AGENDA

TEACHER WORKFORCE PLANNING ADVISORY GROUP

2.00pm ON MONDAY 28 JUNE 2021

1. Welcome and apologies

2. Minutes of meeting on 11 November 2020 (Paper TWPAG/2021/1)

3. Analysis of Teacher Induction Scheme Cohorts 2016/17 to 2019/20 (Paper TWPAG/2021/2)

4. Manifesto commitments:
   - 3,500 additional teachers and classroom assistants;
   - reduction of teachers' daily contact time by an hour and a half per week.

   (Paper TWPAG 2021/3)

5 Next steps

6. AOB

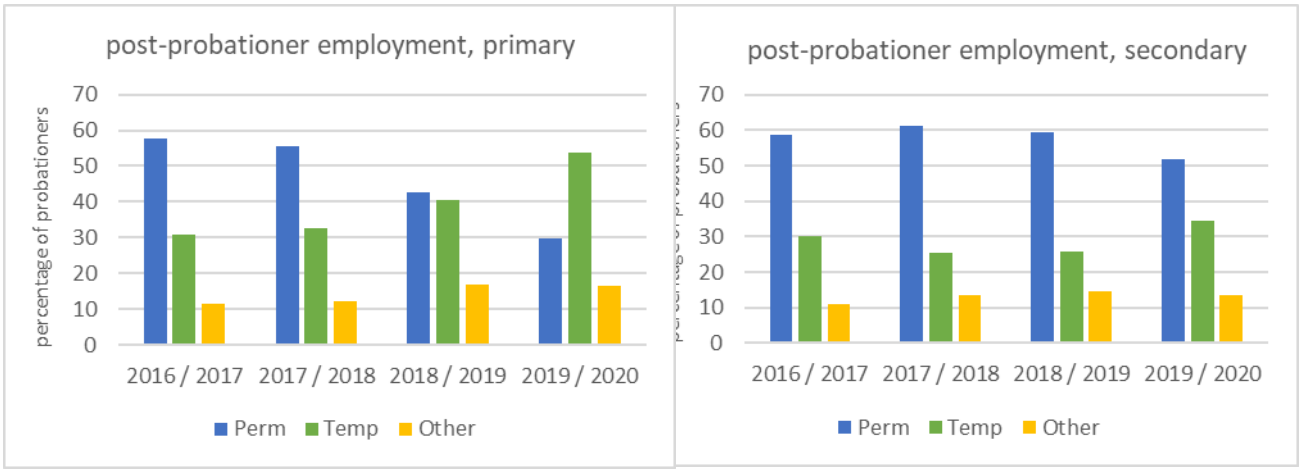
TWPAG/2021/2

Analysis of Teacher Induction Scheme Cohorts – 2016/17 to 2019/20

This note provides a breakdown of the post-probationer[1] tables we publish annually in the school summary statistics. The issue of the numbers of early career teachers who have not secured permanent roles has been raised by both pressure groups of teachers and opposition parties. We welcome questions and discussions on the data presented. Including views on whether any further analysis of the breakdowns by local authority and secondary subject would be useful for teacher workforce planning.

Data collected in the annual teachers census shows there has been an increase in the proportion of probationers who can only find temporary posts in the year following their probation. As shown in the graphs below, this increase in temporary employment is particularly true in the primary sector. Over half of the 2019/2020 primary cohort were in temporary roles in the year following their probation, this is the first cohort where there are more teachers in temporary posts than permanent.

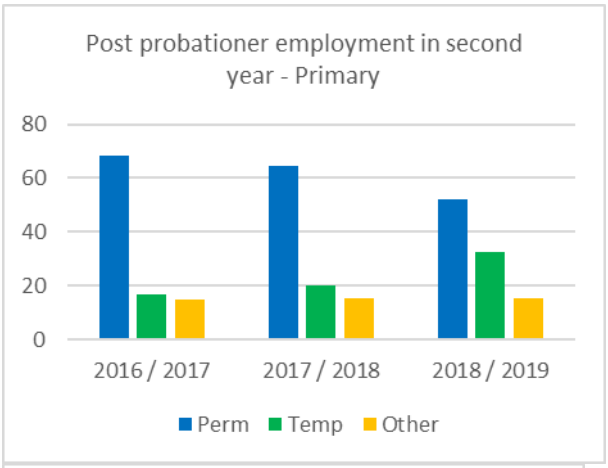
Chart 1: Percentage of post-probationers by employment type, cohort 2016/2017 – 2019/2020

