

TEACHER RETENTION PAYMENTS POLICY REVIEW

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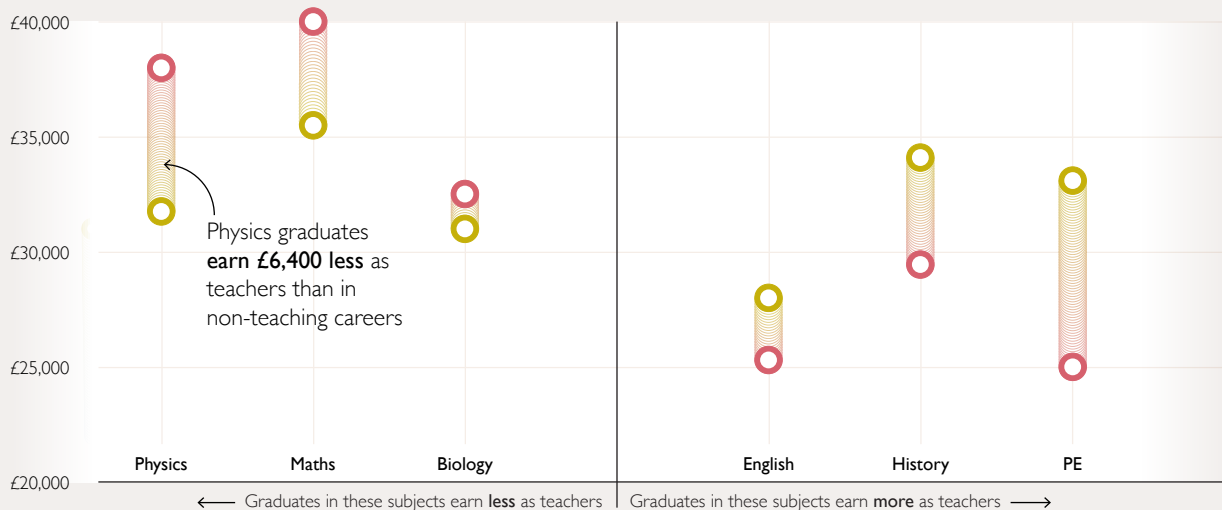
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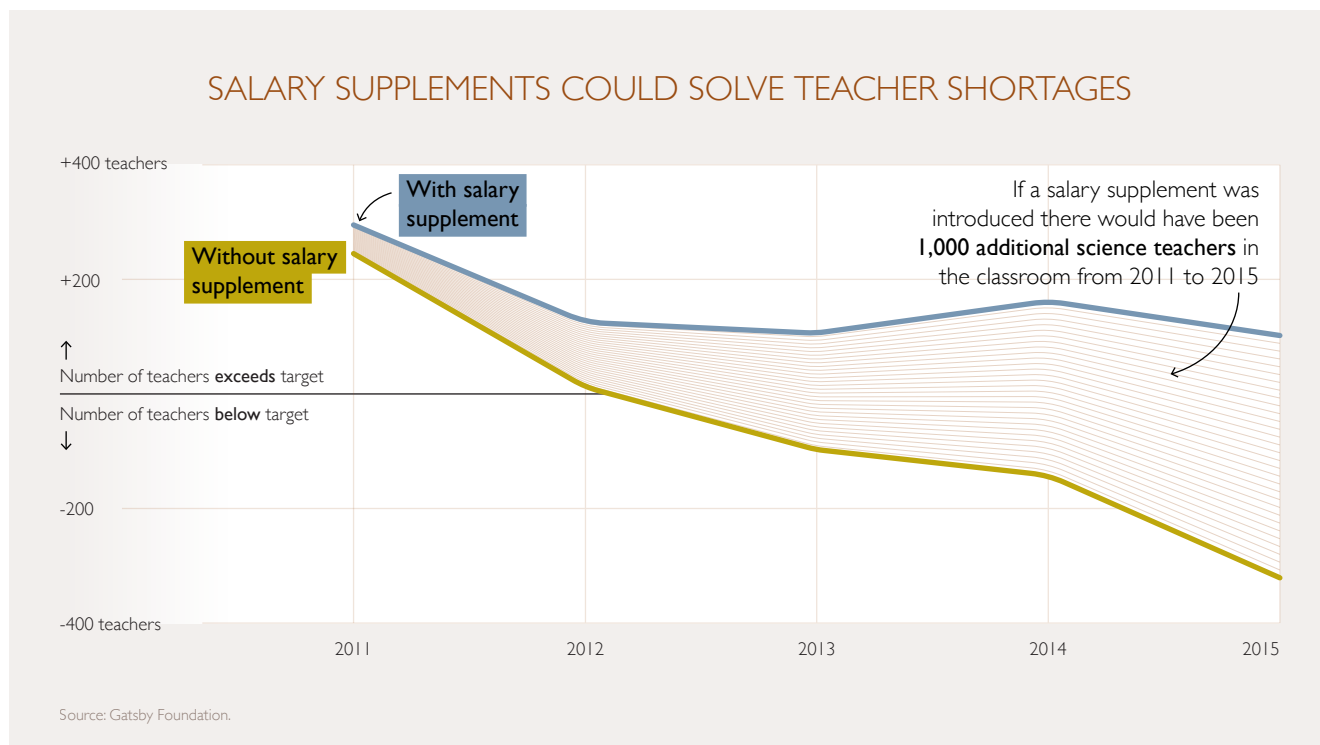
The shortage of maths and science (particularly physics) teachers in England is a persistent problem. Even with an increased number of applications to teacher training as a result of the pandemic, maths and physics initial teacher training courses struggled to recruit sufficient trainees. Last year physics recruited just **22% of the target** set by government. This, combined with the fact that science and maths teachers leave the classroom in greater numbers than other teachers, has resulted in a severe shortage of these teachers. The shortage means that pupils are often being taught by teachers without specialist knowledge.

