



## 2019 Great Science Share for Schools Evaluation findings summary

## How did the research work?

Over the past 4 years of development of the Great Science Share for Schools (GSSfS) campaign there has been a lot of anecdotal evidence of the impact the campaign has on teachers, schools and pupils. This year GSSfS partnered with ImpactEd to find out more about the difference the campaign has on pupil outcomes.

To do this we mapped three academically validated questionnaires from the research literature to assess **metacognition, openness and resilience** – three traits with strong associations with achievement in and beyond schools. We then compared results from a sample of GSSfS schools against a comparison group of similar pupils not taking part in the GSSfS from ImpactEd's national dataset of over 25,000 responses using a technique called propensity score matching.

## What did we find?

The results between the GSSfS pupils (n=373, from 7 Greater Manchester schools) and the comparison group showed:

- Higher levels of openness and resilience for GSSfS pupils, and slightly lower levels of metacognition. These results were not statistically significant, so we can't say for certain that the higher scores were necessarily due to the GSSfS alone, but they do provide some promising trends.
- The differences between the groups were much larger when we looked specifically at:
  - o mathematical problem solving and creativity aspects of openness, and the academic persistence elements of resilience

Here, GSSfS pupils scored substantially higher than the comparison groups.

These are particularly promising findings that we are looking to investigate more in the future.

- no substantial differences between boys, girls
- **no substantial differences between pupils from the most disadvantaged postcodes** on the three outcomes.

Generally these measures tend to reflect achievement gaps, so the fact that different groups all showed results that were broadly in line with each other helps to support the GSSfS aims of inclusivity and equality.



With thanks to the schools who voluntarily took part in this evaluation. It is through the support, encouragement and enthusiasm of teachers and STEM Educators that the Great Science Share for Schools can continue to develop to achieve further engagement and quality.

Take part in the 2020 Great Science Share for Schools campaign: www.greatscienceshare.org

