Multiple-year allocations for Initial Teacher Training

Methodology for the 2019 to 2020 academic year

October 2018

Contents

Introduction

Multiple-year allocations give the top performing School Centred Initial Teacher Training (SCITTs) and Higher Education Institutions (HEIs) a guaranteed number of postgraduate Initial Teacher Training (ITT) places in future years, offering longer term stability and planning opportunities. The top 25% performing ITT providers[1] have been awarded multiple-year allocations from 2019 to 2020. These 60 ITT providers will receive a guaranteed number of postgraduate ITT places for three years[2], up to and including academic year 2021 to 2022.

This document details the methodology and data sources that were used by the Department for Education (DfE) to determine the top 25% performing ITT providers. The methodology uses a combination of published data and organisational management information that has been submitted in previous ITT, Ofsted and School Workforce data collections.

Four indicators have been used to score the performance of ITT providers, with each indicator given equal weight. The indicators are described in detail later in this document but in summary, they are:

- Ofsted rating
- Trainee undergraduate degree class
- Trainees recruited compared to places allocated
- Employment rates

The calculated scores have been used to rank ITT providers to determine the recipients of multiple-year allocations from 2019 to 2020. DfE has published underlying data on all the indicators in an accompanying spreadsheet to enable ITT providers to understand their own scores.

The full list of ITT providers awarded multiple-year allocations for the 2019 to 2020 academic year is provided in Table 1 in the multiple-year allocations spreadsheet.

Applying multiple-year allocations in practice

ITT providers awarded multiple-year allocations this year will receive a guaranteed number of postgraduate training places until 2021 to 2022 inclusive.

For **allocated** courses, they are guaranteed the number of training places equal to the number of places allocated for the 2019 to 2020 academic year. If a postgraduate course that is currently in the **unlimited** category falls in the allocated category in future years,

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[1] Based on the number of ITT providers active in the market on 1 September 2018. This equates to 60 ITT providers.

[2] As published in the statistical release outlining allocations on 25 October 2018.

then they are guaranteed the number of training places equal to the number of trainees recruited to that course in academic year 2018 to 2019.

For ITT providers who were awarded multiple-year allocations in 2018 to 2019 and again in 2019 to 2020, this year's award replaces last year's. A small number of ITT providers that were awarded multiple-year allocations for 2018 to 2019 in October 2017 have not received a fresh award this year. These ITT providers have a guaranteed number of places until 2020 to 2021 only.

The diagram below illustrates the three cohorts that have received multiple-year allocations so far.
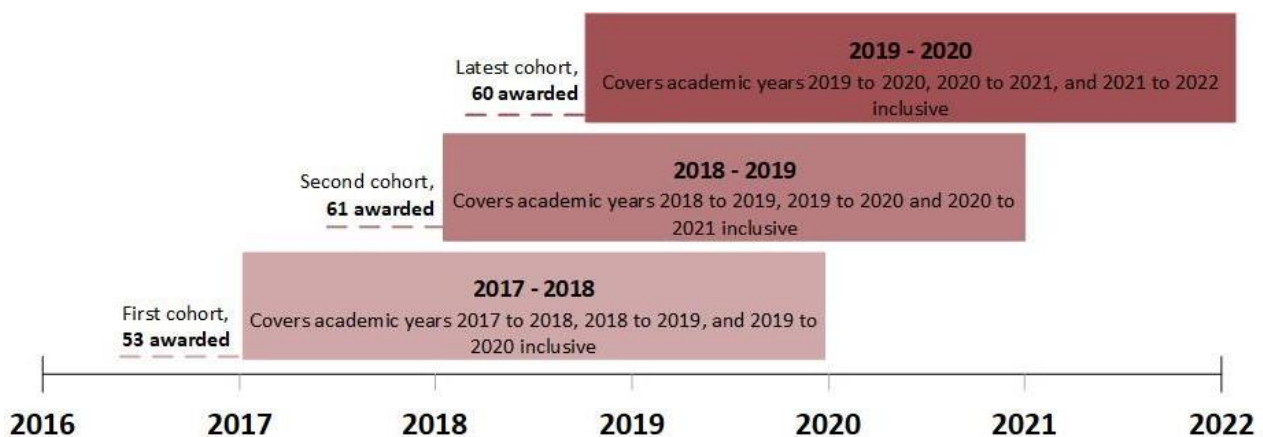
For HEIs, the guarantee applies to provider-led places. For SCITTs, the guarantee applies to both provider-led and School Direct places for which they are a ratifying ITT provider.

