Primary Science Quality Mark

PSQM is a programme of self-evaluation, framed by 13 criteria covering primary school science leadership, teaching, learning and enrichment, against which science subject leaders audit current practice and develop and implement a whole school improvement plan. Schools can apply to complete the award at one of three marks - Primary Science Quality Mark, PSQM Gilt or PSQM Outreach.

The programme includes compulsory four half day face-to-face training sessions for the primary science subject leader and one teacher from a Y5 class from each school. Leaders also receive mentoring via an interactive e-portal and have access to resources to support their work towards the accreditation.

In this trial, PSQM will work with science leaders and Year 5 science teachers at 140 primary schools.

This efficacy trial will test the impact of PSQM on science attainment and pupil and teacher attitudes towards science teaching and learning, as well as science more generally. The project is being jointly funded with the Wellcome Trust as part of the Improving Science Education round.

Why are we funding it?

PSQM has a large reach, with 88 hub leaders across England and other countries and nearly 3,000 schools have completed the programme over the last ten years.

As well as being wide-spread and scalable, the project fits with the need to increase the profile of science in primary schools and to improve the teaching of the subject at that level.

By evaluating the impact of PSQM on science attainment using a standardised test, we will be generating useful evidence for schools about a programme that is widely used.

This project is jointly funded by the Wellcome Trust as part of our Improving Science Education Round.

How are we evaluating it?

This will be an efficacy trial evaluated by a team from RAND. The evaluation will be structured as a randomised control trial, which will compare the progress of pupils who receive the intervention to a “business-as-usual” control group. 140 schools will be recruited to the trial, with 70 schools receiving the intervention from September 2019.

Science attainment will be measured by independently administered tests at the end of the academic year and one year later. We will also measure student attitudes and dispositions to science and their science lessons, and undertake a detailed implementation and process evaluation to assess how schools apply the approach in practice.

When will the evaluation report be due?

The evaluation report will be published in Summer 2022.