



Guide to Insight Tariff

Insight is an online tool for benchmarking the senior phase. It is a professional tool available to secondary schools and local authorities to allow them to look at specific cohorts of learners and identify areas of success and where improvements can be made.

The Tariff Scale is a key feature of the Insight online benchmarking tool. It allows a score to be calculated that summarises a wide range of achievement and awards from a range of providers.

The tariff score is based on elements from the Scottish Credit and Qualifications Framework (SCQF), in particular SCQF Credit Points and levels, as well as elements related to a qualification's composition. The tariff scale allows comparisons to be made between cohorts, schools, local authorities and their virtual comparators.

Role of the Tariff Scale

The Insight Tariff Scale places a notional point value to attainment so that schools and local authorities can compare attainment between the virtual comparator, schools, local authorities or other breakdowns of cohorts in the senior phase. This feature is useful for benchmarking purposes because it can help prompt questions about particular aspects of cohort performance. These questions can then be investigated further using the rich and rounded information available within the tool and beyond.

The tariff points accrued by particular schools, local authorities and cohorts **should not be viewed** as the only way of measuring performance and should be considered in the context of the other outcome measures included in the tool, for example, breadth and depth, improving post-school participation and raising attainment in literacy and numeracy as well as other data sources. In addition, the tariff scale **should not be viewed** as a reflection on the value of the qualifications to individual learners, nor should it be used to inform decisions about the particular courses that individual learners pursue. Tariff measures are designed to evaluate the average performance of cohorts, not individuals.

The Insight tariff is used in the following measures:

- Improving Attainment for All – National and Local Measures
- Attainment v Deprivation – National and Local Measures
- Curricular Areas – All Curricular Areas and Single Curricular Area

The Insight Tariff also drives the following options/filters:

- Pupil Points

The tariff scale is built upon 6 tariff principles which can be found in Appendix A



Insight Tariff Calculation

Awards which are included in Insight are awarded Tariff points based on the following criteria:

Volume of Attainment: The volume of attainment given by an award is provided by the number of SCQF Credit Points attributed to it. This ensures that a greater breadth of learning attracts more Insight Tariff points. SCQF Credit Points for an award can be found using the [SCQF Database](#) or is often included in the award descriptor provided by the awarding body.

Level of Attainment: The level of attainment given by an award is provided by the SCQF Level attributed to it. This ensures that a greater depth of learning attracts more Insight Tariff points than equivalent attainment at a lower level. The SCQF Level for an award can be found using the [SCQF Database](#) or is often included in the award descriptor provided by the awarding body.

Course Added Value: Awards which demonstrate an added value to learning over and above the components of the award will attract additional Insight Tariff points. This ensures that, for example, a course with an end point assessment attracts more tariff points than a course comprised of units only. A list of courses given added value is given in Appendix 2 - Reference Table 2.

Grade/Result Value: Awards which differentiate attainment by grading will have different Insight Tariff points attributed to the various grades. For example a Grade A in National 5 Mathematics will attract more Insight Tariff points than a Grade C in the same course. The following awards attract this add-on:

- SQA Graded National Courses
- Open University Young Applicants in Schools Scotland (YASS)
- Newbattle Abbey College Creative Musicianship Awards
- Training Qualifications UK's (TQUK) Certificate in Design, Engineer, Construct (The Digital Built Environment)
- Edinburgh College Creative Thinking and Let's Get Thinking Creatively Awards

De-duplication of tariff points occurs to ensure attainment is not double-counted when a learner has completed, for example, the same unit across multiple courses.

Please note:

'Best' Attainment – Measures based on tariff points will be based on 'best' achievements in each subject. This means that all subjects studied by the learner in the senior phase will be included but upper level qualifications and better grades will receive more points. The purpose of basing a learner's tariff points on 'best' qualifications in a subject is to ensure that there is no incentive or dis-incentive to go through every level. For example, someone undertaking a National 5 in Maths and then a Higher in Maths will receive the same points as someone who has only taken the Higher Maths (assuming they receive the same grade at Higher).



The tariff score is calculated in 2 stages and added together*:

Stage 1: Basic Tariff Point Allocation

$$= \text{SCQF Credit Points} * \text{SCQF Level Multiplier}$$

Volume of attainment

See Reference Table 1

Stage 2: Course/Grade Point Add-on

$$= (\text{Course Weight} + \text{Result Weight}) * \text{SCQF Credit Points/NCC}$$

Reference Table 3

Reference Table 4/5

Reference Table 7

*Note that for grade neutral tariff only Stage 1 is calculated.



