

Title: Next government needs long-term pay strategy that will help teacher supply challenge

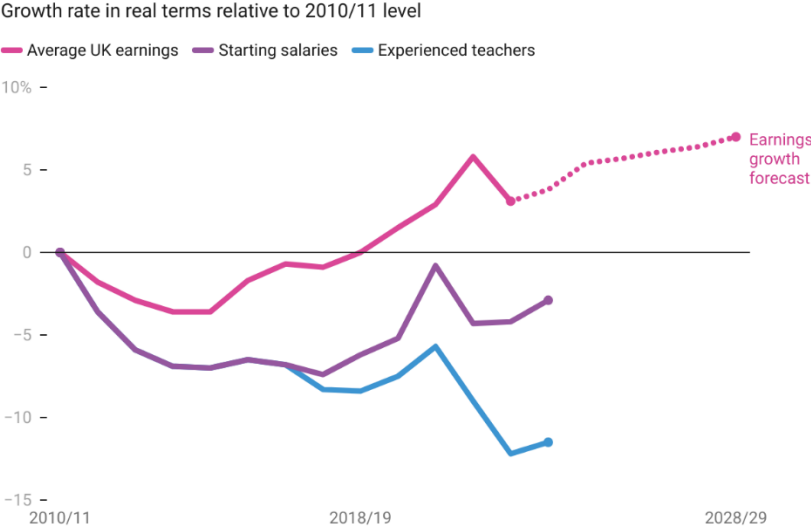
EMBARGOED UNTIL TUESDAY 14 MAY 2024, 00:01AM

Authors: Jack Worth and Sarah Tang

Teacher recruitment and retention in England remains in a [critical position](#), despite a significant pay rise of 6.5 per cent in September 2023. Secondary initial teacher training (ITT) recruitment in 2023/24 reached only half of its target, symptomatic of high targets due to growing pupil numbers, teachers leaving and chronic undersupply in many subjects that has not been matched by sufficient recruitment to ITT.

Teacher pay is a key Government lever for improving teacher supply. However, growth in teacher pay has not kept pace with average UK earnings over the last decade, meaning teachers' pay is less competitive than it was in 2010/11.

Teachers' pay growth has lagged behind earnings growth in the wider labour market since 2010/11



Note: 'Experienced teachers' refers to teachers at the top of the upper pay scale. Dotted line represents the forecast of real earnings growth based on OBR projections from March 2024. Source: NFER analysis of School Teachers' Pay and Conditions Document, Office for National Statistics and Office for Budget Responsibility • Created with Datawrapper

We are currently in the middle of the annual teacher pay cycle, with the School Teachers' Review Body (STRB) considering its recommendations to Government, based on evidence from a range of parties, including the DfE and unions. [The Government has suggested](#) that teacher pay should this year return to 'a more sustainable level', while [teaching unions have called](#) for 'fully funded, inflation-plus and undifferentiated pay increases sufficient to make a meaningful step towards a major correction in pay'. Given the teacher recruitment and retention situation, what should STRB recommend?

As we approach the general election, political parties that may form the next Government should also be considering what role teacher pay increases might play in addressing the teacher recruitment and retention crisis. With an autumn election likely, there will be little time for the Secretary of State to prepare for the pay cycle to begin again for the 2025/26 pay round. What might the next Government's teacher pay strategy look like?

In this analysis, funded by Gatsby Charitable Foundation, we use NFER's simulation and forecasting model to consider the costs and potential impacts of different pay strategies on medium-term recruitment and retention. We find that a status quo policy of increasing teacher pay at the same rate as average earnings is unlikely, all else equal, to lead to significant progress in addressing teacher supply. However, making steps towards narrowing the competitiveness gap between the average wages and teacher pay that has opened up since 2010/11 by increasing teacher pay at a faster rate is likely to improve teacher supply, albeit at a higher cost. However, other approaches – such as targeted financial incentives aimed at shortage subjects and non-financial measures such as workload reduction – will also be important to make sustained and long-term progress.

What might teacher supply look like under current policy?

NFER has developed a model that forecasts future teacher recruitment and retention and simulates the responses to different future policy scenarios, relating to changes to pay and other financial incentives such as bursaries and early-career retention payments (see 'methodology' below for more details).

