

**REPORT TO: CHILDREN AND YOUNG PEOPLE'S SERVICES COMMITTEE ON
7 OCTOBER 2015**

SUBJECT: ANALYSIS OF SECONDARY SCHOOL ATTAINMENT 2014/15

BY: CORPORATE DIRECTOR (EDUCATION AND SOCIAL CARE)

1. REASON FOR REPORT

1.1 The Committee is asked to scrutinise and note the attainment of secondary schools in Moray for session 2014-15

1.2 This report is submitted to Committee in terms of Section III (C) (1) of the Council's Scheme of Administration relating to all the functions of the Council as Education Authority.

2. RECOMMENDATION

2.1 **It is recommended that Committee scrutinise the position in respect of attainment of young people in Moray in this the second year of the new National Qualifications.**

3. BACKGROUND

3.1 Performance in the Senior Phase is now profiled by just four key national benchmarking measures on Insight, the Senior Phase Benchmarking Toolkit. It encourages taking a holistic approach to evaluating attainment and achievement that takes into account performance across all four measures. The four National benchmarking measures focus on:

- 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

3.2 Although the latest set of annual exam results become available in September each year, leavers destinations data is not available until December, and will not appear in Insight until February of the following year. Therefore, it will only be possible to provide a complete picture of attainment and achievement from March onwards each year.

Insight Benchmarking Measures – National Measures

- 3.3 As noted in paragraph 3.2 above, the data for the four national benchmarks will be available each year in late February, once the school leavers data has been compiled. It is especially important to reiterate that this represents data for all school leavers from S4 – S6 for the school year 2014-15, as opposed to individual cohorts of learners. The National Measures exclusively profile our school performance for learners at the point of exit from secondary school education. The Local Measures, also available on Insight and referred to this Committee on 19 November 2014 (paragraph 9 of the minute refers), detail the performance of schools on a cohort by cohort basis. Schools will report solely on the four National Measures in March each year.
- 3.4 In September each year, it will be possible to profile school performance in three of the four Local Measures and in the breadth and depth of awards gained by learners on a cohort by cohort basis.

Insight Benchmarking Measures – Local Measures

- 3.5 The Local measures that are pertinent to report on a cohort by cohort basis at this time are:
- Improving attainment in Literacy and Numeracy
 - Improving attainment for all
 - Tackling disadvantage by improving the attainment of lower attainers relative to higher attainers

Breadth and Depth

- 3.6 Insight enables us to profile the breadth and depth of qualifications completed by learners in each year in the senior phase. This is initially seen as a direct alternative to the previous method of reporting on performance of pupils attaining 1+, 3+ and 5+ awards at levels 5, 6 and 7 in STACs (Standard Tables and Charts). It will be particularly worthwhile to be able to track the value added at each stage in the Senior Phase i.e. to analyse the performance of an S4 cohort in 2014 through to the completion of S6 in 2016.

Tariff Score Methodology

- 3.7 In the local measures of Improving Attainment for All and Tackling disadvantage by improving the attainment of lower attainers relative to higher attainers, learner performance is measured by the number of tariff points they have accrued during the Senior Phase. The number of tariff points a young person accrues in their school career is currently based on their 'latest and best performance' i.e. if a learner achieves an A pass at National 5 in S4 this would accrue 84 points, but would be succeeded by their performance at Higher in the same subject in S5 and again by performance at Advanced Higher in S6. The points are not aggregated for an improved performance in a given subject area. **Appendix 1** gives further explanation of Tariff Score Methodology.

Curricular Model Variance Across Local Authorities

- 3.8 The majority of learners in Moray schools are entered for six awards in S4. The number of awards learners in S4 are entered for varies significantly, with some authorities maintaining a policy of encouraging learners to complete seven or eight awards in S4, akin to previous presentations at Standard Grade level. This inconsistency in curricular models across the country compromises the validity of making comparisons using the tariff point scale – for example, a learner who completed eight awards in another local authority in S4 will gain tariff points for at least two additional awards which will be retained throughout the remainder of their school career, skewing not only performance at S4 but also in S5 and S6. The ‘Virtual Comparator’ authority constructed by Insight for comparison with Moray does not at present take this into account. The Insight team at the Scottish Government have recognised this and are currently working on an alternative tariff score to make future comparisons fairer.

2013/14 Vs 2014/15 Comparison And Trend Data

- 3.9 This report provides the data necessary to make direct comparisons between performance in year 1 and year 2 of the implementation of the National Qualifications. Valid three year trend data will be established and reported on in October 2016.