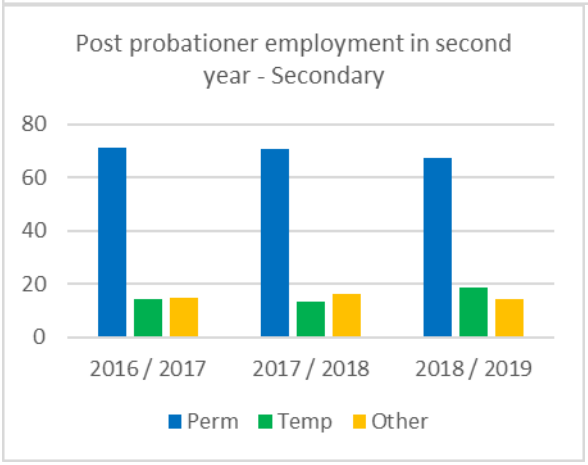


There has also been an increasing proportion of teachers who have been unable to permanent roles beyond the first year following their probationer. The chart below shows the proportion of employment type for teachers in the second year following their probation year.

Chart 2: Percentage of post-probationers by employment type in second year of employment, cohort 2016/2017 – 2018/2019

[1] Throughout this paper probationers refers to teachers who have completed their probationer year through the one year full time Teacher Induction Scheme (TIS) only.

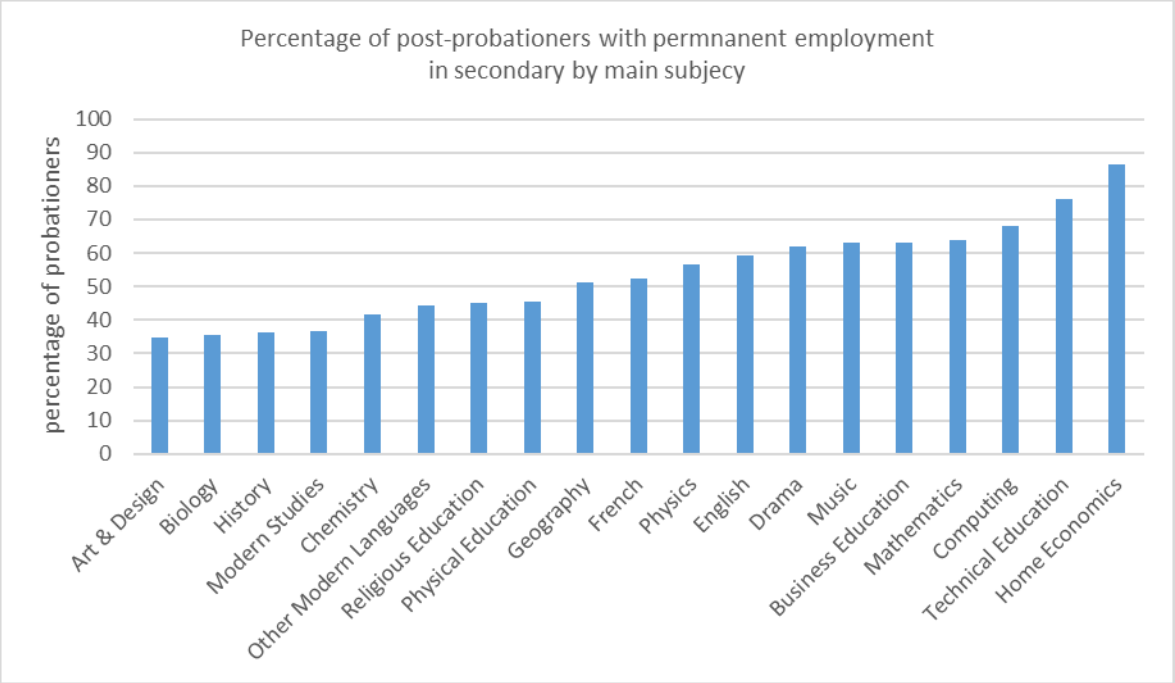




Secondary Subject Variation

We have also looked at the how many probationers who found employment in the year following their probation by main subject taught for secondary schools (this is based on the subject they taught in their probation). In 2019/2020 cohort, under 40% of probationers teaching Art & Design, Biology, History and Modern Studies found permanent employment. Subjects with the highest level of permanent employment were Technical Education and Home Economics.