WHY DO TEACHERS LEAVE?

We know the reasons that teachers leave the classroom are varied and include, amongst other factors, concerns about workload and autonomy. But we also know that there is strong demand for numerate graduates in other sectors, meaning that maths and physics teachers may have more and better paid options open to them outside of teaching when compared with teachers of other subjects. Gatsby has a long-standing interest in understanding whether teacher supply could be improved by using salary as an incentive to remain in the classroom.

SALARIES OF **TEACHERS** AND **NON-TEACHERS** BY DEGREE SUBJECT





HOW CAN WE MAKE TEACHERS STAY?

In 2017 Gatsby published a [report](#) by Dr Sam Sims that examined what might happen if we paid science and maths teachers more at the start of their careers. The research used data from studies in the US to model what might have happened to the teaching population in England had a retention payment policy been in place.

The study showed that supplementing the salaries of existing science and maths teachers by 5% could have solved the shortage and that it would have done so at a lower cost than simply recruiting and training more teachers – even if it had been possible to recruit the teachers in the first place.

THE RETENTION PAYMENT POLICY

Following this, the Department for Education (DfE) piloted the Teacher Retention Payment incentive in 2018/19 and 2019/20. The policy offered early career maths and physics teachers in some areas of the country a retention payment of £2,000 after tax per annum. The pilot was widely understood by the profession with DfE reporting a 90% take-up rate of the incentive amongst eligible teachers.

THERE WAS A **90%** TAKE-UP IN THE POLICY AMONG ELIGIBLE TEACHERS

HOW EFFECTIVE IS THE RETENTION PAYMENT POLICY?