Local Measure - Improving Attainment in Literacy and Numeracy

- 3.10 The tables below show the performance on a cohort by cohort basis by learners in Moray, compared with our virtual comparator authority, ‘VC’.

S4

| Local Measure | Moray | | VC | |
|-------------------------------|-------|------|------|------|
| | 2014 | 2015 | 2014 | 2015 |
| Level 4 Literacy and Numeracy | 84% | 81% | 80% | 85% |
| Level 5 Literacy and Numeracy | 35% | 38% | 41% | 47% |
| Further information | 2014 | 2015 | 2014 | 2015 |
| Level 4 Literacy | 94% | 95% | 89% | 92% |
| Level 5 Literacy | 63% | 65% | 58% | 63% |
| Level 4 Numeracy | 84% | 82% | 83% | 87% |
| Level 5 Numeracy | 38% | 41% | 47% | 53% |

S5

| Local Measure | Moray | | VC | |
|-------------------------------|-------|------|------|------|
| | 2014 | 2015 | 2014 | 2015 |
| Level 4 Literacy and Numeracy | 86% | 91% | 87% | 91% |
| Level 5 Literacy and Numeracy | 60% | 64% | 61% | 68% |
| Further information | 2014 | 2015 | 2014 | 2015 |
| Level 4 Literacy | 97% | 97% | 96% | 96% |
| Level 5 Literacy | 79% | 85% | 77% | 84% |
| Level 4 Numeracy | 87% | 92% | 88% | 92% |
| Level 5 Numeracy | 64% | 66% | 65% | 71% |

S6

| Local Measure | Moray | | VC | |
|-------------------------------|-------|------|------|------|
| | 2014 | 2015 | 2014 | 2015 |
| Level 4 Literacy and Numeracy | 93% | 92% | 94% | 94% |
| Level 5 Literacy and Numeracy | 74% | 76% | 77% | 78% |
| Further information | 2014 | 2015 | 2014 | 2015 |
| Level 4 Literacy | 98% | 98% | 98% | 98% |
| Level 5 Literacy | 89% | 92% | 92% | 92% |
| Level 4 Numeracy | 93% | 93% | 94% | 95% |
| Level 5 Numeracy | 79% | 78% | 80% | 81% |

- 3.11 The emerging trend in Literacy and Numeracy performance is that Literacy is broadly in line with or above our virtual comparator authority at both level 4 and 5 and that Numeracy is below, although the gap appears to close significantly for those learners who complete six years at secondary school.

Local Measure - Improving attainment for all

- 3.12 This measure allows us to examine how different ability cohorts are attaining in relation to the appropriate virtual and national cohorts. Three ability cohorts are identified for the school, its virtual comparator and Scotland as a whole: those in the bottom 20% of tariff points scored, those in the top 20% of tariff points scored, and those that fall within the middle 60% of tariff points scored. The tables below show the average number of tariff points accrued by learners in each year group during the last two academic sessions.

S4 (based on S4 roll)

| S4 Tariff scores | Lowest 20% | | Middle 60% | | Highest 20% | |
|--------------------|------------|------|------------|------|-------------|------|
| | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 |
| Moray | 121 | 120 | 326 | 334 | 503 | 507 |
| Virtual Comparator | 124 | 132 | 385 | 387 | 615 | 607 |
| National | 107 | 111 | 364 | 369 | 607 | 599 |

S5 (based on S5 roll)

| S5 Tariff scores | Lowest 20% | | Middle 60% | | Highest 20% | |
|--------------------|------------|------|------------|------|-------------|------|
| | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 |
| Moray | 78 | 64 | 486 | 500 | 959 | 956 |
| Virtual Comparator | 72 | 74 | 519 | 537 | 977 | 983 |
| National | 57 | 53 | 478 | 498 | 965 | 970 |

S6 (based on S6 roll)

| S6 Tariff scores | Lowest 20% | | Middle 60% | | Highest 20% | |
|--------------------|------------|------|------------|------|-------------|------|
| | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 |
| Moray | 105 | 133 | 589 | 609 | 1208 | 1182 |
| Virtual Comparator | 122 | 104 | 576 | 566 | 1192 | 1175 |
| National | 108 | 91 | 558 | 542 | 1165 | 1158 |

