

## Teacher workforce planning 2013

### Pupil projections

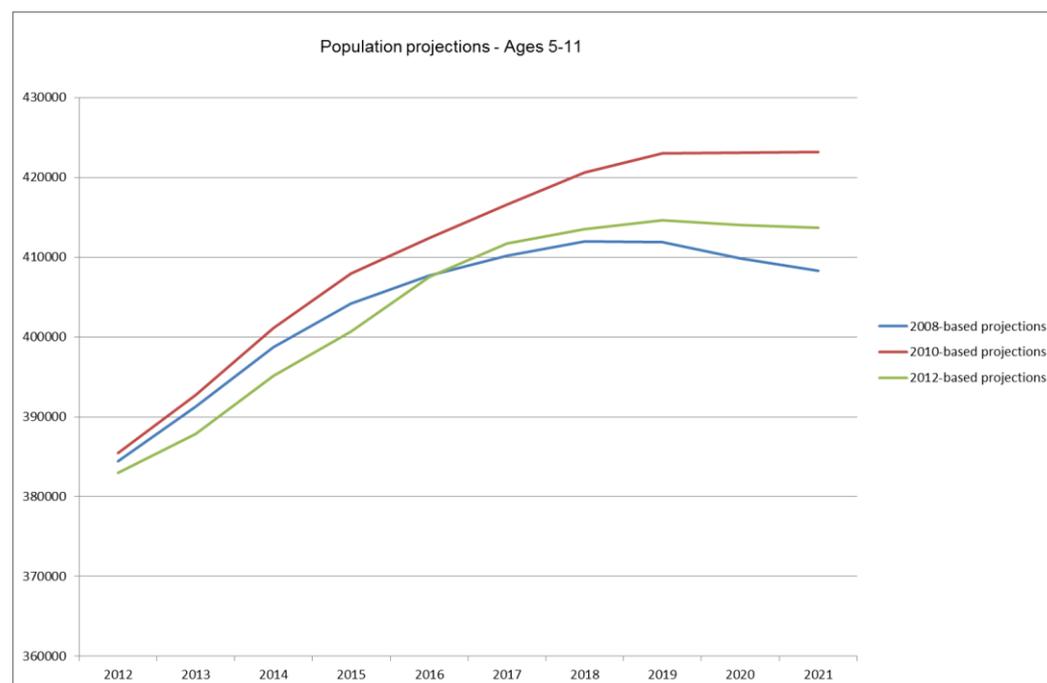
The most recent published pupil projections (June 2012), use data from the 2011 pupil census and National Records of Scotland's 2010-based population projections. They suggested a continued rise in primary roll and a continued fall in secondary roll for 2013, resulting in virtually constant total pupil numbers (-700).

These trends were again borne out by the 2013 pupil census (data published December 11<sup>th</sup> 2013) but as with 2012, the magnitude of the observed changes (+6,700 primary and -4,400 secondary) led to a modest rise in overall pupil numbers (+2,300) compared to 2012.