Chart 3: Percentage of post-probationers with permanent employment in secondary by main subject



Local Authority Variation

The proportion of probationers who are obtaining permanent employment in the year following their probationer varies a lot between local authorities. For primary teachers in the 2019/2020 cohort, under 10% of probationers which carried out their probationer year in Inverclyde and North Ayrshire found permanent employment. In contrast over 70% of probationers in Western Isles, Perth & Kinross, Clackmannanshire and Aberdeen City found permanent employment.

There are likely to be a number of factors causing this variation, for example it may be some local authorities only offer temporary contract to their probationers or chose to not keep them on at all. The data shows the percentage of permanent employment of probationers in any local authority in the year following their probation, not just the local authority where they undertook their probation year.

Table 1: Percentage of post-probationers with permanent employment. (This only takes into account where the individual carried out their probation, not where they found employment the following year.)

	Primary				Secondary			
	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2016 /2017	2017 /2018	2018 /2019	2019 /2020
Aberdeen City	83	76	85	75	79	89	71	72
Aberdeenshire	65	71	70	28	66	76	80	84
Angus	75	92	40	11	76	77	65	75
Argyll & Bute	44	36	26	14	50	83	58	38
Clackmannanshire	69	79	65	74	47	25	40	50
Dumfries & Galloway	37	40	14	14	75	71	75	60
Dundee City	70	69	52	68	72	92	72	67
East Ayrshire	41	43	38	14	62	67	46	30
East Dunbartonshire	48	41	29	51	32	33	44	24
East Lothian	41	34	29	11	70	59	57	44
East Renfrewshire	60	60	46	22	64	31	32	24
Edinburgh City	56	45	43	21	51	61	67	50
Falkirk	70	67	62	18	58	67	45	37
Fife	44	45	49	32	56	64	76	64
Glasgow City	72	72	42	19	53	56	57	64
Highland	73	70	31	20	59	61	47	57
Inverclyde	42	8	15	7	14	42	64	29
Midlothian	56	70	29	24	61	53	44	40
Moray	66	74	73	20	50	56	75	64
Na h-Eileanan Siar	25	57	20	71	80	67	78	38
North Ayrshire	61	40	27	7	57	54	65	42
North Lanarkshire	33	30	31	24	36	51	48	35
Orkney Islands	38	20	50	0	17	40	0	50
Perth & Kinross	59	63	59	73	68	55	55	50
Renfrewshire	34	52	35	12	44	51	44	33
Scottish Borders	56	71	39	22	89	82	79	63
Shetland Islands	33	50	14	0	100	100	50	50
South Ayrshire	44	32	19	0	58	45	48	36
South Lanarkshire	80	73	41	68	78	82	83	88
Stirling	47	37	36	21	51	50	50	37
West Dunbartonshire	41	52	22	14	63	54	62	44
West Lothian	44	54	48	44	71	79	66	61

TWPAG/2021/03

Teacher Workforce Planning discussion note: impact of manifesto commitments – SG Education Analytical Services, June 2021

The SNP manifesto committed to increasing teacher numbers and reducing teacher class contact time. This note considers the possible impact of these commitments on setting ITE places and uses the teacher workforce planning statistical model to look at possible options for meeting these commitments.

100 days Commitment:

- To fund local authorities to increase teachers by 1,000 and classroom assistants by 500 in the first 100 days

Manifesto Commitments:

- Reduce teacher's class contact time by an hour and a half per week.
- Recruit at least 3,500 additional teachers and classroom assistants, over and above the 1,400 teachers recruited during the pandemic.

How we have modelled this:

- 1,000 additional teachers above 2020 teacher levels in 2021
- 1.5 hours reduced teacher working time to be introduced at earliest possible
  point from August 2022 onwards (if teaching numbers allow)
- 3,000 teachers above 2020 levels by 2025 (3,500 target less the 500 classroom assistants in the 100 days commitment)

The assumptions and analysis included are for discussion purposes. We would welcome feedback and discussion on the validity of the assumptions and the desirability and practicality of the modelled scenarios to meet these commitments.

Background on Pupil and Teacher Numbers and Pupil Projections

In secondary schools, teacher and pupil numbers have both been rising since 2016. Across this period the pupil teacher ratio (PTR) has increased (worsened) to 12.5, the highest level since 2004. The lowest secondary PTR was 11.6 in 2007.

The number of Secondary pupils is projected to continue increasing until 2024 after which it will fall in every year until 2035.