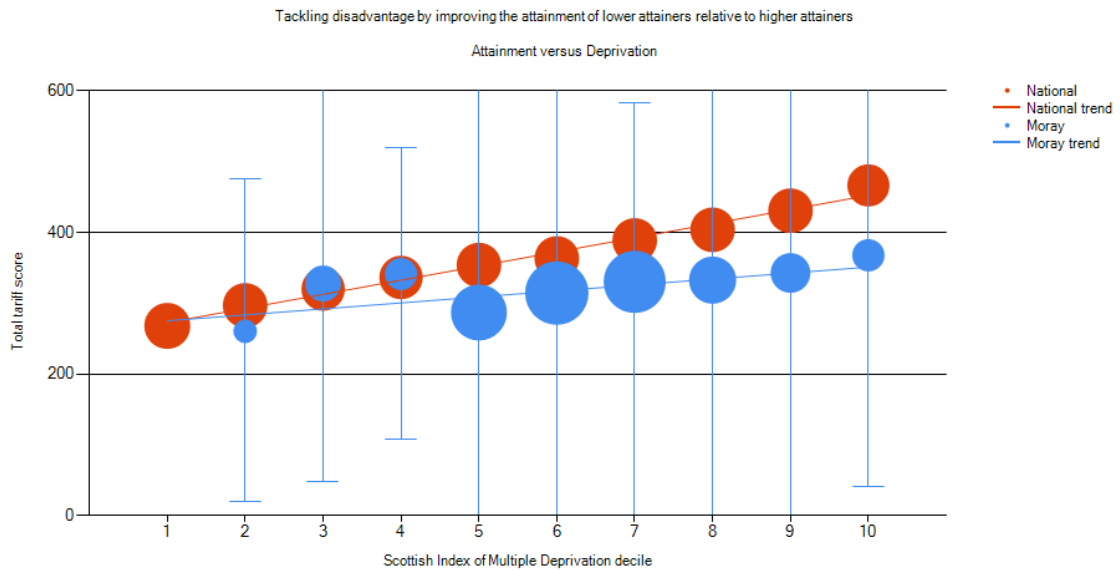
- 3.13 From the above data, the disparity between the attainment of the lowest and highest achieving young people in Moray is mirrored nationally. For each ability cohort, learners in Moray who stay in school until S6 accrue more tariff points on average than their peers both nationally and in comparison with the virtual comparator authority.

Local Measure - Leaver Initial destinations – Increasing post school participation

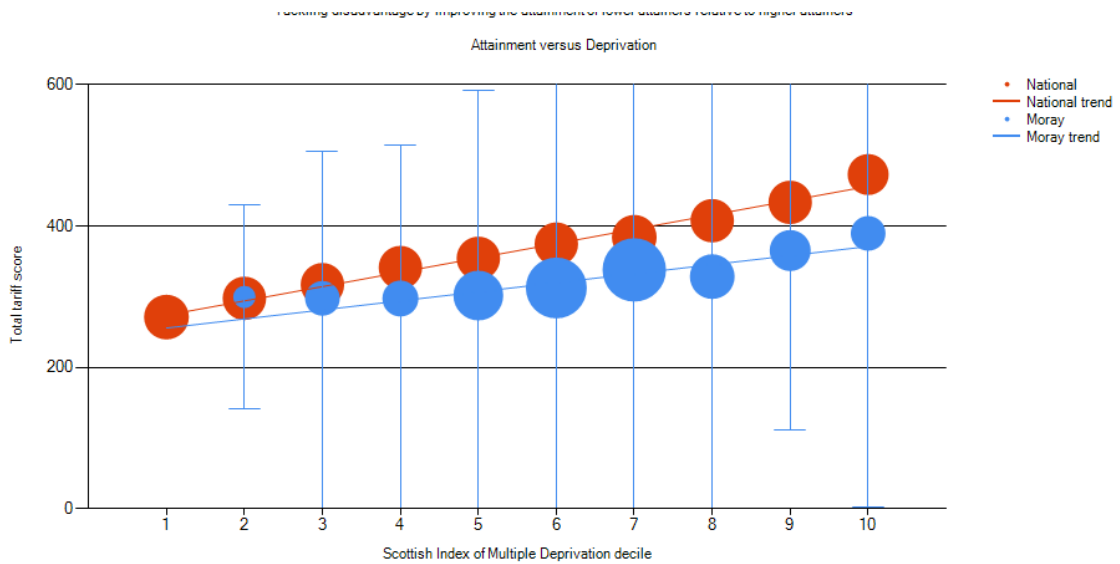
- 3.14 This will be reported on as both a Local and National Measure in March each year, when leavers data becomes available.

