR SELECTED MEASURES

Measure	Description
1	The percentage of young people achieving at least 5 passes (A-C) at SCQF Level 5 or better by the end of S4
2	The percentage of young people achieving at least 5 awards at SCQF Level 4 or better by the end of S4
3	The percentage of young people achieving at least passes (A-C) at SCQF Level 6 or better by the end of S5
4	The percentage of young people achieving at least pass (A-C) at SCQF Level 6 or better by the end of S5
5	The percentage of young people achieving at least 1 pass (A-C) at SCQF Level 7 or better by the end of S6
6	The percentage of young people achieving at least 5 passes (A-C) at SCQF Level 6 or better by the end of S6

## Earlier period: Sessions 2008-09 to 2012-13

## Aberdeenshire Data

Measure		2009	2010	2011	2012	2013
1	5+ @Lev5 S4	38.7	40.9	39.7	40.3	38.1
2	5+ @Lev4 S4	84.6	83.7	82.6	83.3	83.3
3	3+ @Lev6 S5	26.8	26.3	29.9	29.7	28.6
4	1+ @Lev6 S5	44.0	44.9	47.8	47.1	47.3
5	1+ @Lev 7 S6	16.5	16.6	18.1	19.4	17.7
6	5+ @Lev6 S6	24.5	24.4	24.9	27.8	26.7

## Aberdeenshire Data – Calculated moving averages and average rates of change

Measure		2009-2011	2010-12	2011-13	Average rate of change
1	5+ @Lev5 S4	39.8	39.8	39.4	-0.13
2	5+ @Lev4 S4	83.6	83.2	83.1	-0.19
3	3+ @Lev6 S5	27.7	28.6	29.4	+0.58
4	1+ @Lev6 S5	45.6	46.6	47.4	+0.61
5	1+ @Lev 7 S6	17.1	18.0	18.4	+0.44
6	5+ @Lev6 S6	24.6	25.7	26.5	+0.62

### National Data

Measure		2009	2010	2011	2012	2013
1	5+ @Lev5 S4	35.4	36.6	36.4	37.4	38.4
2	5+ @Lev4 S4	77.6	78.3	78.8	80.2	81.5
3	3+ @Lev6 S5	23.4	25.0	26.3	27.2	28.2
4	1+ @Lev6 S5	40.7	43.3	44.9	46.8	48.0
5	1+ @Lev 7 S6	13.5	14.6	15.8	16.4	16.9
6	5+ @Lev6 S6	20.5	22.3	23.9	25.7	26.1

### National Data – Calculated moving averages and average rates of change

Measure		2009-2011	2010-12	2011-13	Average rate of change
1	5+ @Lev5 S4	36.1	36.8	37.4	+0.42
2	5+ @Lev4 S4	78.2	79.1	80.2	+0.64
3	3+ @Lev6 S5	24.9	26.2	27.2	+0.78
4	1+ @Lev6 S5	43.0	45.0	46.6	+1.20
5	1+ @Lev 7 S6	14.6	15.6	16.4	+0.58
6	5+ @Lev6 S6	22.2	24.0	25.2	+1.00

### Recent period: Sessions 2013-14 to 2017-18

#### Aberdeenshire Data

Measure		2014	2015	2016	2017	2018
1	5+ @Lev5 S4	38.9	39.6	43.6	44.9	42.7
2	5+ @Lev4 S4	84.0	81.6	81.8	84.0	76.4
3	3+ @Lev6 S5	29.7	34.0	34.6	37.1	34.8
4	1+ @Lev6 S5	46.9	53.4	53.6	57.3	55.4
5	1+ @Lev 7 S6	19.3	20.6	23.1	23.9	25.0
6	5+ @Lev6 S6	24.7	25.1	28.3	28.9	30.7

### Aberdeenshire Data – Calculated moving averages and average rates of change

Measure		2014-2016	2015-17	2016-18	Average rate of change
1	5+ @Lev5 S4	40.7	42.7	43.7	+1.01
2	5+ @Lev4 S4	82.5	82.5	80.7	-0.58
3	3+ @Lev6 S5	32.8	35.2	35.5	+0.91
4	1+ @Lev6 S5	51.3	54.8	55.4	+1.38
5	1+ @Lev 7 S6	21.0	22.5	24.0	+1.00
6	5+ @Lev6 S6	26.0	27.4	29.3	+1.09

**National Data**

Measure		2014	2015	2016	2017	2018
1	5+ @Lev5 S4	35.2	37.9	39.7	40.9	39.5
2	5+ @Lev4 S4	84.7	80.0	80.0	81.1	75.9
3	3+ @Lev6 S5	29.7	33.1	34.3	34.7	34.8
4	1+ @Lev6 S5	49.6	54.6	55.6	55.8	55.9
5	1+ @Lev 7 S6	18.8	19.9	20.9	21.5	22.2
6	5+ @Lev6 S6	26.1	27.2	28.6	29.1	29.3

**National Data – Calculated moving averages and average rates of change**

Measure		2014-2016	2015-17	2016-18	Average rate of change
1	5+ @Lev5 S4	37.6	39.5	40.0	+0.81
2	5+ @Lev4 S4	81.5	80.4	79.0	-0.82
3	3+ @Lev6 S5	32.4	34.0	34.6	+0.74
4	1+ @Lev6 S5	53.3	55.3	55.8	+0.83
5	1+ @Lev 7 S6	20.3	20.8	21.5	+0.42
6	5+ @Lev6 S6	27.3	28.3	29.0	+0.57