Example Insight Tariff Calculations

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

- National 5 in English (A), Maths(C), French (A), Biology (C), German (B)
- Highers in English (A) and French (B)
- Higher unit in Spanish – Using Language (not completed the course).
- NPA Level 6 Laboratory Science
- Youth Scotland Youth Achievement Award at level 5.

Example 1 – Graded Course Award

Using French as an example, the 'best' award is a Higher Grade B. The SQA Course descriptor for this course tells us that it has 24 SCQF Credit Points at SCQF Level 6. This course has a graded element and a course weight (Appendix B - Reference Tables 3 and 4).

Stage 1 - Basic Tariff Allocation = $24 \text{ SCQF Credit Points} * 14/3 \text{ (Level 6 Multiplier)} = 112$

Stage 2 - Course/Grade Add-on = $(48 + 22) * 24/24 = 70$

Total Insight Tariff Points = $112 + 70 = 182$

Example 2 – Ungraded Course Award with Course Weight

Using NPA Laboratory Science as an example, the SQA Course descriptor for this course tells us that it has 48 SCQF Credit Points at Level 6. No 'best' consideration is made as there is no articulation with any other attainment. NPA awards have no graded element but are allocated a course weight (Appendix B - Reference Tables 2 and 3).

Stage 1 - Basic Tariff Allocation = $48 * 14/3 = 224$

Stage 2 - Course/Grade Add-on = $(48 + 0) * 48/24 = 96$

Total Insight Tariff Points = $224 + 96 = 320$

Example 3 – Ungraded Course Award

Using Youth Scotland Youth Achievement Award as an example, the SCQF database tells us that it has 11 SCQF Credit Points at Level 5. No 'best' consideration is made as there is no articulation with any other attainment. This course is not graded and does not have a course weight.

Stage 1 - Basic Tariff Allocation = $11 * 11/6 = 20.17$

Stage 2 - Course/Grade Add-on = $(0 + 0) * 11/24 = 0$

Total Insight Tariff Points = $20.17 + 0 = 20.17$

**Example 4 – Unit Award**

Using Spanish - Using Language as an example, the SQA unit descriptor for this course tells us that it has 6 SCQF Credit Points at Level 6. No 'best' consideration is made as there is no articulation with any other attainment. Units are not graded and do not have a course weight.

Stage 1 - Basic Tariff Allocation = $6 * 14/3 = 28$

Stage 2 - Course/Grade Add-on = $(0 + 0) * 11/24 = 0$

Total Insight Tariff Points = $28 + 0 = \mathbf{28}$



Tariff Methodologies

Insight measures based on tariff points will be built up using the 3 methodologies; total tariff points, complementary tariff points or grade neutral tariff points. Each of these methodologies are based on 'best', but differ in the volume of learning which is counted or the inclusion or not of the graded add on. Each methodology offers a different way to look at attainment in a cohort but together they provided a rounded view of the attainment.

Average Total Tariff

This is the default tariff methodology in all versions of 'Improving Attainment for All' and 'Attainment v Deprivation'.

For each learner, the total tariff for all of their 'best' attainment is calculated. Then, for the cohort in question, an average is taken of the total for each learner.

Average Complementary Tariff

Complimentary Tariff can be selected in all versions of 'Improving Attainment for All' and 'Attainment v Deprivation' using the 'Change Options' button then selecting 'Complimentary Tariff Points' under the 'Basis' option.

For each learner only the densest 120 SCQF Credit Points worth of 'best' attainment is considered. Generally speaking, the greater the SCQF level of an award, the greater the density of learning. Then, for the cohort in question, an average is taken of the complimentary total for each learner.

This methodology was developed to allow comparisons between cohorts undertaking different numbers of qualifications.

Average Grade Neutral Tariff

Grade Neutral Tariff can be selected in all versions of 'Improving Attainment for All' and 'Attainment v Deprivation'. It is used in conjunction with the 2 previous tariff methodologies to give either; Total Grade Neutral Tariff or Complimentary Grade Neutral Tariff.

For each learner, a total or complimentary total is calculated without any course or grade add-on applied to graded courses. For example, Higher French at Grade B will get the 112 tariff points from the basic allocation, but NOT the 48 points for the course weight component nor the 22 points for the grade add-on. The total is therefore 112. Then, for the cohort in question, an average is taken of the Grade Neutral total using each learner.

This methodology was developed to recognise the equal value that ungraded and graded courses can play in a learner journey.