Local Measure - Tackling disadvantage by improving the attainment of lower attainers relative to higher attainers – Attainment vs deprivation

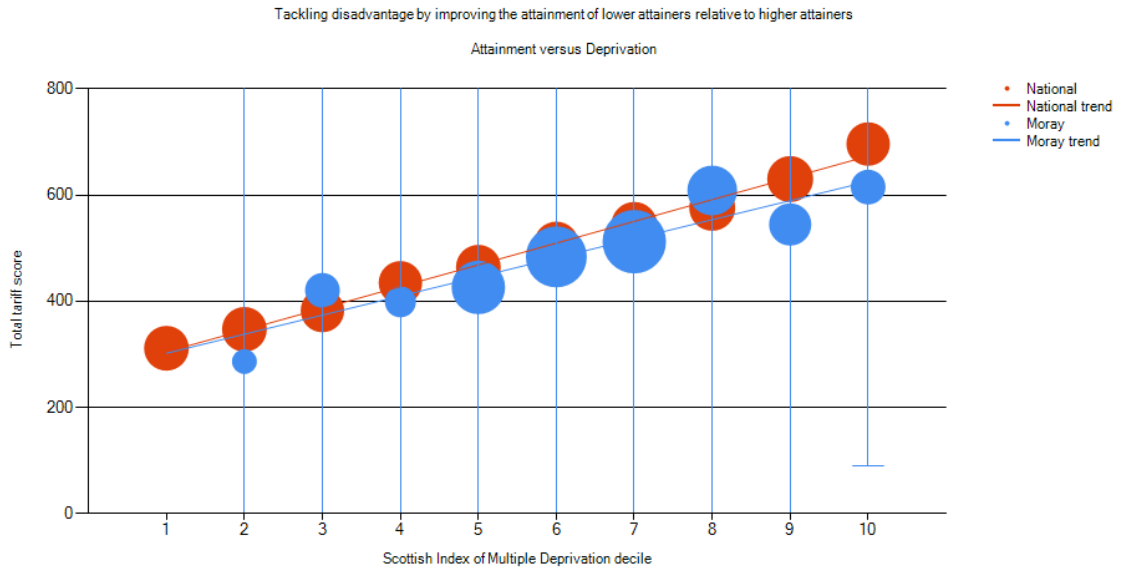
Attainment versus Deprivation
 Average Tariff Score of S4 learners by SIMD decile (2014)
 (Moray versus Scotland)



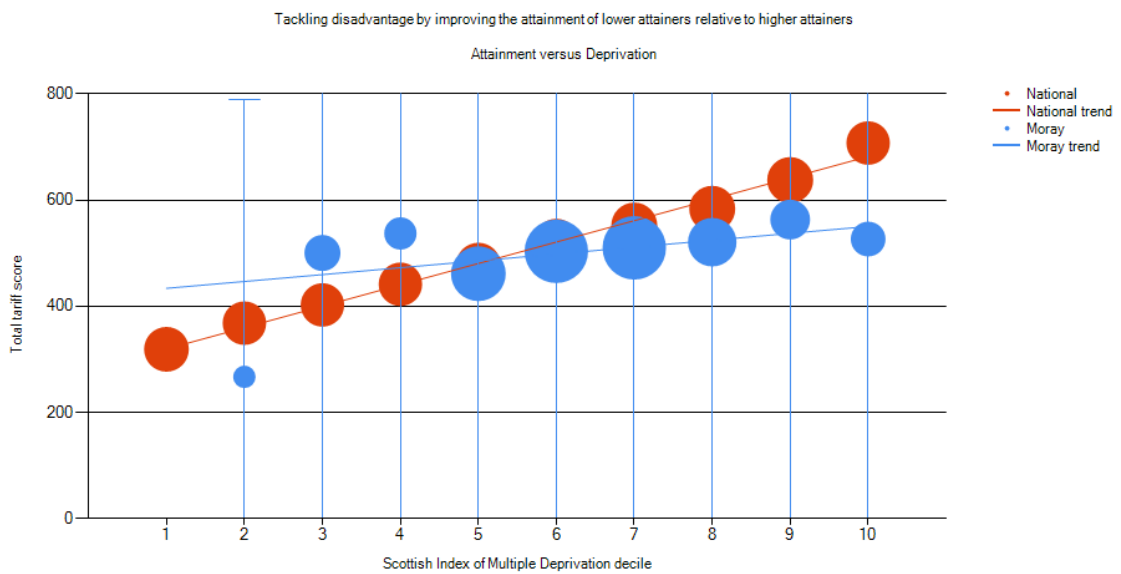
Attainment versus Deprivation
 Average Tariff Score of S4 learners by SIMD decile (2015)
 (Moray versus Scotland)