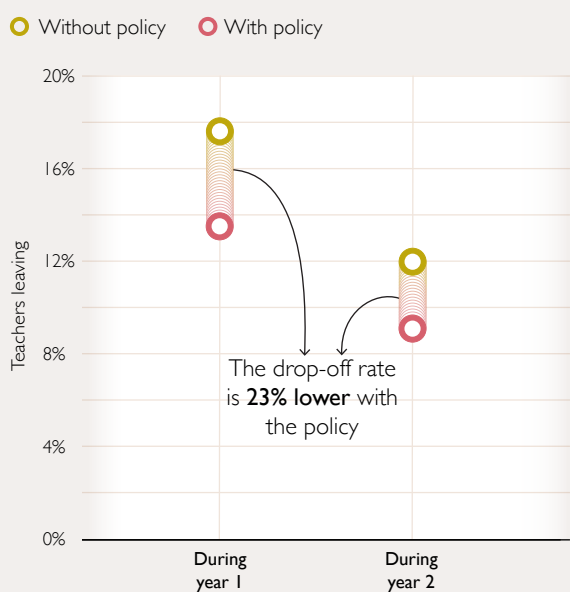
In their report [“The effect of financial incentives on the retention of shortage-subject teachers: evidence from England”](#) Dr Sam Sims and Dr Asma Benhenda from UCL evaluated the retention payment (RP) policy and examined whether paying teachers in England a salary supplement had any effect on the numbers choosing to leave the profession.

Using School Workforce Census (SWC) data, they looked at five cohorts of secondary teachers who qualified between 2014/15 and 2018/19, and observed the teachers from the year they began employment up to the 2020/21 academic year.

The study controlled for factors such as the pandemic, subject taught, geographical area and other financial incentives operating at the same time.

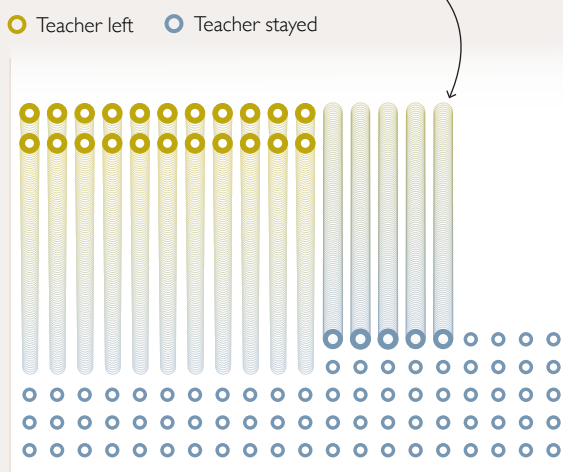
The results are consistent with previous findings and show that teachers who received the retention payment were 23% less likely to leave teaching when compared with ineligible teachers. Without the retention payment, we would normally expect that for every 100 maths teachers who complete their training and enter the classroom, 27 would leave within their first two years of teaching. Applying the RP policy meant that only 22 teachers left the classroom, retaining an additional five.