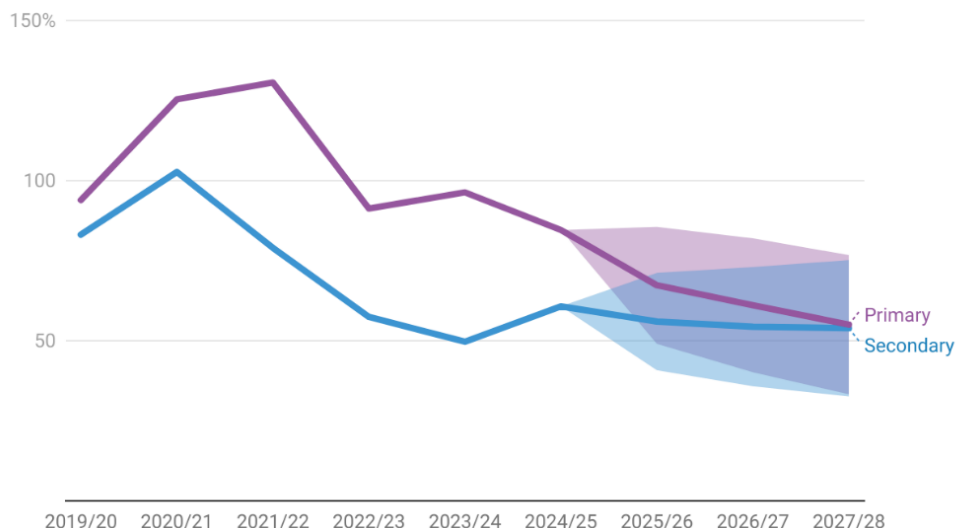
Our baseline scenario assumes that teacher pay increases at the same rate as average earnings in the UK economy (around two per cent per year). We also assume that bursaries and the levelling up premium stay at their respective 2024/25 rates into the future. We implicitly assume that there are no other policy influences on recruitment and retention over time, even though there might be (for example, reduced workload in line with the Government's workload reduction target, which could improve retention).

The figure below shows the baseline forecast under this policy scenario on primary and overall secondary teacher supply. It shows the rapid decline in teacher supply since the pandemic, due to a combination of poor recruitment and increasing targets, and the likely slight improvement in secondary recruitment in 2024/25 due to bursary increases and additional international recruitment.

However, the forecast suggests that teacher supply is likely to remain significantly below target, both for secondary where it has been ever since the pandemic, but also for primary. Despite falling primary pupil numbers meaning that fewer new primary teachers are likely to be needed, the model's forecast suggests that the recruitment level of primary teachers is currently so low that the target may rise over time to account for that under-recruitment, further worsening the supply picture.

Teacher supply has fallen since 2021/22 and continues to fall in our baseline scenario, where teacher pay growth matches forecasted growth in average earnings

Recruitment to postgraduate ITT compared to target



Note: 2025/26 to 2027/28 is a forecast, based on an assumption that teacher pay growth matches average earnings growth each year, bursaries and early career payments are fixed at 2024/25 levels and there are no other policy influences on recruitment or retention.

Source: NFER teacher pay forecast and simulation model • Created with Datawrapper

Also shown on the chart are 95 per cent confidence intervals. Any forecast is subject to considerable uncertainty, as it is impossible to fully know the future. For example, no-one would have predicted that in 2019 both the primary and secondary targets would be exceeded the following year. Also, other things can happen that affect recruitment and retention, such as trends in other factors and policy changes (e.g. workload reduction, flexible working, etc.).

However, it remains useful to look ahead into the future with guidance from the evidence on how teachers tend to respond to economic conditions, pay and other policy changes. The rest of this analysis considers the costs and impacts of alternative strategies, to inform the development of future plans for teacher pay.

What is a delta strategy, and what should delta be?

The baseline scenario above suggests that simply matching teacher pay growth with the growth of earnings in the economy is unlikely to improve teacher supply on its own, and indeed that other trends and influences may continue to worsen teacher supply slightly over time. Moving to close the gap between average earnings and teacher pay therefore could be part of a long-term strategy to address teacher supply challenges. Increasing teacher pay at a faster rate than average earnings would likely improve competitiveness and boost teacher supply.

One way to think about it is as a 'delta' strategy. Delta is a Greek letter, often used in economics to denote a difference. It defines the path of teacher pay growth relative to the growth in outside earnings, equal to the expected growth in average earnings plus a difference on top: the 'delta'. This then happens every year over a number of years, gradually increasing the competitiveness of teacher pay relative to the wider labour market.

A key question for policymakers for this strategy is what that delta should be. We explore the costs and impact of three different deltas: 1 percentage point (pp) above average earnings, 2pp and 3pp. In each case teachers' pay grows annually by the rate of average earnings plus the delta.