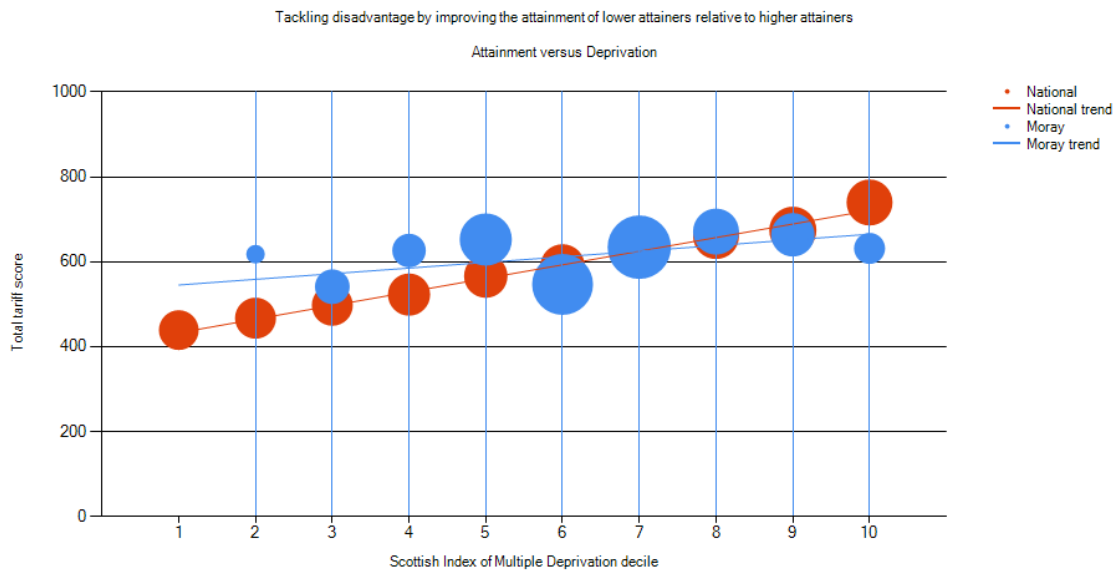
Attainment versus Deprivation
 Average Tariff Score of S5 learners by SIMD decile (2014)
 (Moray versus Scotland)



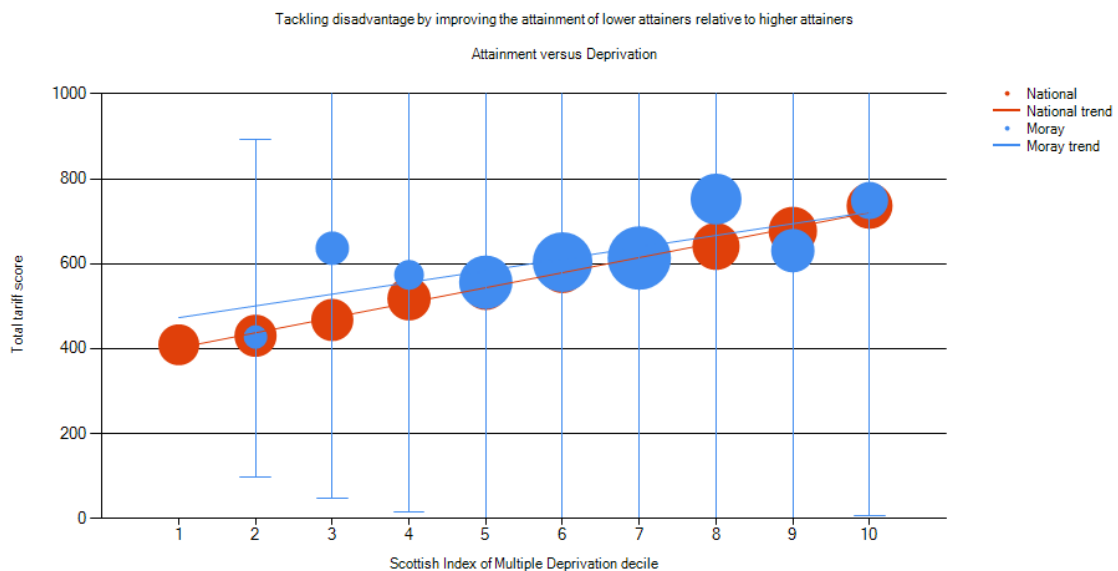
Attainment versus Deprivation
Average Tariff Score of S5 learners by SIMD decile (2015)
(Moray versus Scotland)