Some Special Cases

A small number of qualifications included in the tool have a structure which requires adjustments to their treatment in the tariff scale. These are:

- Baccalaureate – this award is built up from a number of Higher and Advanced Higher courses plus the completion of an Interdisciplinary project. Since points will have been allocated to the Highers and Advanced Highers, only the Interdisciplinary Project receives additional points – equivalent to half an Advanced Higher
- Foundation Apprenticeships – these awards are built up from a combination of courses. To avoid duplication, no points are included for these awards but each of the component courses will be counted within the tariff calculation.
- Extra value units – In cases when a learner achieves a unit at a level above a related course award, careful consideration of 'best' must be made. For example, should a learner attain National 4 Maths course award and a single unit of National 5 Maths then the points given to the N5 unit will have to take into account that points for that unit have been given at N4. The Maths units are 6 SCQF Credit Points each and so are allocated 6 and 11 points at levels 4 and 5 respectively. The learner will receive 33 points for the N4 course award plus the difference between the points for the unit which is 5. The total is 38 points.



Example Tariff Methodologies Calculations

To demonstrate how each methodology operates, the following learner’s attainment is used in each example:

- National 5 in English (A), Maths(C), French (A), Biology (C), German (B)
- Highers in English (A) and French (B)
- Higher unit in Spanish – Using Language (not completed the course)
- NPA Level 6 Laboratory Science
- Youth Scotland Youth Achievement Award at level 5.

Average Total Tariff

Average total tariff is the default methodology in all tariff based measures. Each learner has their Total Tariff calculated which includes the ‘best ‘attainment in each subject. Using the example given above:

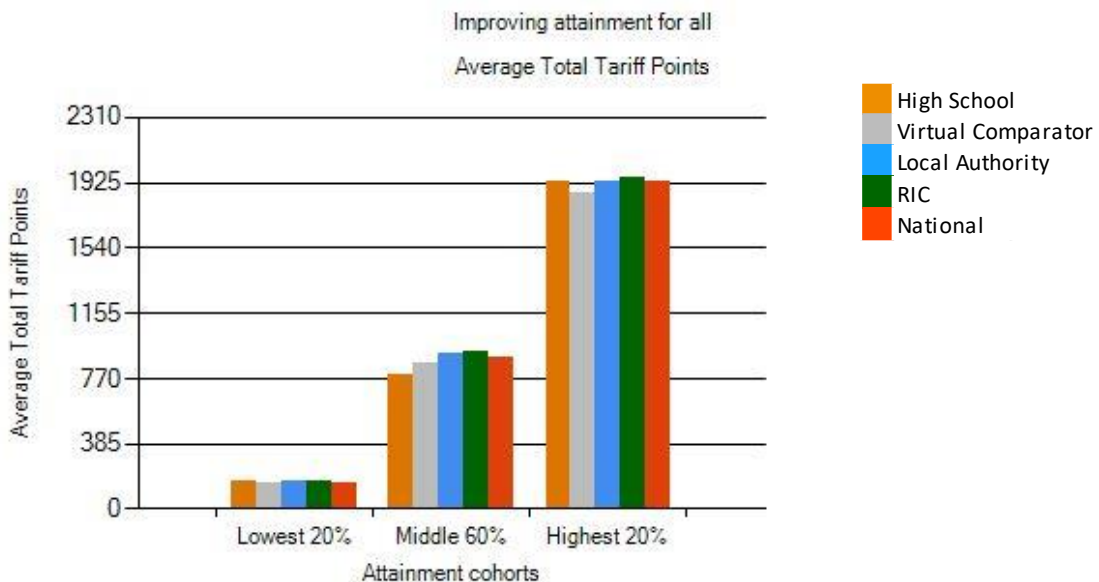
Nat 5 English and French are not considered as there is ‘best’ attainment (Highers) which supersedes them.

204 (Higher English A) + **182** (Higher French B) + **320** (NPA Lab Science) + **28** (Higher Spanish unit) + **74** (Nat5 German B) + **64** (Nat5 Maths C) + **64** (Nat 5 Biology C) + **20.17** (Youth Achievement Award)

Average Total = 956.17

Once this is repeated for each learner in the cohort in question, an average is calculated and displayed in the measure.

For example, below is an Attainment for All graph for a leavers’ cohort using Average Total Tariff.





Average Complementary Tariff

Average Complementary Tariff can be selected as an option in tariff based measures. Unlike Average Total, this methodology uses a fixed volume of learning to allow fair comparison between learners/cohorts when the number of courses undertaken may vary. The volume of learning which is measured is the densest 120 SCQF Credit Points.

Each learner has their Complementary Tariff calculated. Using the example given above:

Again, Nat 5 English and French are not considered as there is 'best' attainment (Highers) which supersedes them.