Calculating the score

Four indicators have been used to score the performance of all eligible ITT providers. HEIs and SCITT providers have been assessed separately in the analysis, with distinct calculations for each group. This is because SCITT providers have had their partnered School Direct data included, whereas HEIs have not. Including School Direct data for SCITTs enabled DfE to recognise the wide range of models employed by SCITTs without unfairly penalising those who choose (for example) to focus purely on being a partner ITT provider for a School Direct partnership – where frequently the lead school and the SCITT are co-located.

Calculation methodology

A summary of the calculation methodology is as follows:

1. Four indicators have been used, each corresponding to different data on the quality of ITT provision.

2. Three of the four indicators combine three years of data, with the most recent data being weighted more heavily, to give a total score for the indicator. Providers with fewer than three years of data were not eligible to be included in these calculations.

3. The total indicator scores have been "normalised", i.e. converted into a number from 0 to 1, depending on whether they were at the bottom (0), or at the top (1) of the range. Each ITT provider will therefore have 4 separate scores, ranging from 0 to 1.

4. The normalised scores have been treated equally, with each having the same prominence. They were added together to give a total score, ranging between 0 and 4. All ITT providers in the top 25% have met the threshold for multiple-year allocations.

Figure 1: Overview of the calculation process
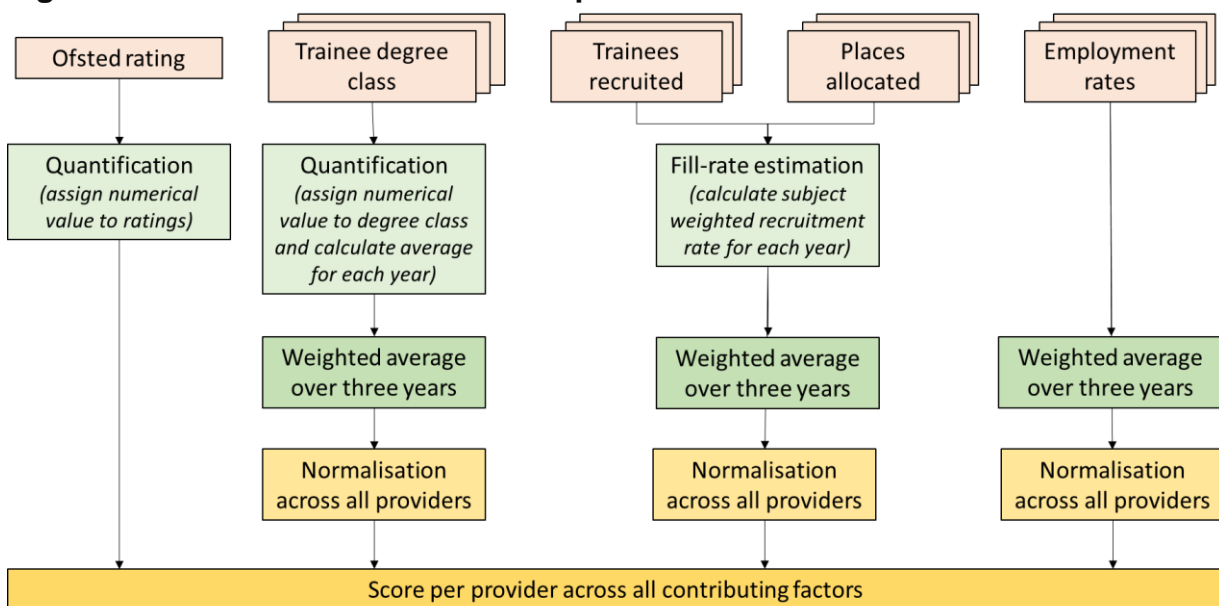
Data

With the exception of Ofsted grading, all of the indicators used three years' data. This allowed performance over time to be taken into consideration and reduced the effect of exceptionally high or low performance in one year.

For consistency, scores for previous years were taken from last year's publication and only scores for the most recent year of data were calculated for this publication. This means that if a provider has submitted revised data for previous years this will not be taken into account.