In primary schools, teacher numbers have been rising since 2012, initially at a slower pace than the rising number of pupils. However pupil numbers reached a peak in 2017 but teacher numbers have continued to rise. This has resulted in the pupil teacher ratio in primary schools falling to the lowest (best) ever level in 2020 of 15.4. This was partly as a result of the additional teachers employed for covid recovery in 2020.

The number of Primary pupils is projected to continue to fall every year until 2035 (although there is much less certainty once start we reach cohorts of children who are not yet born from 2026 onwards).

1,000 additional teachers above 2020 teacher levels in 2021

Previously workforce planning analysis has been done on the basis of the number of teachers tracking pupil numbers.

To keep pace with a projected overall increase in pupil numbers the number of teachers in 2021 would need to be 200 higher than 2020. This would be made up by an increase of 300 Secondary teachers and 100 special school teachers and a decrease of 200 primary teachers (in line with the decreasing number of primary school pupils).

In order to meet the target of 1,000 additional teachers, a further 800 teachers will be required above the increase of 200 required to match the increase in pupils.

Based on the prevalence of temporary primary staff, large number of primary probationers, and anecdotal evidence of primary teachers who have been unable to secure employment we have assumed that primary teachers will be easiest to recruit and so all of these 800 additional teachers will be in the primary sector. This would result in an overall increase of 600 primary teachers, 300 secondary teachers and 100 special school teachers.

Assumption on how 100 days commitment will be met

	Primary	Secondary	Special	Centrally Employed	ELC	Total
2020	25,700	24,100	1,900	1,000	700	53,400
2021	26,300	24,400	2,000	1,000	700	54,400

1.5 hours reduced teacher class contact time to be introduced at earliest possible point from August 2022 onwards

We have made some simple calculations to estimate the number of teachers required to reduce class contact time. These calculations only consider the requirement of teacher numbers at a national level and not any practical implications around teacher availability and/or timetabling at a school or local authority level.

We have used the 2019 staff census as a baseline as this reflects the teaching workforce without the addition of covid recovery teachers. We have assumed that by 2022 teachers currently in covid recovery roles would be available to work in roles which allowed reduced class contact time to be introduced.

We have assumed that all teachers in non-promoted posts currently have 22.5 hours class contact time (taking account of part time posts).

Using primary teachers as an example, we have taken the total number of classroom teachers (non-promoted posts)
= 20,100

And multiplied this by 22.5 hours of class contact time to get total class contact hours.
=452,000

And then divided this by the new class contact time of 21 hours to get a new requirement for classroom teachers
=21,500

The estimated impact of reducing class contact time to 21 hours for primary, secondary and special teachers is shown in the table below.

2019 Staff and Pupil Census

	Primary	Secondary	Special
Classroom Teachers	20,100	16,800	1,500
PTR	15.9	12.4	3.7

Estimated impact of reducing CCT to 21 hours in 2019

	Primary	Secondary	Special
Classroom Teachers Required	21,500	18,000	1,600
PTR Required	15.1	11.8	3.5
Additional teachers required	1,400	1,200	100

This has allowed us to calculated an estimated pupil teacher ratio required in each sector to meet the class contact time commitment in 2019. ('PTR required' in the table above).

The pupil teacher ratios are based on the whole teaching workforce (including promoted posts). We have assumed that there will be no impact on the number of promoted posts required as a result of reducing class contact time.

We have taken these PTRs and used them with the pupil projections to calculate the number of teachers required to meet the commitment in each year from 2022 to 2025 in each sector.

Teachers required to reduce class contact time

	Primary	Secondary	Special	Centrally Employed	ELC	Total	
2020	25,700	24,100	1,900	1,000	700	53,400	Census
2021	26,300	24,400	2,000	1,000	700	54,400	100 days commitment
2022	25,500	26,200	2,200	1,000	700	55,600	Class Contact time reduced to 21 hours
2023	25,000	26,600	2,200	1,000	700	55,500	
2024	24,500	26,700	2,200	1,000	700	55,200	
2025	24,200	26,700	2,200	1,000	700	54,800	

We have highlighted a couple of key results of this analysis.

Secondary Teachers required in 2022: This analysis estimates that the required increase in secondary teachers to reduce class contact time, whilst keeping pace with increasing pupil numbers, will be over 2,100 between 2020 and 2022. This will need to be teachers who are already in the system or about to start ITE in 2021. This target is likely to be very challenging to meet – especially if the increases are to be met across all subjects.

