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Multiple-Year Initial Teacher Training Allocations

Methodology for the 2018 to 2019 academic year

October 2017

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Introduction

Multiple-year allocations give the top performing School Centred Initial Teacher Training (SCITTs) and Higher Education Institutions (HEIs) the guarantee of minimum number of allocated Initial Teacher Training (ITT) places for three years.¹. This baseline guarantee will provide longer term stability and planning opportunities for ITT providers. For the 2018 to 2019 academic year 61² ITT providers will be awarded multiple-year allocations for Initial Teacher Training (ITT) places on the basis that they are in the top 25% performing ITT providers.³ This document outlines the methodology used by the National College for Teaching and Leadership (NCTL) to determine the ITT providers who will be awarded multiple-year allocations from 2018 to 2019. It contains technical explanations of the analysis used in determining the top 25% performing ITT providers.

Expiry or review date

This guidance will be reviewed again for the 2019 to 2020 academic year.

Who is this publication for?

This guidance is for HEIs and SCITTs. It explains NCTL's process for awarding multipleyear allocations of ITT places.

Overview

This document sets out the methodology used to award multiple-year allocations. The methodology uses a combination of published data and organisational management information that has been submitted in previous ITT census data collections. Using this document, SCITTs and HEIs can calculate their own scores.

The calculated scores were used to rank ITT providers to determine the top 25% performing ITT providers based on the four indicators described below. The criteria used for judging quality are described in detail in this document, and NCTL 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-

¹ as published in the Statistical First Release outlining allocations on 26 October 2017.

 $^{^2}$ 61 ITT providers were awarded, but due to the closure of one SCITT in 2017 to 2018, 60 will receive the designation in 2018 to 2019.

³ Based on the number of ITT providers active in the market on 31 August 2017.

year allocations for 2018 to 2019 is provided on Table 1 in the multiple-year allocations spreadsheet.

The four indicators are as follows:

- Ofsted rating
- Trainee degree class
- Trainees recruited/places allocated
- Employment rates

Applying multiple-year allocations in practice

In 2017 to 2018, NCTL introduced the offer of multiple-year allocations for the top performing SCITTs and HEIs. 53 ITT providers were awarded multiple-year allocations from 2017 to 2018, which guaranteed those ITT providers a minimum number of ITT places up to 2019 to 2020 inclusive.⁴

Most ITT providers that were awarded multiple-year allocations in autumn 2016 are receiving a fresh award of multiple-year allocations in October 2017. For these providers, this year's award replaces last year's, and guarantees places up to 2020 to 2021. Some ITT providers are being awarded multiple-year allocations for the first time in October 2017, and also have a guarantee of places up to 2020 to 2021. A small number of ITT providers that were awarded multiple-year allocations in autumn 2016 are not receiving a fresh award in October 2017. These providers have a guarantee of places to 2019 to 2020 only.

For HEIs, the award of multiple-year allocations applies to provider-led places. For SCITTs, the award of multiple-year allocations applies to both provider-led and School Direct places for which they are a ratifying provider.

Calculating the score

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. This enabled NCTL 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 provider for a School Direct partnership – where frequently the lead school and the SCITT are co-located. HEIs and SCITTs both had to meet the same criteria to be in the top 25% for 2018 to 2019.

⁴ The allocations that are guaranteed to ITT providers that were awarded multiple-year allocations for 2017 to 2018 are published in the official statistics publication from 9 May 2017.

Calculation methodology

A summary of the calculation methodology is as follows:

- Four data indicators are used, each corresponding to a domain relating to the overall quality of ITT provision. These are calculated for every single provider, and use a variety of data sources;
- Three of the four indicators combine three years of data, with most recent data being weighted more heavily to give a total score for the indicator;
- The total indicator scores are "normalised", i.e. converted into a number from 0 to 1, depending on whether they are the bottom (0), or at the top (1) of the range. Each provider will therefore have 4 separate scores, ranging from 0 to 1;
- The normalised scores are treated equally, with each having the same prominence. This means that they can be 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.

The four indicators used are described in more detail in later sections. The weighting and normalisation processes are covered in the following two sections. The diagram below shows an overview of the calculation process.



Figure 1: Overview of the calculation process

Three years' data is used

With the exception of Ofsted grading, all of the indicators use three years' data. This allows performance over time to be taken into consideration, and reduces the effect of

outlier performance in one year. NCTL has weighted the most recent year of data most heavily as shown in the table below, in order to encourage ITT providers to improve their performances and get the benefits of doing so quickly. The weights are multiplied by the value for year, and the three years added together.

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

Figure 2: Weighting of three years' data

Normalisation of each indicator

Normalising the scores allows for greater differentiation between ITT providers when the raw scores are broadly similar to each other, but the absolute value of the indicator is well above zero. An example of where this might be sensible is trainee degree class, where many ITT providers have scores between 60 and 80 (see page 10). By 'stretching' this range of values out, scores can be more easily differentiated, and scores can be added across multiple measures where the same approach has been applied. The effect of doing this is that the strongest ITT providers for a particular indicator will have a score of 1, and the poorest performers will have a score of 0. The exact position of a provider will depend on their relative position between these two numbers.