Firstly, the density of learning in each award is calculated by dividing the number of Insight Tariff points for the award by the number of SCQF Credit Points:

Award	Level/Grade	Tariff Points	SCQF Credit Points	Density (Tariff Points/ SCQF Credit Points)	Running total of SCQF Points
English	Higher A	204	24	8.5	24
French	Higher B	182	24	7.58	48
Lab Science	Level 6 Pass	320	48	6.67	96
Spanish	Higher Unit	28	6	4.67	102
German	Nat 5 B	74	24	3.08	126
Maths	Nat 5 C	64	24	2.67	150
Biology	Nat 5 C	64	24	2.67	174
Youth AA	Level 5 Pass	20.17	11	1.83	185

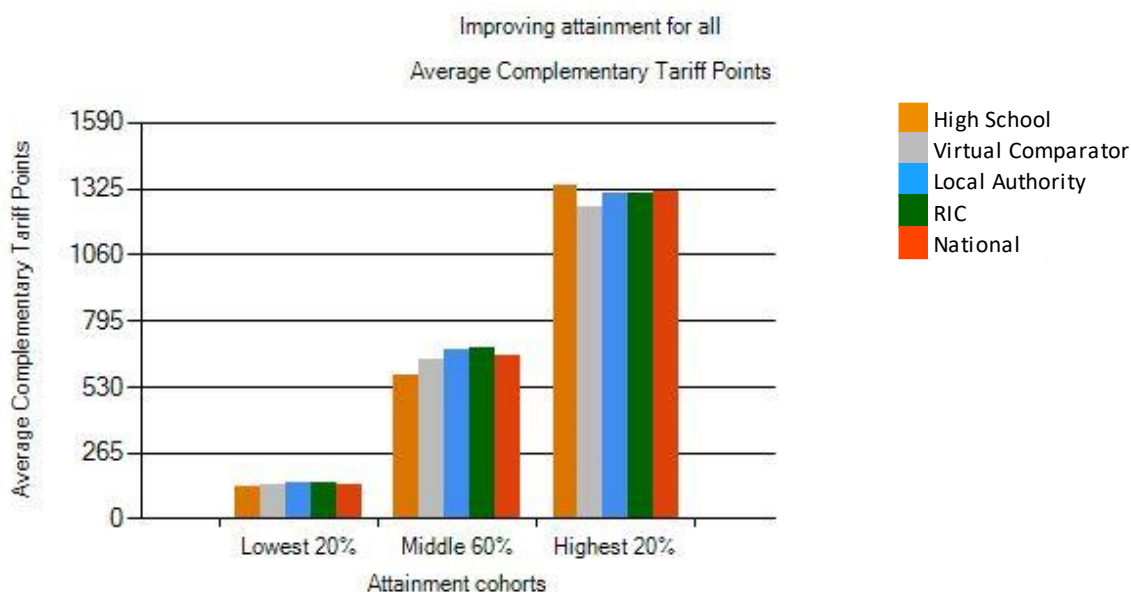
This learner has a total of 185 SCQF Credit Points of attained learning. However, only the densest 120 SCQF is considered. The first 4 awards in the table contribute 102 SCQF Credit Points. The fifth award takes the total beyond 120 so a proportional fraction of the points are taken. Since only 18 SCQF Credit Points worth are needed from a 24 SCQF Credit point course, the fraction is 18/24. Thus:

204 (Higher English A) + **182** (Higher French B + **320** (NPA Lab Science) + **28** (Higher Spanish unit)

Plus an 18/24 fraction of **74** (Nat 5 German B) = **55.5**

Complementary Total = 789.5

Once this is repeated for each learner in the cohort in question, an average is calculated and displayed in the measure. For example, this is an attainment for all graph for a leavers' cohort using Average Complementary Tariff.



Average Grade Neutral Tariff

Average Grade Neutral Tariff can be selected as an option in tariff based measures. It can be selected together with Total or Complimentary Tariff. This tariff methodology does not include any additional weight or grade add-on for a course – it considers all courses as being ungraded.

Using the example given above, firstly we calculate the grade neutral tariff points for each award by calculating SCQF Credit Points * SCQF Level Multiplier:

Award	Level/Grade	SCQF Credit Points	SCQF Multiplier	Grade Neutral Points
English	Higher A	24	14/3	112
French	Higher B	24	14/3	112
Lab Science	Level 6 Pass	48	14/3	224
Spanish	Higher Unit	6	14/3	28
German	Nat 5 B	24	11/6	44
Maths	Nat 5 C	24	11/6	44
Biology	Nat 5 C	24	11/6	44
Youth AA	Level 5 Pass	11	11/6	20.17

Secondly, if grade neutral is selected along with Total Tariff, then the total of all the values in the final column is calculated.

112 (Higher English A) + 112 (Higher French B) + 224 (NPA Lab Science) + 28 (Higher Spanish unit) + 44 (Nat5 German B) + 44 (Nat5 Maths C) + 44 (Nat 5 Biology C) + 20.17 (Youth Achievement Award) = 628.17

The Grade Neutral Total tariff value is 628.17

If grade neutral is selected along with Complementary tariff, then the total of the 'densest' 120 SCQF Credit Points worth of awards (see above) is calculated.



