

## Evaluation of Primary Science Quality Mark

### Trial Information Sheet for Participant Families (Years 3 and 4)

The school your child attends has agreed to take part in a research project assessing the effects of a programme designed to improve children's outcomes in science. Below is a description of the trial, and what is involved for you and your child. Please read the information carefully and keep this sheet for future reference. If you are happy for your child to be involved, you do not have to do anything. If you decide that you do NOT want your child to be involved in the research, please withdraw your child from the project as described below. You are free to withdraw your child from this project at any time.

#### Who is undertaking the trial?

The trial is funded by the Education Endowment Foundation (EEF) and the Wellcome Trust. The Primary Science Quality Mark (PSQM) programme will be carried out by The University of Hertfordshire (the Delivery Team) and will be independently evaluated by RAND Europe (the Evaluation Team).

#### What is the purpose of the trial?

The purpose of the trial is to measure the effectiveness of the Primary Science Quality Mark, an accreditation programme which enables primary schools to improve science education through effective science leadership and supported school self-evaluation. The science subject leader and one Y5 teacher attend training to develop leadership in science and raise the profile and quality of science teaching and learning. The PSQM programme takes place over the duration of one year. At the end of the year schools submit evidence which is assessed against the PSQM criteria. If these have been met a Primary Science Quality Mark is awarded. Research suggests that PSQM can benefit schools in multiple ways, such as contributing to raising the profile of science in primary schools and providing schools with a framework and professional support for developing science leadership, teaching, and learning.

The trial is being conducted across 140 schools in England as a Randomised Controlled Trial. This means half of the participating schools in each trial area will be randomly allocated to take part in the PSQM programme. These are the Intervention Schools. The other half will not take part in PSQM. These are the Control Schools. The random allocation of schools is essential to the evaluation as a rigorous way to evaluate the effects of the programme. Random allocation will take place in June and schools will find out whether they are in the intervention or control group in July. However, the Evaluation Team will collect data on the current Year 3 and Year 4 pupils from ALL schools in the trial, regardless of whether they are Intervention or Control Schools, including KS1 results in English and Maths, Year 5 science test results, as well as related background data such as free school meals eligibility. By participating in the trial, schools and

individual participants contribute to furthering knowledge on strategies for whole-school improvement in science teaching and learning.

### **What is involved if my child takes part?**

If the school is selected as an Intervention School, the Year 5 teacher and the science subject leader will take part in PSQM training, use the PSQM framework and resources to construct and implement an action plan to develop science teaching and learning across the school, and produce a submission which will be assessed for a Primary Science Quality Mark. If there is more than one Y5 class, the school will nominate one Y5 teacher to take part in the training. If the school is a Control School, the Year 5 teacher and the science subject leader will not attend PSQM training or work towards achieving a Primary Science Quality Mark. The school will, however, receive a payment to compensate for staff time taken by participating in the trial.

There will be no changes to the curriculum for the children, however there will be some additional data collection, as described below. The following is a summary of the trial timeline:

### **2018/19: Recruitment and set-up**

In the current academic year, schools will be recruited and randomly allocated to either take part in PSQM or to be in the control group.

### **2019/20: PSQM implementation and evaluation**

In Intervention Schools, the Year 5 teacher and science subject leader will attend PSQM training and use the PSQM framework in their school.

In June-July Year 5 children in both Intervention and Control Schools from the nominated class will sit a brief science knowledge and science attitudes assessment.

### **2020/21: Follow-up evaluation**

In June-July Year 5 (new cohort) children in both Intervention and Control Schools from the nominated class will sit a brief science knowledge and science attitudes assessment.

The Evaluation Team will obtain basic information about your child from the school, including their name, sex, date of birth, Free School Meals status and Unique Pupil Number. RAND Europe will use the information provided to link with the National Pupil Database (NPD; held by the Department for Education) to collect your child's Key Stage 1 results in English and Mathematics and/or Early Years. In schools with more than one Year 3, 4, and Year 5 classes, baseline data will be collected for all pupils but only one class will participate in outcome assessment per year (the class taught by the teacher selected to attend PSQM training).

Intervention outcomes will be assessed primarily by assessing pupil science attainment at the end of 2019/20 and 2020/21 academic years, collected by the National Foundation for Educational Research, contracted by RAND Europe. The assessment implementers will be appropriately trained and have the Disclosure and Barring Service clearance. They will conduct a science attainment test and attitude survey, lasting in total about 60 minutes.

Once your child's information is included in the data set, the data will be anonymised and it will not be possible to identify individual pupils and their test results. The Evaluators will not use your child's name or the name of the school in any report arising from the trial. After the trial is completed, data will be archived. If follow-up studies are conducted in the future to evaluate intervention long-term effects, pupil outcomes data from subsequent data collection will be linked with the NPD data using Unique Pupil Numbers. All personal data will be treated with strictest confidence by the evaluators in accordance with the requirements of the General Data Protection Regulation (GDPR). Please see the Privacy Notice for detailed information regarding the data ([http://redocuments.org/PSQM/Privacy\\_Note\\_Parents.pdf](http://redocuments.org/PSQM/Privacy_Note_Parents.pdf)).

If you DO NOT WANT your child's data to contribute to this trial, please complete the withdrawal form which you can access at <http://redocuments.org/PSQM/Withdrawal.pdf> or complete an online withdrawal here: <https://www.smartsurvey.co.uk/s/KP8W0/>. Alternatively you can request a hard copy from the school office.

#### **What will happen to the results of the trial?**

The results of this trial will be reported by the Education Endowment Foundation. The anonymised report will be freely available on their website. The anonymised results may also be written up for publication in academic journals.

#### **Who has approved this research?**

The trial will undergo ethical review from the RAND Human Subjects Protection Committee and the University of Hertfordshire.

#### **Contact for further information**

If you have any questions about this trial, please contact the Evaluation Team with any questions via email or phone: RAND Europe - Hannes Jarke - [psqm@rand.org](mailto:psqm@rand.org), 01223353329

Thank you very much for your time!