Attainment versus Deprivation
 Average Tariff Score of S6 learners by SIMD decile (2014)
 (Moray versus Scotland)



Attainment versus Deprivation
 Average Tariff Score of S6 learners by SIMD decile (2015)
 (Moray versus Scotland)



3.15 The above graphs show 2013/14 and 2014/15 attainment data for S4, S5 and S6 (using average tariff scores) for Moray profiled against national data, broken down into ten deciles according to Scottish Index of Multiple Deprivation (SIMD) data. Thus, decile 1 refers to the attainment of young people with postcodes within datazones identified as being the 10% most deprived in Scotland according to SIMD, whilst decile 10 refers to those young

people with postcodes in the top 10% of the least deprived datazones according to SIMD. In Moray there are no datazones ranked in decile 1.

- 3.16 The graphs suggest that by the end of S6 Moray compares well with the national picture, with the tariff scores in each decile either above or generally in line with the national average tariff score. It is important to be aware of the numbers of young people appearing in each of these deciles. This is represented proportionately in the graph by the area of the circles, with the above graphs showing that the highest concentration of young people in Moray are in deciles 5-8. The vertical lines show the range of attainment within each decile.
- 3.17 Our aspiration for learners in Moray is for the line in this graph to be both as high and as flat as possible. This would indicate that all of our young people would be achieving equivalently well at school, irrespective of their SIMD classification.
- 3.18 At present, the performance of S4 learners in Moray relative to their national peers in both 2014 and 2015 appears to indicate significant underperformance across the majority of deciles – however, it is imperative to note that for this measure this is in fact largely attributable to the variance in curricular structures. An emerging trend across all three year groups appears to be that our most disadvantaged learners accrue on average significantly more tariff points than their peers nationally, and our most affluent young people accrue significantly fewer points than their national peers in S5. For those that stay on in S6 the performance this year was in line with or above the national average, particularly notable because this group of learners represent the last cohort to have completed eight awards at Standard Grade level when in S4.

Breadth And Depth – Progression Through The Senior Phase

- 3.19 For the S4 cohort in 2014 it is now possible to consider the breadth and depth of qualifications which they went on to study in S5 in 2015. In October 2016, it will be possible to profile their journey through the whole Senior Phase. The tables below illustrate the number of awards accrued at each level during S4 in 2014 and by the equivalent cohort in S5 (based on the original S4 roll) in 2015, compared with both our virtual comparator authority.

| S4 Moray Breadth and Depth 2014 | | | | | | |
|---------------------------------|---------|---------|---------|---------|---------|---------|
| Awards | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 |
| 1 or more | 97.62% | 97.34% | 97.24% | 96.20% | 80.13% | 1.43% |
| 2 or more | 96.39% | 96.20% | 96.01% | 94.30% | 68.25% | 0.19% |
| 3 or more | 93.73% | 93.44% | 93.06% | 91.06% | 57.13% | 0.19% |
| 4 or more | 88.50% | 88.21% | 87.64% | 84.13% | 46.20% | 0.00% |
| 5 or more | 78.04% | 77.85% | 77.57% | 72.81% | *37.64% | 0.00% |
| 6 or more | 52.66% | 52.66% | 52.47% | 47.81% | 23.38% | 0.00% |
| 7 or more | 3.90% | 3.90% | 3.90% | 3.14% | 0.57% | 0.00% |