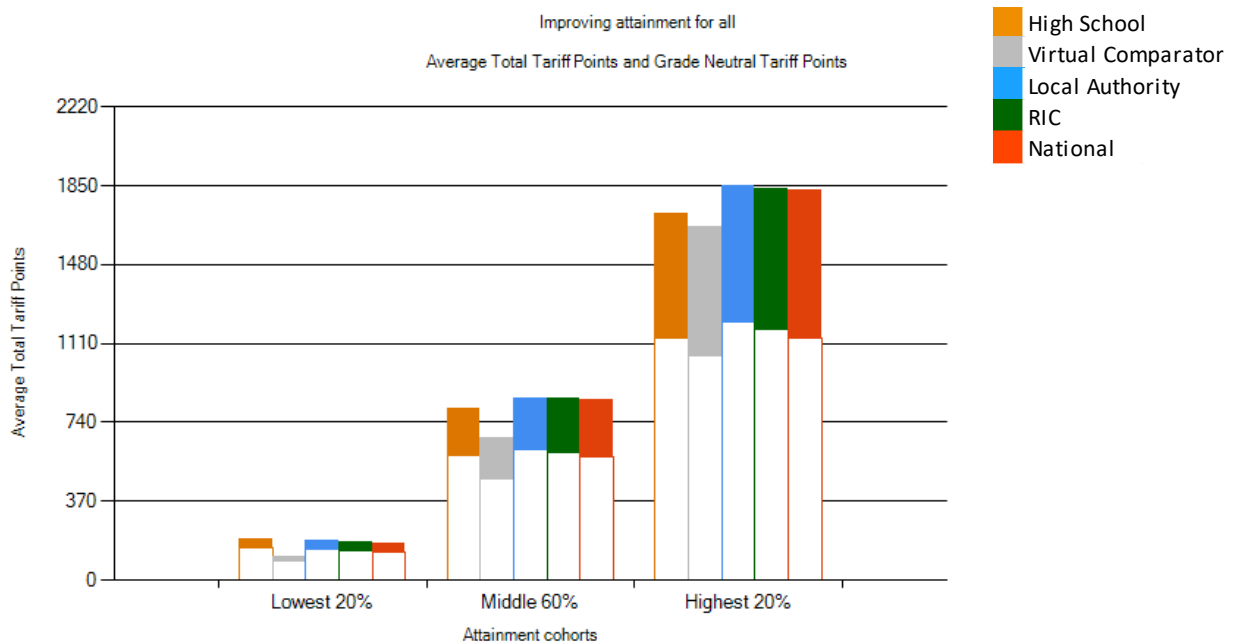
112 (Higher English A) + **112** (Higher French B) + **224** (NPA Lab Science) + **28** (Higher Spanish unit)

Plus an 18/24 fraction of **64** (Nat 5 German B) = **33**

The Grade Neutral Complementary tariff value is 509

Finally, this is repeated for each learner in the cohort in question, an average is calculated and displayed in the measure.

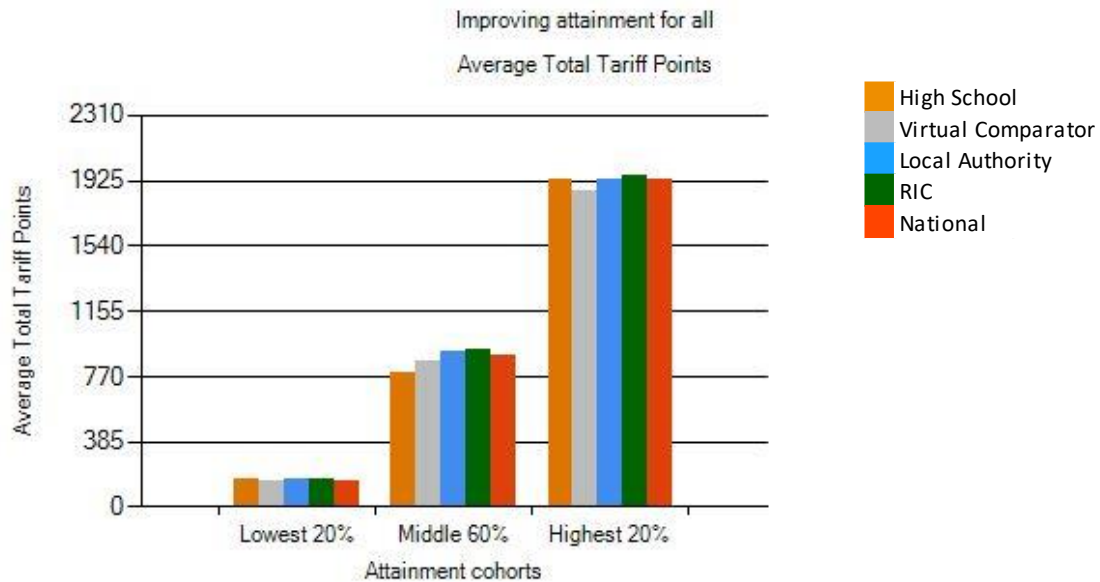
For example, this is an attainment for all graph for a leavers' cohort using Average Total Tariff with the respective Average Grade Neutral Total Tariff overlaid in white.