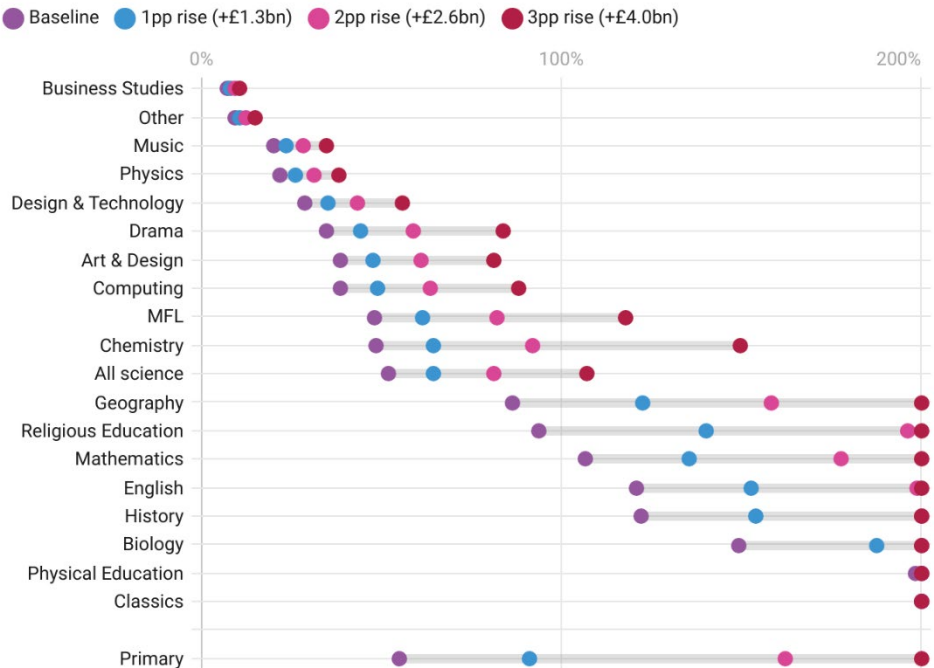
Each 'delta' scenario has an additional cost compared to the baseline scenario, with a delta of 1pp equating to an additional £1.3bn per year from 2027/28 onwards. A delta of 2pp equates to an additional £2.6bn per year from 2027/28 onwards and a delta of 3pp equates to an additional £4bn. The baseline scenario itself also implies an increase in the annual cost of teacher pay and incentive expenditure, being £1.5bn higher in 2027/28 compared to 2024/25.

The figure below shows the forecasted impact on teacher supply in primary and different secondary subjects in 2027/28 of three scenarios where 'delta' is 1pp, 2pp and 3pp. In these scenarios teacher pay is increasing at a faster rate than average earnings growth. The additional cost above the cost of the baseline scenario in 2027/28 is also shown.

The forecast shows that higher pay growth is associated with greater teacher supply across all phases/ subjects. This is due to both higher pay making teaching more attractive to enter and improving retention of existing teachers, thereby reducing subjects' respective targets. However, the scale of the impact varies considerably by subject, depending largely on their starting point.

A higher pay growth 'delta' is associated with higher future recruitment and retention, but at higher cost

Forecast of postgraduate ITT recruitment compared to target in 2027/28 under different scenarios



Note: Baseline scenario assumes that teacher pay growth matches average earnings growth each year, bursaries and early career payments are fixed at 2024/25 levels and there are no other policy influences on recruitment or retention. Other scenarios represent different percentage point increases ('deltas') in teacher pay over time, over and above the level of average earnings growth. Total additional policy cost relative to the baseline is shown in brackets. Values above 200% have been top-coded to 200%.

Source: NFER teacher pay forecast and simulation model • Created with Datawrapper

As the pay delta increases, more subjects are forecasted to meet their targets. When pay is increased at 2pp above average earnings eight subjects (and primary phase) have an adequate number of teachers, while increasing pay by 3pp pushes a further three subjects up to their targets. While physics remains considerably below target even under a 3pp delta, supply across all three sciences is forecasted to hit the combined target under this scenario.

As pay increases across all subjects, some subjects (such as PE and history) are forecast to exceed their targets, whereas others such as physics and design and technology remain a significant way off. While pay 'lifts all boats', there remain a handful of subjects where pay increases alone are unlikely to resolve their shortages. Teacher supply is in a better position for all subjects, all else equal, where pay growth is higher. However, the high level of variation in teacher supply across subjects highlights the importance of focusing additional resource on shortage subjects through targeted measures.

What about affordability for schools?