Overall teacher numbers by 2025: In terms of overall teacher numbers, reducing class contact time whilst keeping pace with pupil numbers would require 2,200 additional teachers above the 2020 levels by 2022 – however this reduces to 1,400 additional teachers above the 2020 levels by 2025, because of the reduction in primary school pupils.

3,000 teachers above 2020 levels by 2025

To consider how to meet this target we have looked at the teacher workforce planning model combined with the analysis to reduce class contact time.

We have looked at 2 scenarios, the starting point for both was ensuring there were enough teachers in each sector by 2025 to meet the reduction in class contact time (1,400 teachers above 2020 levels). This leaves a further 1,600 teachers that will need to be in place by 2025 to meet the target of increasing the teaching workforce by 3,000.

In scenario A – the 1,600 extra teachers required to reach 3,000 teachers above 2020 levels are all primary teachers. This has the effect of keeping primary teacher numbers stable from 2021 to 2025, despite the reduction in pupil numbers. This would equate to a substantial prioritisation of the primary sector over the secondary sector. Based on our assumption of the number of additional teachers required, in this scenario the reduced class contact time would not be possible in secondary schools until 2025.

In scenario B – the 1,600 extra teachers are split between primary and secondary. This results a reduction in primary teachers from 2021 and challenging targets for secondary ITE recruitment. In this scenario the number of teachers required to reduce class contact time to 21 hours in secondary schools is reached by 2024.

Summary of scenarios to meet 3,000 Additional Teachers

	Primary	Secondary	Special	Centrally Employed	ELC	Total	
2020	25,700	24,100	1,900	1,000	700	53,400	Census
2025	24,200	26,700	2,200	1,000	700	54,800	Class Contact time reduced to 21 hours
2025	25,800	26,700	2,200	1,000	700	56,400	Scenario A
2025	25,000	27,500	2,200	1,000	700	56,400	Scenario B

Scenario A - Secondary teachers reach level to reduce class contact time by 2025 then additional teachers all in primary

Scenario A: Teacher Numbers

	Primary	Secondary	Special	Centrally Employed	ELC	Total	
2020	25,700	24,100	1,900	1,000	700	53,400	Census
2021	26,300	24,400	2,000	1,000	700	54,400	100 days commitment
2022	26,200	25,000	2,200	1,000	700	55,000	Scenario A
2023	26,000	25,500	2,200	1,000	700	55,500	
2024	25,900	26,100	2,200	1,000	700	56,000	
2025	25,800	26,700	2,200	1,000	700	56,400	

Scenario A:PTR

	Primary	Secondary	Special
2020	15.4	12.5	3.8
2021	14.9	12.5	3.8
2022	14.7	12.4	3.5
2023	14.5	12.3	3.5
2024	14.3	12.1	3.5
2025	14.1	11.8	3.5

Scenario A: ITE Places

year	primary BEd	secondary BEd	combined BEd	primary PGDE	secondary PGDE
2020	800	200	200	1200	1700
2021	800	200	200	1200	1800
2022	800	200	200	1100	2000
2023	800	200	200	1000	2000
2024	800	200	200	900	2000
2025	800	200	200	600	1100
2026	800	200	200	600	1000
2027	800	200	200	600	700

Scenario B - Set Secondary teachers to reach level to reduce class contact time by 2025 then additional teachers split between primary and Secondary

Scenario B: Teacher Numbers

	Primary	Secondary	Special	Centrally Employed	ELC	Total	
2020	25,700	24,100	1,900	1,000	700	53,400	Census
2021	26,300	24,400	2,000	1,000	700	54,400	100 days commitment
2022	26,000	25,200	2,200	1,000	700	55,000	Scenario B
2023	25,600	25,900	2,200	1,000	700	55,500	
2024	25,300	26,700	2,200	1,000	700	56,000	
2025	25,000	27,500	2,200	1,000	700	56,400	

Scenario B: PTR

	Primary	Secondary	Special
2020	15.4	12.5	3.8
2021	14.9	12.5	3.8
2022	14.8	12.3	3.5
2023	14.7	12.1	3.5
2024	14.6	11.8	3.5
2025	14.6	11.5	3.5

Scenario B ITE Places

year	Primary BEd	Secondary BEd	Combined BEd	Primary PGDE	Secondary PGDE
2020	800	200	200	1200	1700
2021	800	200	200	1200	1800
2022	800	200	200	900	2300
2023	800	200	200	700	2300
2024	800	200	200	600	2400
2025	800	200	200	500	1200
2026	800	200	200	500	1000
2027	800	200	200	500	800