Interpreting Tariff Scores

Average Total Tariff (Graph 1)

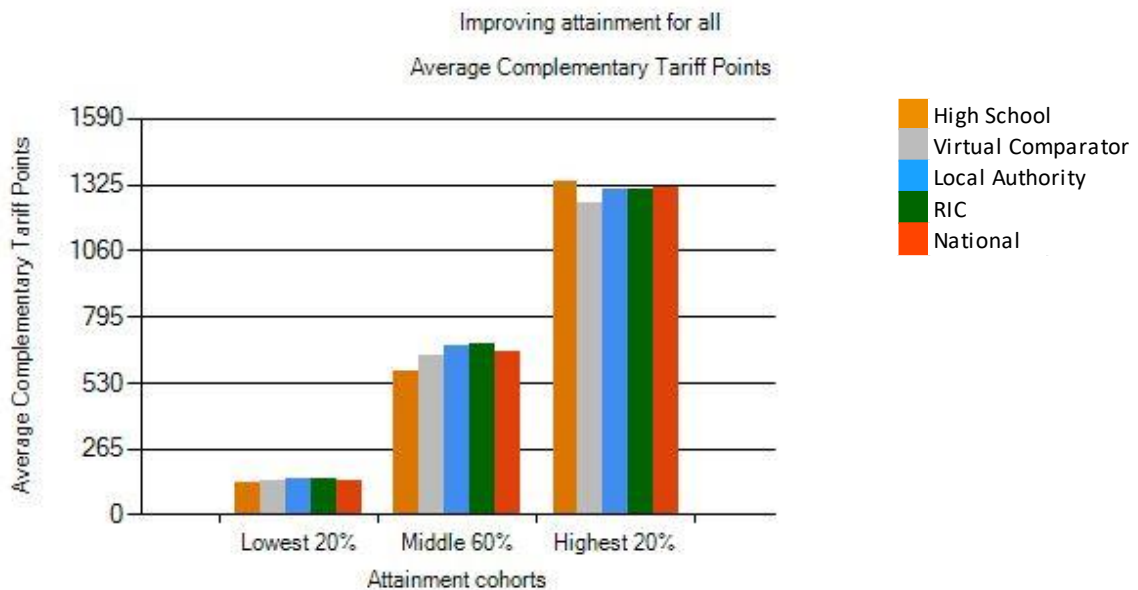


From Graph 1 above, the average total tariff would suggest:

- For the highest 20% of leavers the school is above the Virtual Comparator (VC). This would indicate that, on average, the highest 20% of leavers are getting more attainment value at their school than similar pupils at other schools.
- For the Middle 60% of leavers the school is below the Virtual Comparator (VC). This would indicate that, on average, the middle 60% of leavers are getting less attainment value than similar pupils at other schools.
- For the Lowest 20% of leavers the school is slightly above the Virtual Comparator (VC). This would indicate that, on average, the lowest 20% of leavers are getting slightly more attainment value at their school than similar pupils at other schools.



Average Complimentary Tariff (Graph 2)



From Graph 2 above, the average complimentary tariff would suggest:

- For the highest 20% of leavers the school is well above the Virtual Comparator (VC). This would indicate that, on average, the highest 20% of leavers are getting more attainment value at their school than similar pupils at other schools when the densest 120 SCQF Credit Points worth is considered and compared.
- For the Middle 60% of leavers the school is below the Virtual Comparator (VC). This would indicate that, on average, the middle 60% of leavers are getting less attainment value than similar pupils at other schools when the densest 120 SCQF Credit Points worth is considered and compared.
- For the Lowest 20% of leavers the school is very slightly below the Virtual Comparator (VC). This would indicate that, on average, the lowest 20% of leavers are getting very slightly less attainment value at their school than similar pupils at other schools.

