



Guide to Insight Tariff

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.

For a more technical explanation of the methodology please see the [Insight Tariff Note](#)

Tariff Methodologies

As of September 2018, there are 3 tariff methodologies used within Insight. Each offers a different way to look at attainment in a cohort but together they provided a rounded view of the attainment.

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.

Calculation of tariff points for individual awards is explained in the [Insight Tariff Note](#)



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:

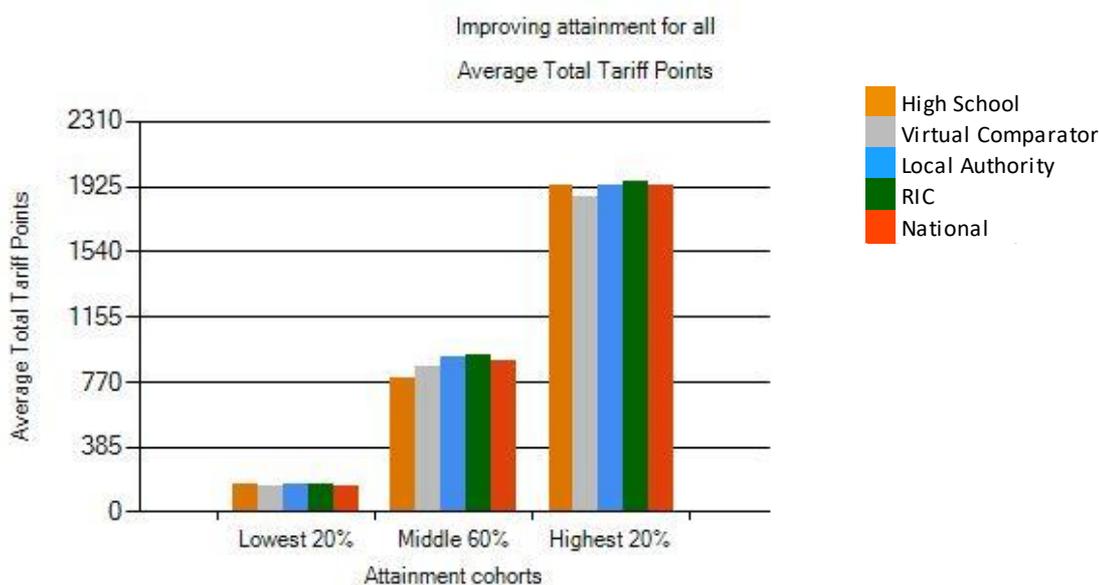
Nat 5 English and French are not considered as there is 'best' attainment (Highers) which supersedes them.

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, this 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

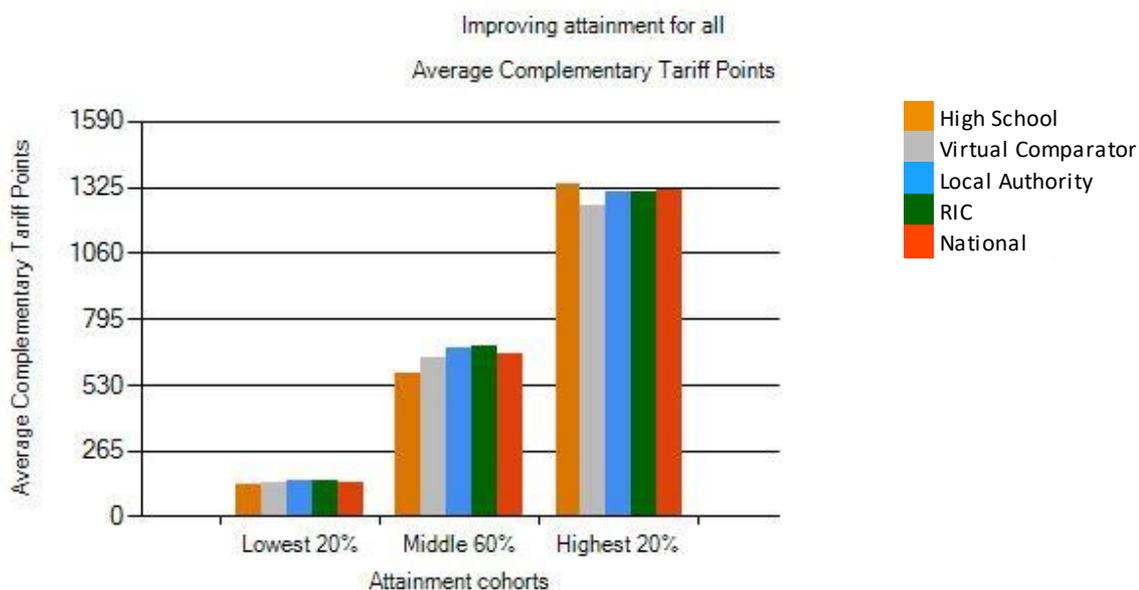
This learner has a total of 185 SCQF Credit Points of attained learning. However, only the densest 120 SCQF is considered. The first 4 awards in the table contribute 102 SCQF Credit Points. The fifth award takes the total beyond 120 so a proportional fraction of the points are taken. Since only 18 SCQF 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 (see [Insight Tariff Note](#)):