THE RETENTION PAYMENT POLICY REDUCES THE RISK OF NEW TEACHERS LEAVING BY 23%

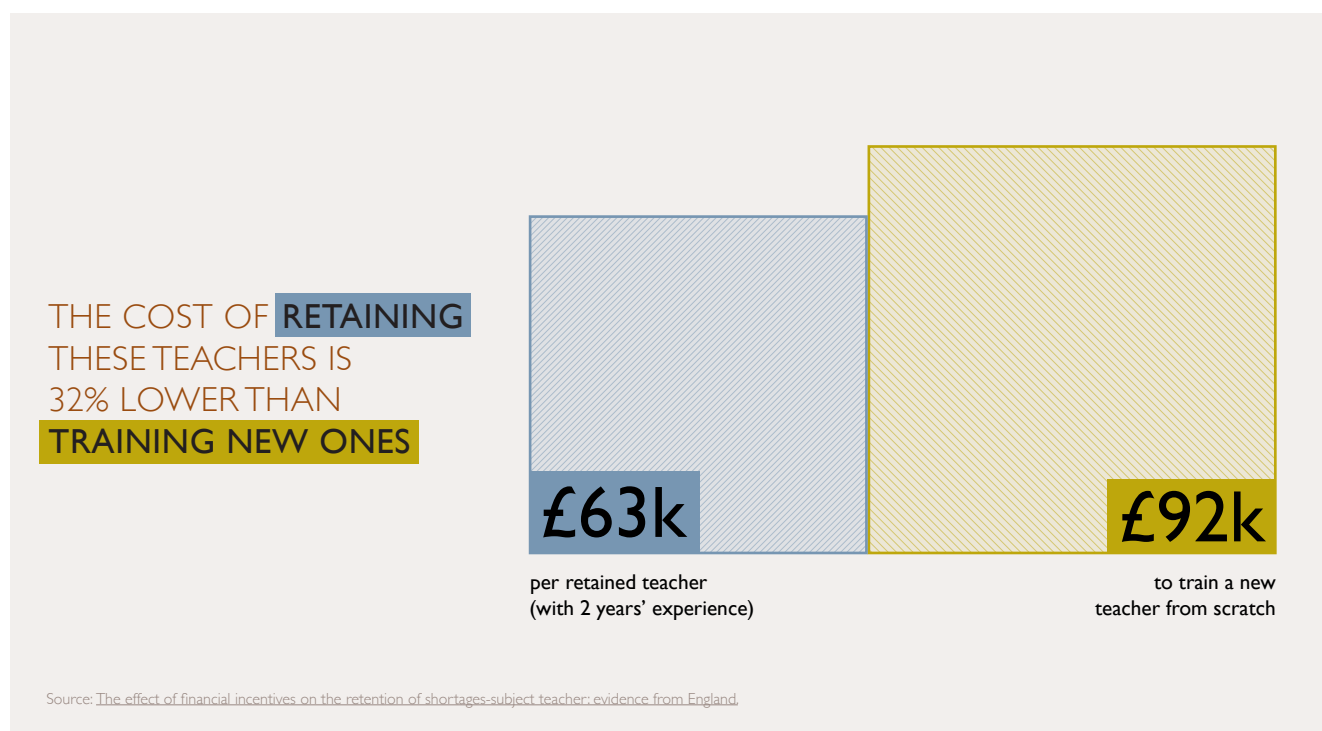


Source: [The effect of financial incentives on the retention of shortages-subject teacher: evidence from England.](#)

100 TEACHERS ENTER THE CLASSROOM. WE'D EXPECT 27 TO LEAVE BY YEAR THREE. WITH RETENTION PAYMENTS, **FIVE OF THEM STAY.**



Source: [The effect of financial incentives on the retention of shortages-subject teacher: evidence from England.](#)



A BOOST OF MORE EXPERIENCED TEACHERS

If we apply this to the actual cohort of maths teachers who entered the classroom in 2016/17, the RP policy could have secured an additional 104 teachers continuing into their third year.

The cost of retaining these maths teachers through the policy is 32% lower than simply recruiting and training 104 additional teachers. Not only does this make the policy extremely cost-effective, it also means that there is an increase in the number of experienced maths teachers in the classroom.

The programme is substantially more cost-effective than simply paying a higher starting salary to all teachers as it specifically targets shortage subject teachers.

LONG-TERM LEVELLING UP

Following the success of the pilot, a 'levelling-up premium' that pays a retention bonus of £3,000

to maths and science teachers in 55 areas of the country was announced earlier this year. Based on our research we believe that this is a positive move which should increase the numbers of students being taught by specialist teachers in poorer areas.

It is worth noting that this evaluation looks at the short-term effect of the retention payments. We don't know what happens to teachers after the policy ends, although research from the US would suggest they leave at the normal rate.

As we have noted previously, government data on teacher deployment and retention is weak and we urge that as part of the evaluation of the levelling-up premium, consideration is given to making greater use of data to track the long-term impact of the premium alongside other teacher retention measures such as the Early Years Career Framework.