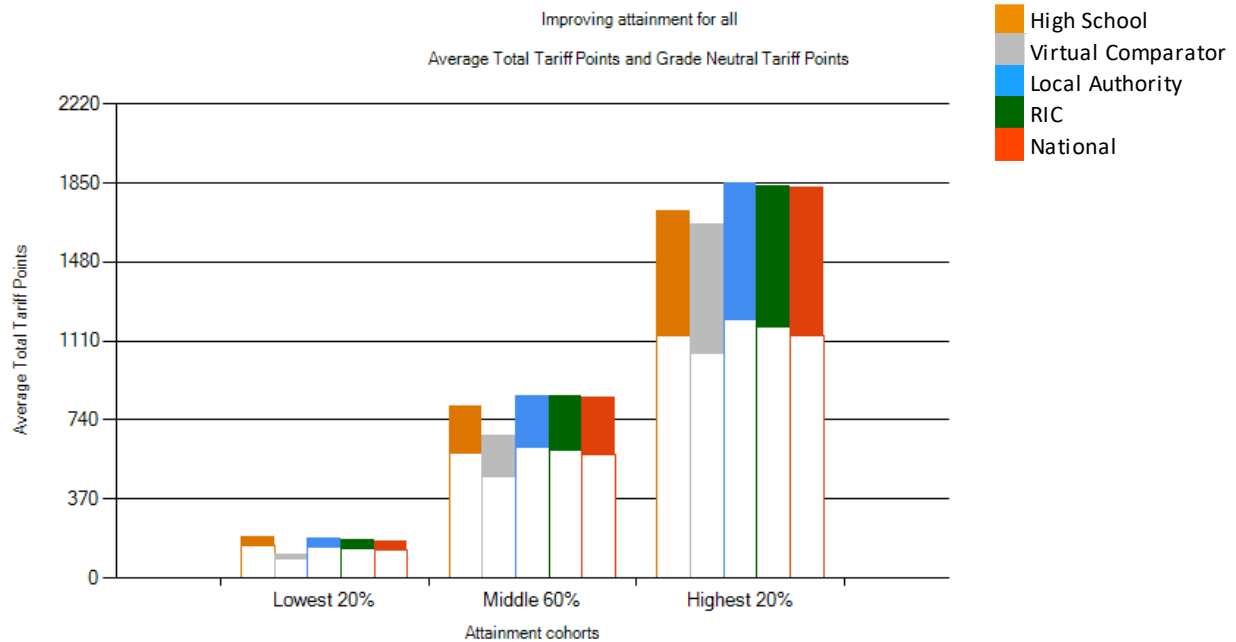
Where differences in commentary are found between the two tariff options (Total and Complimentary), this is most commonly:

- In the earlier stages - between-school differences in curriculum approach, especially in the number of subjects studied, tends to be greatest in S4.
- Among the higher attaining learners – such learners tend to have attainment in a larger number of subjects.

Differences may also occur if a high proportion of pupils take unusual courses or unusual levels, such as many pupils taking Highers or similar SCQF Level 6 courses in S4.

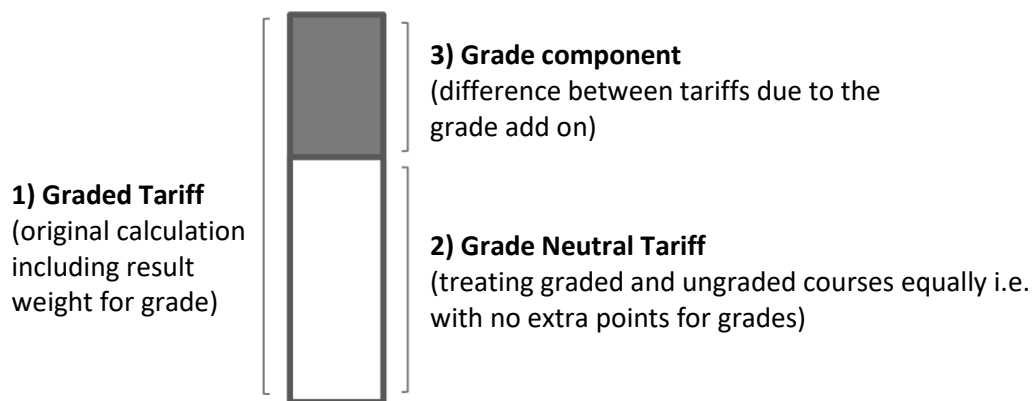


Average Grade Neutral Tariff (Graph 3)



TIPS for interpreting grade neutral bar charts

- 1) Compare the total height of your school’s bar to your VC
- 2) Compare the height of the Grade Neutral Tariff component to your VC – a higher bar would suggest your learners were engaged in a more demanding curriculum (though an SCQF level lense) than your VC.
- 3) Compare the size of the Grade Component to your VC (for exact values view the data table)



From Graph 3 above, the average grade neutral total tariff would suggest:

- For the highest 20% of leavers the school is above the Virtual Comparator (VC). This would indicate that, on average, the highest 20% of leavers are getting more attainment value at their school than similar pupils at other schools when the grade neutral methodology is used.