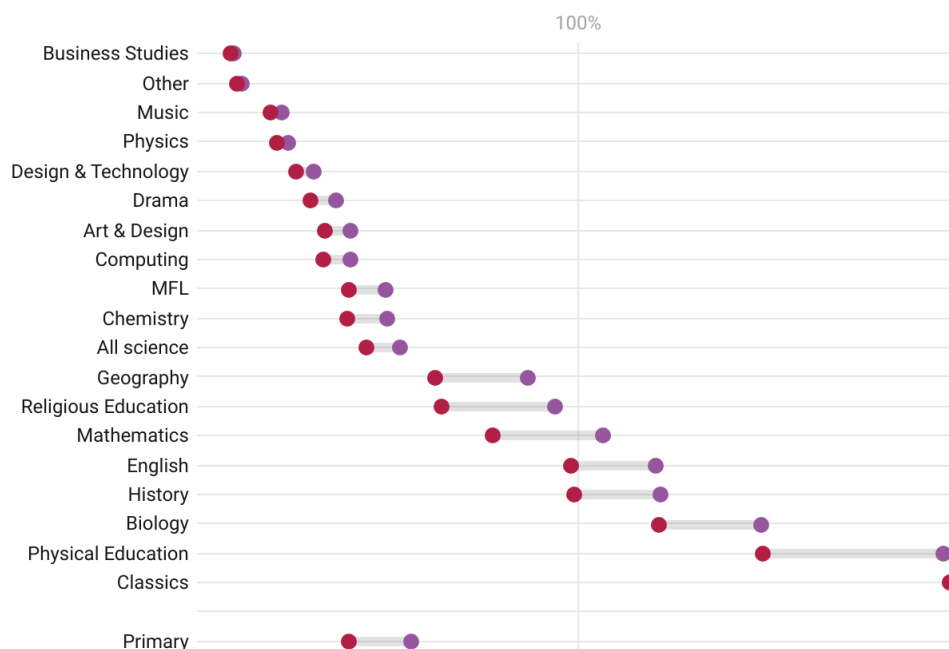
The Government has put considerable weight in its evidence on the constraints placed by the affordability for schools of significant pay increases, given the size of the schools budget. [Economist Luke Sibieta has suggested](#) that, given other changes to schools' costs, the Government's evidence to STRB implies teacher pay growth of *less than* average earnings. Further, the Office for Budget Responsibility's economic forecasts for the next four years are based on spending assumptions provided by the Government that would mean real-terms school spending falling by 1.3 per cent per year.

What would a constrained pay policy mean for teacher recruitment and retention? The figure below shows the impact of teacher pay increasing at a slower rate than average earnings from 2024/25: 1 percentage point lower each year, or a delta of minus 1. Under this scenario, with wages even less attractive relative to those outside of the profession, teacher supply falls relative to the baseline, with only three secondary subjects forecasted to reach their target in 2027/28. While this would bring a saving of £1.2bn per year from 2027/28, the forecasted impact on teacher supply across most subjects and primary would likely affect the quality of education pupils receive, with pupils increasingly taught by non-specialist teachers.

Increasing teacher pay more slowly than average earnings is only likely to compound current teacher supply challenges

Recruitment to postgraduate ITT compared to target

● Baseline ● 1pp cut (-£1.2bn)



Note: Baseline scenario assumes that teacher pay growth matches average earnings growth each year, bursaries and early career payments are fixed at 2024/25 levels and there are no other policy influences on recruitment or retention. Other scenarios represent different percentage point increases ('deltas') in teacher pay over time, over and above the level of average earnings growth. Total additional policy cost relative to the baseline is shown in brackets. Values above 200% have been top-coded to 200%.

Source: NFER teacher pay forecast and simulation model • Created with Datawrapper

Given its implications, such a strategy should be unthinkable for the Government. It is therefore crucial that the Government implements a pay strategy that is likely to contribute to improving teacher supply, and that it is adequately funded at the next spending review.

It's not all about pay

But it's not all about pay, of course. As suggested earlier, financial incentives for specific subjects are needed to further boost recruitment and retention in shortage subjects. The current mechanisms for this are through bursaries and early-career retention payments, where only teachers (or trainees) of particular subjects are eligible. [Recent NFER analysis](#) demonstrates that both increasing bursary and early-career payments are cost-effective approaches to targeting shortage subjects.

Aside from financial considerations, there are other factors that play an important role in teachers' motivations to leave the profession. All the modelled scenarios above have focused solely on pay, but significant parts of the [Government's recruitment and retention strategy](#) concern support, training, flexibility and workload.