In order to normalise a provider's score, it is necessary to know the top and bottom scores for an indicator. These are provided in figure 3, 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 a particularly strong, or particularly weak provider from 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. This means that if an ITT provider's score is above the highest score, or below the lowest scores, then it will be capped at 1 or 0 respectively.

Figure 3: Capping maximum and minimum values

	HEI		SCITT	
	Upper	Lower	Upper	Lower
	value	value	value	value
Indicator 2: Degree class	0.779	0.658	0.789	0.611
Indicator 3: Recruitment performance against	1.240	0.721	1.601	0.633
allocations				
Indicator 4: Quality of outcomes – Employment rates	0.971	0.708	0.979	0.702
within the state-funded sector				

The indicators are summed, and a total score calculated

Each one of the four indicators has an equal weighting. This means that the normalised scores can be added together, to provide a total score which is then used to identify the top 25% performing ITT providers.

Annex A shows a worked demonstration of how to do this for an example 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: Quality of training

The latest published Ofsted Initial Teacher Education inspection outcomes were used for this measure, correct on 14 September 2017, when ITT providers received their confirmation of allocations for 2018 to 2019.

<u>Dataset</u>

Latest data available at the time was Ofsted Initial Teacher Education (ITE) inspections, as at 30 June 2017.

<u>Methodology</u>

Some ITT providers offer only one phase (primary/secondary) of training, whereas some offer both. The following table shows how to calculate a score for a provider, depending on the scores of the phases of ITE provision at the institution. At the time of calculation, there were no ITT providers who had been categorised as "Requires Improvement". 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.

Figure 4: Ofsted rating scores

		Seco	ndary	
		N/A	Good	Outstanding
~	N/A	-	0.5	1
mai	Good	0.5	0.5	0.75
Pri	Outstanding	1	0.75	1

Indicator 2: Recruitment performance against allocations

For this indicator the recruitment of trainees against allocations was calculated. ITT providers were asked to request the number of places required based on a realistic assessment of local need and the minimum sustainability of their programmes and are expected to fill their allocated places on an annual basis. However, it is appreciated that some subjects are more difficult than others to recruit to, so comparisons are made against fill percentages for the same subjects. For example, a provider's percentage fill-rate for mathematics will be compared against the mathematics performance of other ITT providers. Their primary fill-rate will be compared against the primary fill-rate of other ITT providers. There is no penalty if a subject is not offered by a provider. In 2016 to 2017 there were no allocations so NCTL used numbers requested by ITT providers as the denominator for calculations for this year. Although the proportion of recruitment against places requested was lower, they were generally lower across all ITT providers so no ITT providers were disadvantaged using this approach.

Datasets

Trainee numbers taken from ITT census data (NCTL Official Statistics release) for 2014 to 2015, 2015 to 2016 and 2016 to 2017.

ITT allocations data (Management Information release) for 2014 to 2015 and 2015 to 2016 were used. For 2016 to 2017 NCTL used the places requested from the Data Management System.

Methodology

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

- 1. For each subject delivered by a provider, the "average fill rate" across all courses was multiplied by the number of places allocated for that subject. This number was then rounded to the nearest whole number. This represents the number of trainees that NCTL would have expected an "average" provider to have recruited.
- 2. Dividing the sum of the provider's actual trainees by the sum of the expected recruitment results in a number that shows how well the provider performed. A number of 1 represents average performance, anything above or below 1 shows better or worse than average performance respectively.

Indicator 3: Degree class of trainees

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

<u>Dataset</u>

Trainee degree classifications taken from ITT census data (NCTL Official Statistics) for 2014 to 2015, 2015 to 2016 and 2016 to 2017 academic years.

Methodology

For each of the three years above, every provider has an average degree score calculated. This is done by evaluating a mean score across all eligible trainees for that year, using the following table to assign scores for degree classifications.

Figure 5: Degree classification scores

Degree Classification	Score
First Class	1
Upper Second Class	0.75
Lower Second Class	0.5
Other	0

Indicator 4: Quality of outcomes – employment rates within the state-funded school sector

This indicator looks at trainees completing ITT courses and being awarded Qualified Teacher Status (QTS) and whether they go on to become employed in a state-funded school in England at any time within two years.

Early work with the linked ITT Performance Profiles (ITTPP)/School Workforce Census (SWC) dataset has shown that some newly-qualified teachers (NQTs), who are employed during the first year following qualification, do not appear in the SWC in the November immediately following completion of their ITT. This may be as a result of new teachers starting later in the school year (the SWC is collected in November) or delays in entering new members of staff on school reporting systems. NCTL has found that looking over two years after completion of ITT gives a more complete indication of trainee employment and this is the timeframe we have used here.

The latest available SWC was collected in November 2016. Those who trained in 2014 to 2015 are therefore the latest cohort for whom NCTL has the required two years of SWC data (for 2015 and 2016) to determine employment outcomes. Calculations of employment performance here include the three training cohorts who completed their training in 2012 to 2013, 2013 to 2014 and 2014 to 2015.