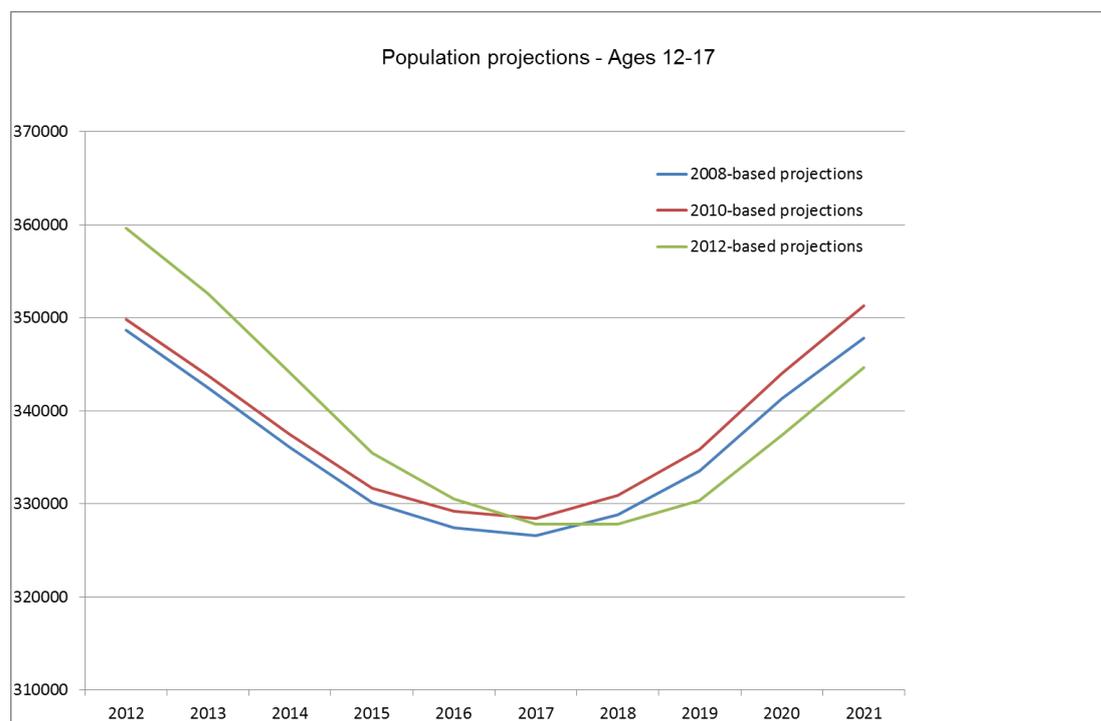
There will be a number of reasons for these differences – as well as the usual issues of changes to population through migration, and take-up of school places, the economic climate might be steering a greater proportion of children into the publicly funded sector, and staying on rates beyond S4 increasing. We do not have sufficient data at this point to make an assessment of whether these factors are real for 2013, but the proportion of secondary pupils accounted for by those in S5-S6 has risen from 24% in 2007 to 28% in 2013.

The census also showed a continued increase in the recent rise in the number of pre-school pupils (approx. +4,500), which will feed through into primary rolls in 2014 and 2015.

However, NRS have now published new population projections based on 2012 data. The charts below show the differences between those and previous versions for primary-aged pupils (5-11) and for secondary-aged pupils (12-17). The impact is both lower growth and lower numbers of primary children than the previous projections were suggesting. This will have a direct impact on the modelled requirement for teachers.



For secondary, the new projections show higher rates of decline in 12-17 year-olds than the previous set of figures, although the overall shape of the projections remains similar.



### Teacher projections

Taking the new population figures into account, and assuming maintaining pupil teacher ratios, teacher numbers in primary would need to rise by about 1,100 between 2013 and 2021. Teacher numbers in secondary should reduce by about 80 by 2021.

Previously published figures for pre-school and primary teacher numbers for 2010 onwards have been amended to remove teachers who have previously been double counted as a result of working in both sectors. The pre-school data are supplied directly by pre-school centres, whereas the school data are supplied by Local Authorities. This has resulted in some teachers who spend part of their week in a primary school and part in one or more pre-school centres being counted by both the pre-school centre in their return and by the LA in their return.

The table below shows the extent of the changes compared to previously published figures:

	Previously published figure			Amended figure (change in brackets)		
	2010	2011	2012	2010	2011	2012
Pre-school FTE	1,563	1,486	1,496	1,524 (-39)	1,461 (-25)	1,386 (-110)
Primary FTE	23,131	22,851	22,732	23,095 (-36)	22,813 (-38)	22,685 (-47)

These changes result in negligible differences in the results of the modelling, with single figure differences in each sector until at least 2016 and 2017 when the difference increases to around 30 (NB this is in the context of larger modelled

requirement in 2017 and after anyway). We can therefore be confident this does not materially affect the outcomes of this process

### **Age profiles**

The 2013 teacher census data shows that there is still a peak in the fifties (specifically 55 to 57), but the now established trend has continued and this peak is much less pronounced than it was in previous years. The proportion aged 50 and over in primary has fallen from 39% in 2007 to 31% in 2013. The proportion aged 50 and over in secondary has fallen from 39% in 2007 to 35% in 2013 (though the rate of decrease has slowed substantially in the last couple of years).