| Moray Breadth and Depth S5 (based on S4 roll) 2015 | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|
| Awards | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | Level 7 |
| 1 or more | 97.93% | 97.46% | 97.36% | 96.23% | 87.38% | 54.05% | 0.94% |
| 2 or more | 96.42% | 96.23% | 96.05% | 94.73% | 78.63% | 42.84% | 0.09% |
| 3 or more | 94.63% | 94.35% | 94.16% | 92.56% | 70.72% | 34.18% | 0.00% |
| 4 or more | 91.62% | 91.43% | 90.77% | 88.79% | 62.24% | 25.33% | 0.00% |
| 5 or more | 86.44% | 86.35% | 85.88% | 82.30% | *53.67% | 16.85% | 0.00% |
| 6 or more | 73.45% | 73.26% | 73.07% | 69.77% | 41.05% | 0.75% | 0.00% |
| 7 or more | 36.06% | 35.97% | 35.69% | 33.05% | 13.65% | 0.09% | 0.00% |
| 8 or more | 11.39% | 11.30% | 11.02% | 9.60% | 2.26% | 0.09% | 0.00% |
| 9 or more | 3.01% | 3.01% | 2.82% | 2.26% | 0.19% | 0.00% | 0.00% |
| 10+ | 0.66% | 0.66% | 0.56% | 0.56% | 0.00% | 0.00% | 0.00% |

*38% of learners from this cohort in Moray had achieved 5 or more awards at level 5 (or greater) by the end of S4 in 2014. For the same cohort, by the end of S5 in 2015, 54% of learners had achieved 5 or more awards at level 5 (or greater).

| S4 Virtual Comparator Breadth and Depth 2014 | | | | | | |
|--|---------|---------|---------|---------|----------|---------|
| Awards | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 |
| 1 or more | 97.14% | 97.09% | 96.94% | 95.48% | 81.06% | 1.50% |
| 2 or more | 95.54% | 95.48% | 95.36% | 93.11% | 70.28% | 0.19% |
| 3 or more | 93.55% | 93.48% | 93.37% | 90.60% | 60.86% | 0.05% |
| 4 or more | 91.14% | 91.11% | 90.94% | 87.31% | 52.12% | 0.00% |
| 5 or more | 87.07% | 87.06% | 86.90% | 81.99% | **43.40% | 0.00% |
| 6 or more | 78.19% | 78.18% | 78.05% | 72.48% | 34.39% | 0.00% |
| 7 or more | 54.52% | 54.51% | 54.45% | 49.55% | 20.94% | 0.00% |
| 8 or more | 30.70% | 30.69% | 30.65% | 27.59% | 10.75% | 0.00% |

| Virtual Comparator Breadth and Depth S5 (based on S4 roll) 2015 | | | | | | | |
|---|---------|---------|---------|---------|----------|---------|---------|
| Awards | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | Level 7 |
| 1 or more | 98.18% | 98.11% | 97.88% | 96.63% | 87.52% | 61.46% | 0.56% |
| 2 or more | 97.07% | 96.95% | 96.84% | 94.89% | 80.91% | 50.05% | 0.07% |
| 3 or more | 95.90% | 95.79% | 95.66% | 93.35% | 74.38% | 40.92% | 0.01% |
| 4 or more | 94.54% | 94.42% | 94.25% | 91.36% | 67.25% | 31.02% | 0.00% |
| 5 or more | 91.88% | 91.79% | 91.65% | 87.93% | **58.50% | 19.66% | 0.00% |
| 6 or more | 86.45% | 86.37% | 86.17% | 81.94% | 47.61% | 1.56% | 0.00% |
| 7 or more | 70.95% | 70.89% | 70.73% | 66.51% | 32.75% | 0.13% | 0.00% |
| 8 or more | 48.16% | 48.13% | 48.02% | 44.49% | 17.82% | 0.00% | 0.00% |
| 9 or more | 21.44% | 21.41% | 21.37% | 19.03% | 5.94% | 0.00% | 0.00% |
| 10 or more | 6.51% | 6.49% | 6.47% | 5.47% | 0.91% | 0.00% | 0.00% |

**43% of learners from this cohort in our virtual comparator authority had achieved 5 or more awards at level 5 (or greater) by the end of S4 in 2014.

For the same cohort by the end of S5 in 2015, 59% of learners had achieved 5 or more awards at level 5 (or greater).

- 3.20 It is clear that, irrespective of which level is selected and independent of the variance in curricular models between local authorities, the first cohort of learners in Moray to attempt the new national qualifications are currently on average achieving fewer qualifications in the Senior Phase by the end of S5 than our virtual comparator authority. Next year's data will show whether this gap has been closed by the end of S6.
- 3.21 **Appendix 2** contains the 1+, 3 + and 5+ measures by cohort reported on in session 2013/14 for comparison with 2014/15 data.
- 3.22 Officers provided schools with centrally collated attainment data immediately following the publication of SQA exam results in August, both to enable them to compare their performance and identify best practice across subject areas within the authority and to evaluate progression from level 4 to level 5 and from level 5 to level 6 on a pupil by pupil basis in each school. Central officers will conduct further breadth and depth analysis on a school by school basis to assist schools in evaluating their current Senior Phase provision. Education Scotland are also conducting a 'try-out' inspection model in Moray which will consist of a thematic review of provision in the Senior Phase in all eight secondary schools and relevant partners during the course of this academic session.