DfE weighted the most recent year of data most heavily, to recognise and reward ITT provider improvement. Individual data points were multiplied by the appropriate weight, to generate a value. The three generated values were then added together to generate the ITT provider's score.

Figure 2: Weighting of three years' data

Year of data	Weighting
Most recent	0.5
One year back	0.33
Two years back	0.17

Indicator normalisation

Normalising the scores allowed for greater differentiation between ITT providers when the raw scores were broadly similar to each other. By 'stretching' this range of values out, scores could be more easily differentiated and could be added across multiple indicators where the same approach had been applied.

As a result, the strongest ITT providers for a particular indicator had a score of 1 and the poorest performers had a score of 0. The exact position of an ITT provider depends on their relative position between these two numbers.

The formula for calculating normalised scores is available at Annex A.

Total score calculation

Each one of the four indicators has an equal weighting. In practice, this means the normalised scores were simply added together to provide a total score. This total score was then used to identify the top 25% performing ITT providers.

Annex A shows a worked demonstration of how to do this for an example ITT provider and should be read in conjunction with the following section which describes how to calculate raw scores for each of the four indicators.

Methodology for each indicator

Indicator 1: Ofsted rating

The latest published Ofsted Initial Teacher Education (ITE) inspection outcomes were used for this measure, correct on 11 September 2018, when ITT providers received their confirmation of allocations for 2019 to 2020.

Dataset

The latest data available on 11 September 2018 was Ofsted ITE inspections, as of 31 May 2018.

Methodology

Some ITT providers receive only one Ofsted judgement (a combined judgement for primary and secondary) whereas some providers receive separate judgements for their primary and secondary provision. This is the only category that has not been weighted for multiple years, or normalised, as it already covers a range from 0 to 1.

For example, the table below shows that a provider with an Ofsted rating of Good for Primary and an Ofsted rating of Requires Improvement for Secondary would score 0.375.

Figure 3: Ofsted rating scores

		Secondary			
		N/A	Requires Improvement	Good	Outstanding
Primary	N/A	0.5	0.25	0.5	1
	Requires Improvement	0.25	0.25	0.375	0.625
	Good	0.5	0.375	0.5	0.75
	Outstanding	1	0.625	0.75	1

Indicator 2: Trainee undergraduate degree class

For this indicator DfE used the average undergraduate degree class of trainees, using data submitted as part of historical ITT Census collections.

Dataset

Trainee undergraduate degree classifications taken from ITT Census data (DfE Official Statistics) for 2015 to 2016, 2016 to 2017 and 2017 to 2018 academic years.

Methodology

We calculated a degree score for every ITT provider for each of the three years above. This was done using Figure 4 below to assign a degree score to each trainee based on

their undergraduate degree and then calculating the average score across all eligible trainees in that year. For example, a provider where all trainees achieved an upper second class in 2015 to 2016 would score 75% for that year.

Figure 4: Degree classification scores

Degree Classification	Score
First Class	100%
Upper Second Class	75%
Lower Second Class	50%
Other	0%

Indicator 3: Trainees recruited compared to places allocated

ITT providers requested training places based on a realistic assessment of local need and the minimum sustainability of their programmes.

This indicator measured the successful recruitment of trainees against places and comparisons were made against percentage fill-rates for each subject.

For example, an ITT provider's percentage fill-rate for Mathematics was compared against the Mathematics performance of other ITT providers. There was no penalty if a subject was not offered by an ITT provider.

Datasets

Trainee numbers taken from ITT Census data (DfE Official Statistics release) for 2015 to 2016, 2016 to 2017 and 2017 to 2018.

ITT allocations data (Management Information release) for 2015 to 2016 and 2017 to 2018[3].

DfE ITT Data Management System requested places for 2016 to 2017[4].

Methodology

The following steps were taken to calculate a score for each ITT provider for each of the three years:

1. DfE first calculated the "expected recruitment" for each course based on the number of trainees an average ITT provider would have recruited. To do this, the

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[3] There were no ITT allocations for academic year 2016 to 2017, so the fill-rate was calculated against the number of places requested.

