

## STEM Learning CPD saves £58.5m in teacher training costs

Teachers who engage with STEM Learning science CPD are more likely to stay in the profession, reducing the need to train new teachers. Over the past 3.5 years, **STEM Learning CPD has saved the UK £58.5m in teacher training costs**, a return on investment of 153%.

Analyses from FFT Education Datalab show that teachers engaged with STEM Learning's science CPD are around 160% more likely to remain in the profession compared to similar teachers who have not engaged: "To put this in context, the odds that a science teacher who does not participate in [STEM Learning's science CPD] courses is still in the profession one year later is around 11, meaning for every one teacher that leaves, 11 do not leave. Among those who participate, the odds of remaining are 160% higher, which equates to odds of 29, meaning that for every one teacher that leaves, 29 teachers do not leave."<sup>i</sup>

The following table shows, year by year, the number of teachers who have engaged with STEM Learning's subject specific science CPD across the period 01 Aug 2016 – 31 Dec 2019. We have counted their initial engagement ("Unique participants") separately from any re-engagement in subsequent years.

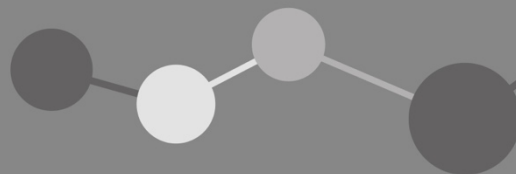
*Teaching staff engaging with STEM Learning science CPD*

Period	Unique participants	Re-engagements
01 Aug 2016 – 31 July 2017	11,315	
01 Aug 2017 – 31 July 2018	16,060	2,969
01 Aug 2018 – 31 July 2019	16,338	5,036
01 Aug 2019 – 31 Dec 2019 <sup>ii</sup>	7,142	3,244

In total, **50,855 teachers engaged** with STEM Learning science CPD. Of these, around 4,238 would have left the profession if they had not engaged with the CPD (50,855/12). However, because they did engage with CPD, only around 1,695 left (50,855/30). Overall, STEM Learning CPD helped around **2,543 teachers stay in teaching**.

In 2016 the Institute for Fiscal Studies (IFS) estimated the average cost of training a teacher to be **£23,000<sup>iii</sup>**. Based on this, we estimate that the 2,543 teachers who remained in the profession following STEM Learning science CPD **saved the UK taxpayer at least £58.5m in training costs** (2,543 \* £23,000). During this time, STEM Learning received £23.1m of Department for Education funding for science CPD, so this £58.5m saving represents a **return of investment of approximately 153%: for every £1 spent on science CPD, £2.53 is saved on teacher training**.

NB The IFS study used 2013/14 data, so the actual savings are likely to be greater as the cost of teacher training has increased since then, particularly for STEM teachers. The Government's 2019 Teacher Recruitment and Retention Strategy increased the tax-free bursaries available to trainee teachers from £20,000 to £26,000 – or up to £35,000 for maths teachers<sup>iv</sup>. More recently, bursaries for physics and chemistry teachers were increased to £35,000<sup>v</sup>.



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· Improving Science Teacher Retention, September 2017 (p.8):

<https://wellcome.ac.uk/sites/default/files/science-teacher-retention.pdf>

The cost varied according to training route, ranging from £17,000 (School Direct salaried, primary) to £38,200 (Teach First, secondary).

· Note that this period is significantly shorter than the other three.

· The Longer-Term Costs and Benefits of Different Initial Teacher Training Routes, July 2016:

<https://www.ifs.org.uk/uploads/publications/comms/R118.pdf>

· Teacher Recruitment and retention Strategy, Jan 2019:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/786856/DFE\\_Teacher\\_Retention\\_Strategy\\_Report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/786856/DFE_Teacher_Retention_Strategy_Report.pdf)

· Up to £35k bursary and early career payments for new teachers, October 2019: <https://www.gov.uk/government/news/up-to-35k-bursary-and-early-career-payments-for-new-teachers>