- For the Middle 60% of leavers the school is very well above the Virtual Comparator (VC). This would indicate that, on average, the middle 60% of leavers are a lot more attainment value than similar pupils at other schools when the grade neutral methodology is used.
- For the Lowest 20% of leavers the school is above below the Virtual Comparator (VC). This would indicate that, on average, the lowest 20% of leavers are getting more attainment value at their school than similar pupils at other schools when the grade neutral methodology is used.

Note as more non-graded qualifications are incorporated into learners' journeys these differences may become less pronounced.

There may also be differences due to the presentation policy of the school i.e. if a school encourages breadth of learning (at a given SCQF level) or depth of learning (at higher SCQF levels).

Reflective questions for improvement

What do the three tariff methodologies suggest about the quality of attainment in general gained by learners in the three groups?

What does the grade add-on portion (colour) of the grade neutral graph suggest about the quality of grades A and B attained in graded courses?

What does the grade neutral tariff suggest about the SCQF level of study learners are engaged in?

What does the grade neutral tariff suggest about the proportion of ungraded courses that make up a learners' attainment?

How many ways can a learner attain at e.g. SCQF Level 5 in ungraded courses at the school?

How many ways can a learner attain at e.g. SCQF Level 6 in ungraded courses at the school?

**Appendix A – Tariff Principles**

A set of six principles underpin the Insight Tariffs. These are:

1. provide the means to support self-evaluation, professional dialogue and performance improvement for school cohorts;
2. be based on qualifications and learning programmes on the SCQF;
3. recognise the value of all types of qualification and learning programme irrespective of assessment methodology;
4. reflect parity of esteem across all qualifications and learning programmes;
5. have a transparent and understandable calculation means, which is statistically robust, educationally relevant and easy to use; and
6. recognise only the 'best' qualification in a given subject for each learner.

**Appendix B – Reference Tables***Table 1 – SCQF Level Multipliers*

SCQF Level	Multiplier
1	1/6
2	1/3
3	2/3
4	1
5	11/6
6	14/3
7	17/2

If the qualification is made up of units from different SCQF levels, it is the level of the course award which is used.

Table 2 – Courses given Course Weight add-on

Course	SCQF Levels
SQA National Awards	4, 5, 6 and 7
SQA National ungraded courses (including Skills for Work)	4,5 and 6
SQA National Progression Awards	4,5 and 6
SQA National Certificates	4,5 and 6
SQA Scottish Vocational Qualifications	4,5 and 6
IFS Certificate in Personal Finance	5
Edinburgh College Creative Thinking/ Let's Get Thinking Creatively Awards	5 and 6
Newbattle Abbey College Creative Musicianship Awards	5 and 6
TQUK Design Engineer Construct Certificates	5 and 6
IB Interdisciplinary Project	7
OU YASS	7

Table 3 - Course Weights

SCQF Level	Course Weight
4	9
5	20
6	48
7 – Advanced Higher	128
7 – IP	64

Please note that the Course weight for a National 4 award is given to the added value unit point allocation. If the qualification is a combination of units making up an ungraded course without a course assessment element, its course weight is 0.



Table 4 - Result Weights (National Qualifications, Edinburgh College Creative Thinking/ Let's Get Thinking Creatively, Newbattle Abbey College Creative Musicianship, TQUK Design Engineer Construct at SCQF level 6)

Result weights vary by SCQF level and type as follows:

SCQF Level	Grade	Result Weight
7	A	80
	B	40
	C	0
	D	-20
6	A	44
	B	22
	C	0
	D	-11
5	A	20
	B	10
	C	0
	D	-5

Table 5 - Result Weights (OU YASS)

SCQF Level	Product type	Grade	Result Weight
7	YASS01 (ungraded)	Pass	0
		Aegrotat Pass	0
	YASS02 (abridged grading)	Distinction	80
		Pass	0
		Aegrotat Pass	0
	YASS03 (full grading)	Distinction	80
		Grade 2 Pass	54
		Grade 3 Pass	27
		Grade 4 Pass	0
		Aegrotat Pass	0

Table 6 – Result Weights (TQUK Design Engineer Construct at SCQF level 5)

SCQF Level	Grade	Result Weight
5	Distinction	80
	Merit	54
	Pass	0



Table 7 - National Course Correction

SCQF Level	National Course Correction
2	18
3	18
4	24
5	24
6	24
7	32
7 - IP	16