[4] Based on initial requests for ITT places and does not include requests made during the academic year.

number of places allocated[5] for each course was multiplied by the national fill rate in that subject. For example, if a provider had 10 allocated places in a subject with a 50% fill rate, their "expected recruitment" for that subject would be 10 * 50% = 5 trainees.

2. To determine how well an ITT provider performed, the total number of trainees they recruited across all subjects is divided by their total expected recruitment across all subjects. A score of 100% represented average performance, anything above or below 100% represented better or worse than average performance respectively.

   For example, if a provider recruited 80 trainees across all subjects but their total expected recruitment across all subjects was 100 trainees, then:

   recruitment score = (actual recruitment) / (expected recruitment) = 80 / 100 = 80%.

Indicator 4: Employment rates

This indicator looked at trainees that were awarded Qualified Teacher Status (QTS) and measured whether they went on to teach in a state-funded school in England.

The latest available SWC was collected in November 2017. This data is used to calculate how many trainees that completed ITT in 2015 to 2016 were employed as teachers within the 2016 to 2017 school year. Employment rates for trainees that completed ITT in 2013 to 2014 and trainees that completed ITT in 2014 to 2015 were measured over a slightly longer period following the completion of ITT, but the methodology has been refined this year to align with the Teacher Supply Model[6].

Datasets

Two datasets were linked for this indicator:

- ITT Performance Profiles (ITTPP), which contains data on ITT course completion and whether trainees gained QTS. Datasets used were ITTPP 2013 to 2014, 2014 to 2015 and 2015 to 2016.
- SWC, which provides data on staff working at state-funded schools, including NQTs. Datasets used were SWC 2014, 2015, 2016 and 2017.

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[5] Based on the number of places allocated for 2015 to 2016 and 2017 to 2018 and the number of places requested for 2016 to 2017. This is because there were no ITT allocations for 2016 to 2017.

[6] The DfE's Teacher Supply Model (TSM) now uses data from this employment measure instead of a previous data source. So that employment rates can be used in the TSM, we now report on the proportion of Newly Qualified Teachers (NQTs) employed in the state funded sector within one year of achieving QTS. Previously, employment rates were measured by the proportion of NQTs that were employed in a state-funded school by November of the following year after achieving QTS, i.e. approximately 16 months after achieving QTS. Measuring employment within one year prevents double counting of trainees in the TSM because the TSM accounts separately for trainees that take more than one year to enter state-funded teaching.

This approach means that an ITT provider needed to have a cohort of trainees in academic year 2013 to 2014 to be included in the analysis. All HEI ITT providers had a cohort at this time, but some newer SCITTs did not. This explains why some SCITTs are not yet eligible for multiple-year allocations.

Methodology

For each of the three years outlined above, we tracked trainees completing their course and recorded if they gained a teaching post in a state-funded school.

This score was created based on the proportion of total trainees that were employed. For example, if all trainees at an ITT provider in 2015 to 2016 were employed as teachers in state-funded schools within one year after qualification, that ITT provider would get a score of 100% for 2015 to 2016.

Annex A: Example calculation

This annex shows an example calculation for a fictional HEI. Each section will present the data necessary to calculate the total score used to rank the performance of ITT providers. In this annex, rounding of values to aid presentation might result in slightly different results to a calculation using more significant figures.

The top and bottom scores for an indicator are needed for normalisation. These are provided below and are used as follows:

$$Normalised\ Score = \frac{Provider\ Score - Overall\ lowest\ score}{Overall\ highest\ score - Overall\ lowest\ score}$$

In order to prevent an outlier score from an ITT provider causing the remaining normalised scores to "bunch" into a narrow range, the bottom three and top three scores from the overall range have been eliminated.

	HEI		SCITT	
	Highest	Lowest	Highest	Lowest
Indicator 2: Trainee undergraduate degree class	0.77	0.64	0.78	0.60
Indicator 3: Trainees recruited/places allocated	1.26	0.78	2.38	0.63
Indicator 4: Employment rates	0.92	0.63	0.97	0.63

Indicator 1: Ofsted rating

The institution offers ITT in both the primary and secondary phases. It has an "Outstanding" Ofsted assessment for primary and "Good" for secondary. Using Figure 3, this indicator has a score of **0.75**.