The previously identified emerging peak forming around age 30, has continued to become more pronounced, and the expansion into the early 30s is also more noticeable. The proportion of primary teachers aged 25-35 is 30% in 2013 compared to 28% in 2010 (24% in 2007), and for secondary the rate is 28% up from 26% in 2010 (24% in 2007).

### **Other data**

The 2013 teacher census shows another increase in the proportions of probationers in permanent or temporary posts (full and part-time). The census showed that the figure had risen from 66% in 2011 to 75% in 2012 and 79% in 2013, with the largest increase coming in the proportion with full-time, permanent contracts (up from 28% in 2012 to 35% in 2013). The GTCS survey showed a similar pattern.

Monthly JSA claimant data also continue to show fewer people are unemployed and seeking work as a teacher. The 2013 figures have been consistently lower than the equivalent month for at least the last four years. For example, the figure for October 2013 was 130, down from September's figure of 150 and lower than the October figure for 2012 of 200.

Taken together, and added to other more anecdotal evidence around supply and recruitment, these findings suggest further reduced levels of "slack" or "spare capacity" within the market for teachers.

### **Intake projections**

Due to the historic unstable nature of the workforce, we have calculated the leaver rates of those in permanent employment only as these are more stable. These rates are much lower, about three per cent of teachers at each age until the mid-fifties. It is likely that those on temporary contracts might naturally have higher leaver rates than this.

Returner numbers would therefore also need to use only those involving permanent posts. However, the number entering permanent posts may be changing compared to recent years (see for example the trend in probationer employment described above) as the workforce settles down following recent (and on-going) restructuring. The model currently uses an assumption of 500 returners per year in each sector.

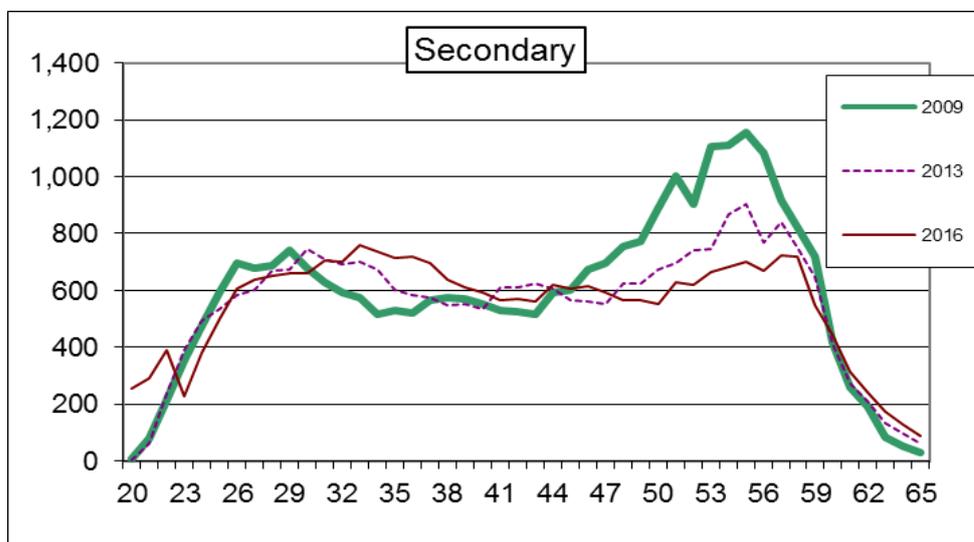
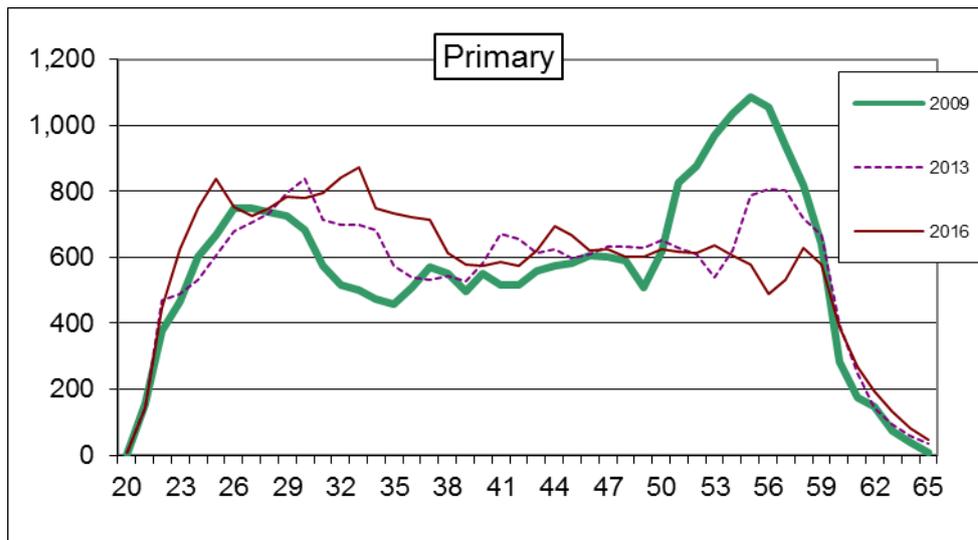
The use of concurrent degrees has increased over recent years. Unfortunately we do not have the breakdown of the study route of probationers in order to calculate the study-to-induction wastage rates. These have therefore been estimated.