Datasets

The ITT Performance Profiles dataset with the SWC dataset are linked:

- ITT Performance Profiles contains data on ITT course completion and whether trainees gained QTS. Datasets used were ITT Performance Profiles 2012 to 2013, 2013 to 2014 and 2014 to 2015
- SWC provides data on staff working at state-funded schools. Datasets used were SWC 2013, 2014, 2015 and 2016

The linked dataset allows NCTL to determine whether those completing ITT took jobs in the state-funded school sector. The following datasets were linked and used:

- ITT Performance Profiles 2014 to 2015 and SWC 2015 and 2016: this shows whether ITT trainees completing training courses in academic year 2014 to 2015 gained a job in a state-funded school in either 2015 or 2016 (shown in the SWC);
- ITT Performance Profiles 2013 to 2014 and SWC 2014 and 2015: this shows whether ITT trainees completing training courses in academic year 2013 to 2014 gained a job in a state-funded school in either 2014 or 2015 (shown in the SWC);
- ITT Performance Profiles 2012 to 2013 and SWC 2013 and 2014: this shows whether ITT trainees completing training courses in academic year 2012 to 2013

gained a job in a state-funded school in either 2013 or 2014 (shown in the SWC). For the 2012 to 2013 performance profiles we have included data from Employment Based Initial Teacher Training (EBITT) courses which later converted to School Direct.

This methodology effectively means that for an ITT provider to be included in the analysis they needed to have a cohort of trainees in 2012 to 2013 (or before). All HEIs involved in ITT had a cohort at this time but many SCITTs did not. This explains why a large number of SCITTs were not eligible for multiple-year allocations. However, they will be eligible to be included in the analysis in future years.

Methodology

To calculate a score for each individual HEI or SCITT the following steps were taken:

Employment rates calculated: For each of the three years outlined above we track the trainees completing their course and see if they were recorded as employed in a state-funded school in the SWC within either of the two years immediately after their courses finished. This score is created based on the proportion of their total trainees that were employed. For example, if all trainees from a provider were employed within the two years following qualification, that provider would get a score of 100%.

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 determine whether the institution would have received a mulitple-year allocation. In this annex, rounding of values to aid presentation might result in slightly different results to a calculation using more significant figures.

Indicator 1: quality of training

The institution offers ITT in both the primary and secondary phases. It has an "Outstanding" Ofsted assessment for primary, and "Good" for secondary. Using data in Figure 4, this indicator has a score of **0.75**.

Indicator 2: degree class of trainees

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

	2014/15	2015/16	2016/17
First class	10	20	30
Upper second class	30	50	40
Lower second class	50	20	20
Other	10	10	10
Mean Degree Score	0.575	0.675	0.7

The degree scores are calculated using the scores assigned in Figure 5. For 2016 to 2017, this would be:

$$[(30^*1)+(40^*0.75)+(20^*0.5)+(10^*0)]/(100) = 0.7$$

Weighting these individual scores across three years using the 0.17; 0.33; 0.5 ratios gives a total (un-normalised) score of **0.6705**:

(0.575*0.17) + (0.675*0.33) + (0.7*0.5) = 0.6705

The final stage is to normalise this value. Using the equation given on page 7, and the maximum and minimum values for normalisation in Figure 3, the normalised score is:

(0.6705 - 0.658)/(0.779 - 0.658) = 0.103

This can be interpreted as this institution being **10.3%** from the lower end of the range of this measure, when compared to those at the top of the range.

Indicator 3: recruitment performance against allocations

This institution runs two courses: primary and biology. In each of the past three years, it has recruited 50, against an allocation of 65, to each of these two courses.

Using the historical average fill-rates for these subjects, an expected recruitment number (rounded) can be calculated for each of the two subjects. For example, in 2016 to 2017, the average fill-rate for biology was 74%, which means with an allocation of 65, the expected recruitment (based on average fill) was 48. The same process for primary gives an expected recruitment of 60, meaning that this provider was better than average at recruiting biology, but poorer than average at recruiting primary.

The recruitment score for each year is calculated by dividing the total actual recruitment by the total of the expected recruitment. For 2016 to 2017, this would be (50+50)/(48+60) = 0.926

	2014/15	2015/16	2016/17
Expected recruitment (Biology)	59	48	48
Expected recruitment (Primary)	59	58	60
Recruitment Score	0.847	0.943	0.926

Weighting and normalising these in the same manner as indicator 3 gives:

(((0.926*0.5)+(0.943*0.33)+(0.847*0.17))-0.721)/(1.24-0.721) = 0.325

Indicator 4: quality of outcomes - employment rates within the state-funded school sector

The institution has employment data as follows.

HEI	PP2014	PP2015	PP2016
	AY 2012/3	AY 2013/14	AY 2014/15
Fictional University	75%	79%	83%

Weighting and normalising these values gives:

(((0.83*0.5)+(0.79*0.33)+(0.75*0.17))-0.708)/(0.971-0.708)= 0.362

Final score

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

0.75 + 0.103 + 0.325 + 0.362 = 1.541

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.



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