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)

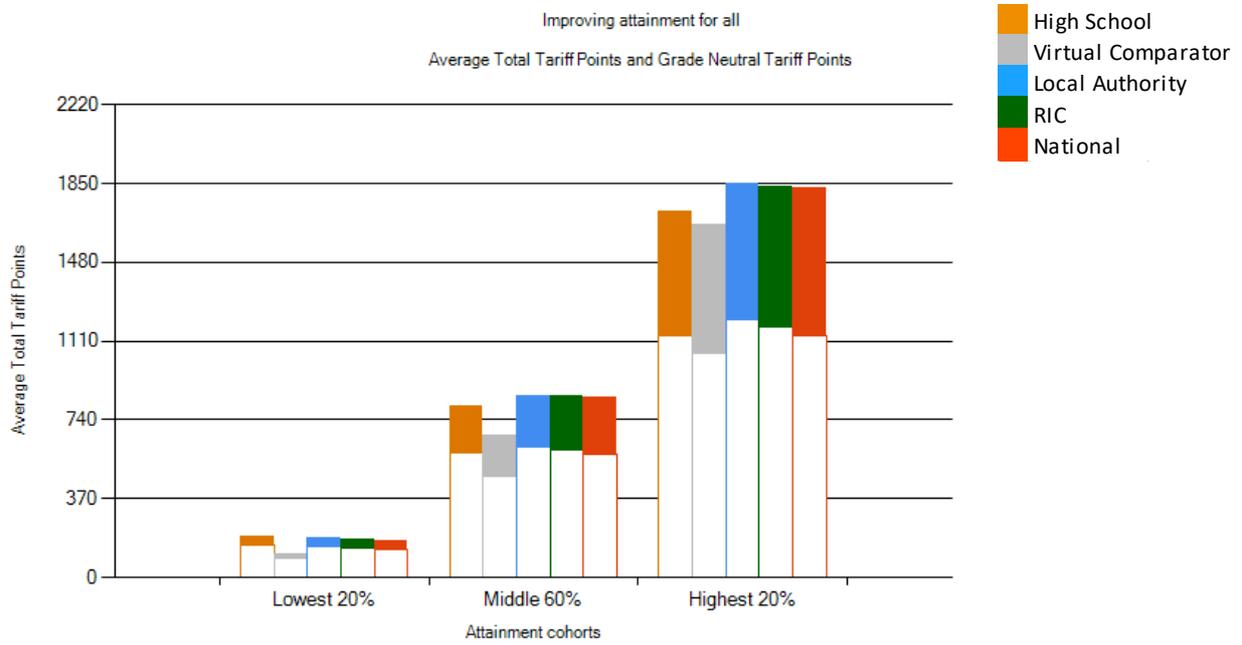
Plus an 18/24 fraction of **64** (Nat 5 German B) = **33**

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, this is most commonly:

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

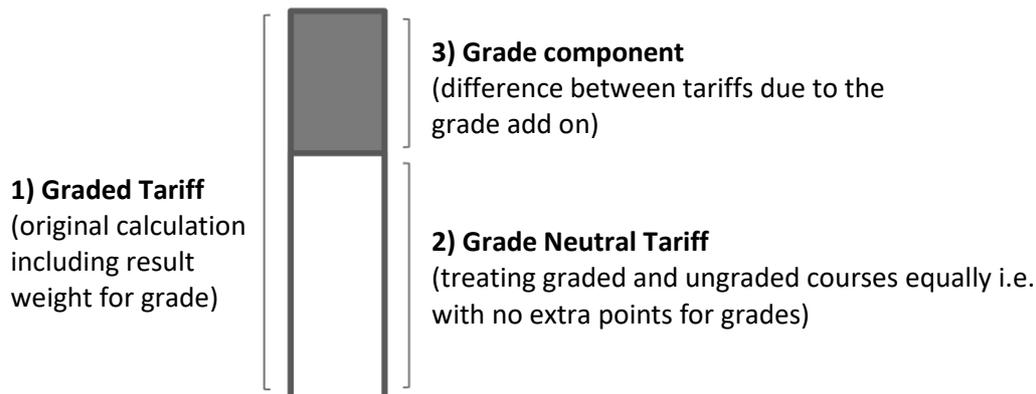
Differences may also occur if a high proportion of pupils take unusual courses or unusual levels, such as many pupils taking Highers in S4.



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
- 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 that similar pupils at other schools when the grade neutral methodology is used.

What can Grade neutral Tariff tell me?

Where differences are found between the two tariff options, this is most commonly:

- More negative differences for schools with a high proportion of graded attainment
- More positive differences for schools with mixed or more non-graded attainment

Note as more non-graded qualifications are incorporated into learners' journeys these differences will 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 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?