**Results**

The above assumptions have been used in the following projections. Other assumptions would result in different outcomes.

The results suggest a need to reduce the intake of students in 2014 (2015 probationers) in both sectors. This results from the lower population projections (see above) and the continuing reductions in the leavers rate. The projections for secondary suggest an annual increase in requirement thereafter, with large increases in 2016. This will be driven by the larger primary roll of recent years working its way into secondary schools, as well as the age profile of secondary teachers.

Age Profiles

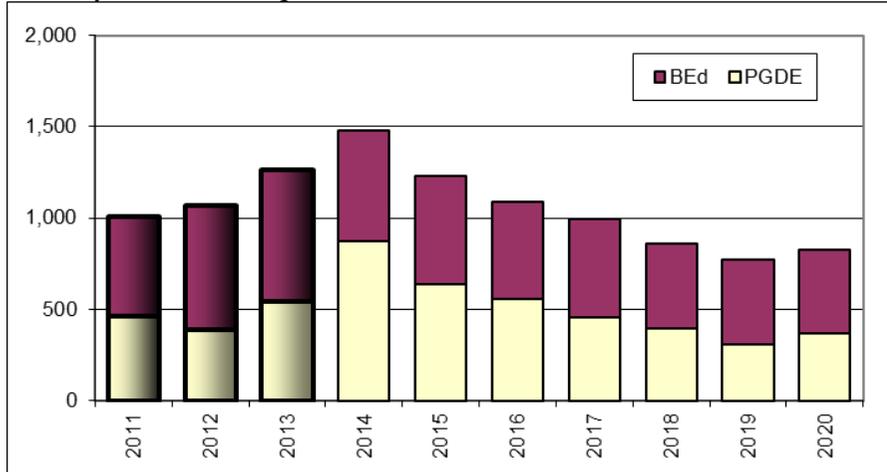


Modelled Student Intakes

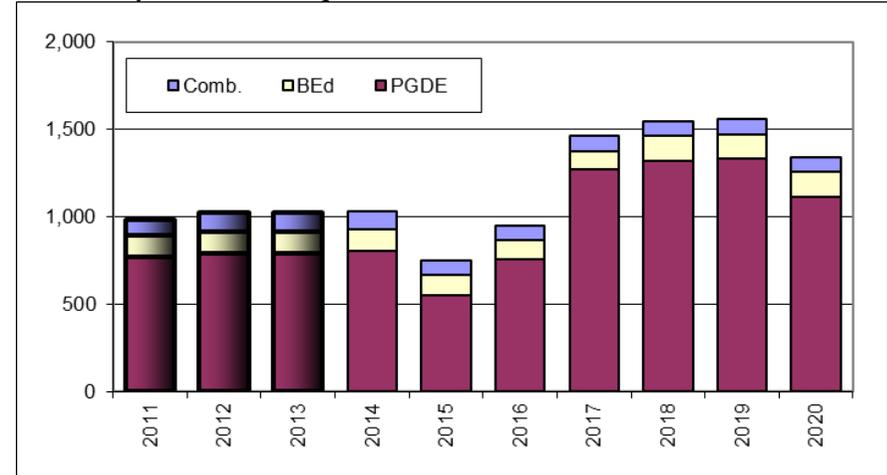
Entry Year	Primary		Secondary		
	BEd	PGDE	BEd	PGDE	Concurrent
2013	813	987	149	915	184
2014	700	722	200	627	180
2015	700	627	200	862	180
2016	700	513	200	1,444	180
2017	700	445	200	1,499	180
2018	700	346	200	1,514	180
2019	700	413	200	1,269	180
2020	700	353	200	1,236	180
2021	700	372	200	1,138	180