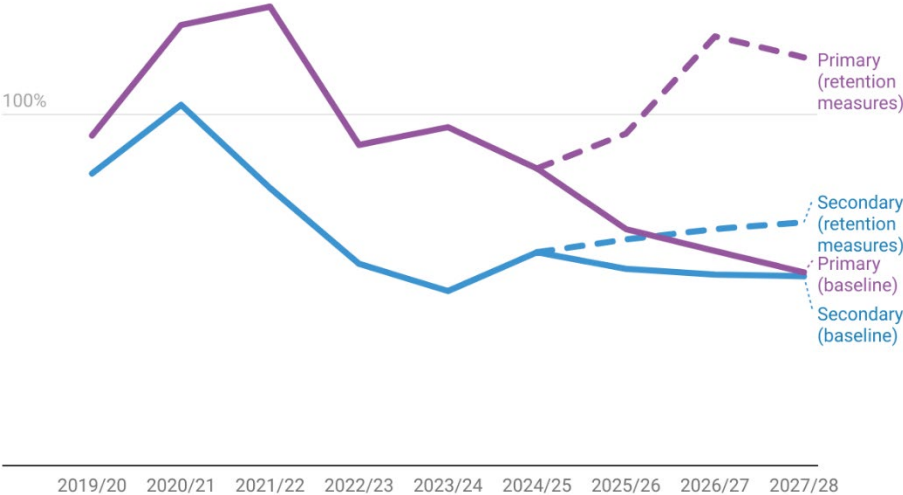
We model the teacher supply impact of changes to teachers' working conditions, such that the overall retention rate is permanently improved by 1 percentage point in 2025/26. This is the magnitude of change in retention between 2016 and 2019. While we don't have robust

evidence on what caused this improvement, teachers’ reported workload (both in working hours and other indicators of workload perceptions) fell over the period and workload is often [cited by teachers](#) as a reason teachers decide to leave the profession. The Government is aiming to reduce teachers’ workload by [five hours per week over three years](#) and has convened a taskforce to make recommendations on how to achieve this. If achieved this could improve teacher retention rates.

Our model suggests that teacher supply improvements under this scenario (reduced recruitment targets from improved retention) are similar to those achieved through increasing teacher pay by 1 percentage point higher than average earnings growth.

Improving the retention rate of teachers by 1pp would have a considerable positive impact on teacher supply by 2027/28

Recruitment to postgraduate ITT compared to target



Note: Baseline scenario assumes that teacher pay growth matches average earnings growth each year, bursaries and early career payments are fixed at 2024/25 levels and there are no other policy influences on recruitment or retention. Another scenario considers the impact of an improvement in retention due to non-financial measures.
 Source: NFER teacher pay forecast and simulation model • Created with Datawrapper

While improvements to teacher retention rates due to changes in teacher working conditions could have a large impact on teacher supply, improvements may be challenging to achieve. Indeed, the Government may find meeting the workload reduction target challenging, as the [latest evidence](#) on teacher workload suggests that working hours increased between 2021/22 and 2022/23 and that survey data indicates that leaving rates may have risen too.

Conclusions

The Government and other policy makers face a complex challenge of achieving an optimal and efficient balance of measures by which to improve teacher supply between pay, incentives and non-financial measures. It is beyond the scope of this analysis to cover the full complexities, but it is clear that the Government needs to adopt a long-term strategy towards teacher pay that is supported with adequate funding. Our forecasts show that increasing teacher pay at a faster rate than average earnings would likely contribute to improved

teacher recruitment and retention and more subjects reaching their recruitment targets. However, schools would need considerable additional funding to deliver these pay increases.

Although increasing pay competitiveness could play a key part in improving overall teacher supply, our analysis suggests that there may continue to be shortages in some subjects, even if the Government were to commit an additional £4bn on pay annually by 2027/28. Targeted policies targeted at shortage subjects will continue to be necessary to overcome the legacy of historical under-recruitment.

Outside of remuneration, a continued emphasis on workload reduction – [especially relating to pupil behaviour](#) – would very likely complement actions to improve the financial attractiveness of teaching. However, as workload reduction takes time and could be unsuccessful, the political parties that will form the next Government should be forming a pay strategy that will make a significant contribution to addressing teacher supply, while securing the public funding required to deliver it.

Methodology

NFER has developed a forecast and simulation model that enables the user to analyse the likely impacts on teacher supply of different future policy scenarios, as well as costs and recruitment and retention levels. The model is based on the most recent data on recruitment to teacher training courses, the salary structure of the teaching workforce and the numbers of teachers at each pay point and their respective rates of leaving the state-funded sector. We also use OBR forecasts for the future unemployment rate and pay growth in the broader economy. The model uses these inputs, with estimates from research showing how responsive teachers (or potential teachers) are to changes in factors (such as pay), to forecast teacher supply. For a full description of the methodology see Appendix A of [Policy options for a long-term teacher pay and financial incentives strategy - NFER](#).