Indicator 2: Trainee undergraduate degree class

The institution has had 100 students (across both phases and courses) for each of the previous 3 years. Their degree classes are as follows:

	2015/16	2016/17	2017/18
First class	10	20	30
Upper second class	30	50	40
Lower second class	50	20	20
Other	10	10	10
Mean Degree Score	**57.5%**	**67.5%**	**70%**

The degree scores are calculated using the scores assigned in Figure 4. For 2017 to 2018, this would be:

[(30*100%)+(40*75%)+(20*50%)+(10*0%)]/100 = **70%**

Weighting these individual scores across three years using the 0.17; 0.33; 0.5 ratios gives a total (un-normalised) score of **0.67**:

(57.5%*0.17) + (67.5%*0.33) + (70%*0.5) = 67% = **0.67**

The final stage is to normalise this value. Using the equation given at the start of this section and the maximum and minimum values for normalisation in Figure 5, the normalised score is:

$$(0.67-0.64)/(0.77-0.64) = \textbf{0.23}$$

This can be interpreted as this institution being 23% from the lower end of the range of this measure, when compared to those at the top of the range.

Indicator 3: Trainees recruited compared to places allocated

The methodology for this indicator has two steps:

Step 1. Calculate historical average recruitment for subjects that the institution runs courses for. This is the number of trainees in the ITT Census in a subject across all ITT providers divided by the total number of places allocated for that subject in that year.

Step 2. Calculate "expected recruitment" for subjects that the institution runs courses for. This is essentially a way of comparing a provider's recruitment against average recruitment for all providers. For example, this institution runs two courses: Primary and Biology. In each of the past three years, it has recruited 50 trainees against an allocation of 65 places to each of these two courses, meaning each had a 77% fill-rate. However, using the average fill-rates[7] across all ITT providers for these subjects, an expected recruitment number (rounded) can be calculated for each subject in each year.

For example, the average fill-rate for Biology across all providers was 74% in 2017 to 2018. The "expected recruitment" for Biology at this ITT provider based on a 74% average fill-rate and 65 allocated places is: expected recruitment = 74% * 65 = 48 trainees. This provider actually recruited 50 trainees so their recruitment in Biology was better than average.

We use the same process for Primary where the average fill rate was 92% across all providers in 2017 to 2018. Again, this provider had 65 allocated places. This gives an expected recruitment of 92% * 65 = 60. The provider actually recruited 50 trainees so their recruitment was poorer than average in Primary.

The recruitment score for each year is calculated by dividing the total **actual** recruitment by the total of the **expected** recruitment. For 2017 to 2018, this would be:

$$(50+50)/(48+60) = \textbf{93\%}$$

This means that this provider recruited 93% (or 0.93 rounded) of **expected recruitment** compared to all other providers.

	2015/16	2016/17	2017/18
Expected recruitment (Biology)	59	48	48
Expected recruitment (Primary)	59	58	60
Recruitment Score	**85%**	**94%**	**93%**

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[7] There were no allocations to recruit for academic year 2016/17, so the fill-rate was calculated against the number of places requested.

Weighting and normalising these in the same manner as indicator 2 gives:

(((93%*0.5)+(94%*0.33)+(85%*0.17))-0.78)/(1.26-0.78) = **0.29**

Indicator 4: Employment rates

The institution has employment data as follows.

	Completed ITT 2013 to 2014	Completed ITT 2014 to 2015	Completed ITT 2015 to 2016
Number awarded QTS	100	99	101
Number of trainees in the SWC	75	78	84
Employment rate	75%	79%	83%

The employment rate is calculated by dividing the number of trainees employed as teachers (as reported in the SWC) by the number that were awarded QTS (as reported in ITT Performance Profiles) for each ITT provider. This institution awarded 101 trainees with QTS in 2015 to 2016, 84 of these trainees were found in the following SWC for the 2016 to 2017 school year. This gives an employment rate of 83% for the latest year of available data.

Weighting and normalising these values across 3 years gives:

(((83%*0.5)+(79%*0.33)+(75%*0.17))-0.63)/(0.92-0.63)= **0.60**

Final score

By adding the normalised scores from each of the individual indicators, we get:

0.75 + 0.23 + 0.29 + 0.60 = 1.87

This score is unlikely to be high enough to get into the top 25%, for which the institution would receive a multiple-year allocation. It would therefore receive its allocation as normal, for one year.