	Projected pupils (pre-school, primary and half of special)	Demand for teachers at start of academic year	Change in demand from previous year	Leavers during previous year	Vacancies arising during previous year	Teachers returning to profession in previous year	Projected Deficit at start of year
Primary							
	<b>2013</b>	474,779	24,361				
	<b>2014</b>	479,797	24,634	272	1,394	1,666	500
	<b>2015</b>	486,803	24,917	284	1,388	1,672	500
	<b>2016</b>	489,510	25,168	250	1,386	1,637	500
	<b>2017</b>	491,309	25,310	142	1,364	1,506	500
	<b>2018</b>	493,926	25,401	91	1,329	1,420	500
	<b>2019</b>	495,141	25,423	23	1,272	1,295	500
	<b>2020</b>	495,451	25,405	-19	1,231	1,213	500
	<b>2021</b>	497,175	25,461	56	1,212	1,268	500
Secondary	Projected pupils (secondary and half of special)	Demand for teachers at start of academic year	Change in demand from previous year	Leavers during previous year	Vacancies arising during previous year	Teachers returning to profession in previous year	Projected Deficit at start of year
	<b>2013</b>	292,650	25,461				
	<b>2014</b>	284,752	24,921	-540	1,373	833	500
	<b>2015</b>	277,409	24,429	-493	1,381	888	500
	<b>2016</b>	273,609	24,179	-250	1,369	1,119	500
	<b>2017</b>	272,956	24,141	-38	1,341	1,303	500
	<b>2018</b>	274,957	24,282	141	1,632	1,773	500
	<b>2019</b>	279,934	24,627	344	1,507	1,852	500
	<b>2020</b>	286,381	25,070	444	1,420	1,864	500
	<b>2021</b>	290,816	25,381	310	1,354	1,664	500

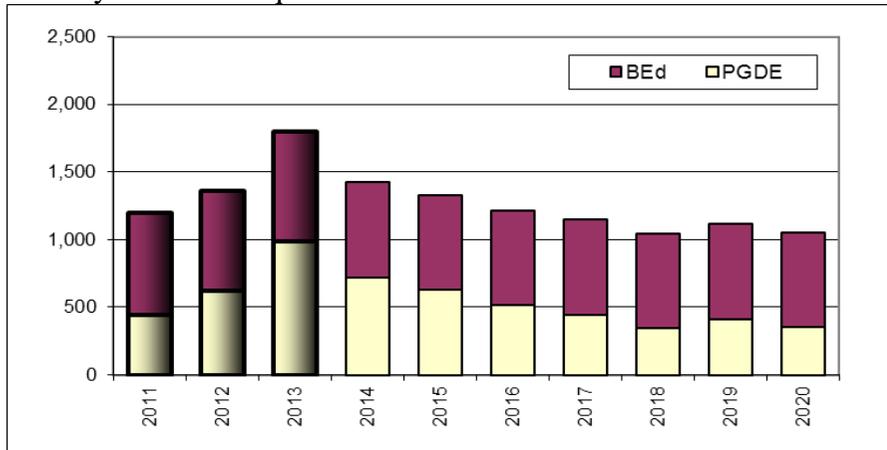
Primary: Teacher Requirement



Secondary: Teacher Requirement



Primary: Student Requirement



Secondary: Student Requirement