4. **SUMMARY OF IMPLICATIONS**

- (a) **Moray 2023: A Plan for the Future/Service Plan**
The Policy was informed by the priorities within the 10 Year Plan (Moray 2023) and Moray Economic Strategy and in particular to Ambitious and Confident Children and Young People and A Growing and Diverse Economy.
- (b) **Policy and Legal**
None arising from this report
- (c) **Financial implications**
None arising from this report.
- (c) **Risk Implications**
None
- (e) **Staffing Implications**
None.
- (f) **Property**
None arising from this report.
- (g) **Equalities**
None.

(h) Consultations

Senior Officers in Education and Social Care, Deborah Brands, Principal Accountant, Margaret Forrest, Legal Services Manager (Litigation and Licensing), Don Toonen, Equal Opportunities Officer, Grant Cruickshank Human Resources Manager and Caroline Howie, Committee Services have been consulted and are in agreement with the contents of this report as regards their respective responsibilities.

5. CONCLUSION

5.1 That Committee scrutinise the position in respect of attainment of young people in Moray in this the second year of the new National Qualifications.

Author of Report: Forbes McFall, Quality Improvement Officer

Background Papers:

Ref:

Appendix 1**Tariff Score Methodology**

The total tariff points for the candidate across all of their subjects is calculated as a cumulative measure of their latest and best attainment in each subject to the given point in time plus points for any standalone units which are un-related to any other subject qualification.

Measures presented in the tool are then an average of the total tariff points for the relevant candidates in the cohort, for example, in the 'tackling disadvantage' and 'average total tariff points' measures.

Example

Suppose a school leaver attained the following in the senior phase:

5 National 5s in English (A), Maths(C), French (A), German (A), History (B)

2 Highers in English (A) and French (B), 2 Higher units in German (but not completed the course).

1 Advanced Higher in English (C).

1 Youth Scotland Youth Achievement Award at level 5.

It is necessary to first calculate the latest and best result in each subject:

English – Advanced Higher C – 400 points.

Maths – National 5 C – 64 points.

French – Higher B – 182 points.

German – National 5 A = 84 points. But they have achieved 2 units at Higher so we deduct 2 National 5 units (22 points) and add on 2 Higher units (56). So, a total of 118 points.

History – National 5 B – 74 points.

Youth Scotland Youth Achievement Award at level 5 – 20 points.

The total tariff points for this school leaver is therefore:

$400+64+182+118+74+20 = 858$.

Appendix 2**STACS measures for comparison with 2013/14**

| Measure | Stage | 2014 | VC |
|----------------------|--------------|------|-----|
| 5+ Awards at Level 5 | By end of S4 | 38% | 43% |
| 1+ Awards at Level 6 | By end of S5 | 53% | 59% |
| 3+ Awards at Level 6 | By end of S5 | 32% | 38% |
| 5+ Awards at Level 6 | By end of S5 | 16% | 19% |
| 5+ Awards at Level 6 | By end of S6 | 29% | 33% |
| 1+ Awards at Level 7 | By end of S6 | 19% | 21% |

| Measure | Stage | 2015 | VC |
|----------------------|--------------|------|-----|
| 5+ Awards at Level 5 | By end of S4 | 40% | 46% |
| 1+ Awards at Level 6 | By end of S5 | 54% | 61% |
| 3+ Awards at Level 6 | By end of S5 | 34% | 41% |
| 5+ Awards at Level 6 | By end of S5 | 17% | 20% |
| 5+ Awards at Level 6 | By end of S6 | 30% | 35% |
| 1+ Awards at Level 7 | By end of S6 | 23% | 22% |

Although Moray's performance has improved in all measures, the performance of our virtual comparator has similarly improved and the gap remains relatively consistent, with the exception of Advanced Higher. Central delivery of some Advanced Higher courses during session 2015/16 is creating greater equity in pupil opportunity at level 7 across all Moray schools this year and should facilitate further improvement at this level in future years.

It should be noted that the information for 2015 is provisional at this stage as the outcomes of post results services enquiries are not yet published in full, although variance is now minimal due to changes in appeals procedures.