STEM Learning CPD boosts attainment in science GCSEs

We tracked GCSE results at schools where teachers had recently participated in STEM Learning science CPD. Student cohorts vary in size from year to year, so our benchmark is the proportion of students achieving a good grade in two science GCSEs or their equivalent, known as "EBacc two sciences" – the level required to achieve the English Baccalaureate (EBacc) measure.

Schools engaging with STEM Learning science CPD saw an increase of more than 10% in the proportion of students achieving Ebacc two sciences, more than double the progress of non-engaged schools.

STEM Learning CPD helped 16,000 additional students achieve EBacc two sciences between 2016 and 2018. In 2018/19, 350,000 Year 11 students in over 2,000 schools benefited from science teaching enhanced by STEM Learning CPD.

Table 1: GCSE results - proportion of students achieving Ebacc two sciences

	Non-engaged schools	Schools engaging with STEM Learning science CPD in:			Commentary:
		2015/16	2016/17	2017/18	
2016	63.5%	62.7%			Schools engaging with STEM Learning CPD had lower achievement than non-engaged schools prior to their engagement.
2017	61.1%	61.2%	61.1%		Results declined for all in 2017 as low attaining students were entered for science GCSEs instead of BTECs. But CPD helped: results at engaged schools went down 1.5% vs 2.4% at non-engaged schools.
2018	63.7%	65.8%	66.9%	62.1%	Results improved for all, but schools using CPD improved twice as much: 4.6% / 5.8% (depending on cohort) vs 2.6% at non-engaged schools.
2019	64.0%	68.0%	67.4%	64.5%	Results improved for all, but schools using CPD saw greater increases: 2.2%/0.5%/2.4% (depending on cohort) vs 0.3% at non-engaged schools.

Table 2: % improvement in proportion of students achieving EBacc two sciences

	Non-engaged schools	Schools engaging with science CPD in:		
		2015/16	2016/17	2017/18
Change from 2016 to 2019	0.8%	8.5%		
Change from 2017 to 2019	4.8%		10.3%	
Change from 2018 to 2019	0.6%			3.9%