

SSERC Primary Cluster Programme in Science and Technology: Key findings (April 2012 – March 2018)

Background

An ongoing evaluation conducted by the Robert Owen Centre for Educational Change (ROC) of the Scottish Schools Education Research Centre's (SSERC) *Primary Science Cluster Programme in Science and Technology* (PCP) has found that this professional learning programme has consistently made a positive difference regarding promoting effective Science and Technology teaching in Scottish schools and associated learner outcomes.

The main aim of PCP is to promote mentor teachers' ability to increase levels of teachers' confidence and expertise regarding science and technology education. The Programme has been in operation since 2012 and a total of some 500 primary schools across all Scottish local authorities have taken part in PCP.

Key findings

- The PCP continues to produce highly motivated mentors who are promoting the skills and confidence of their cluster colleagues to teach science and technology.
- The PCP has had a very positive impact on all mentor-teachers' abilities and their school clusters.
- The PCP appears to have had a greater impact in schools recording higher levels of deprivation.
- Mentors, senior management teams, and other teaching colleagues report an improvement in both scale and quality of science and technology teaching in participating schools.
- Headteachers and Local Authority Officers highlight that HMIE inspections are recognising the success of PCP and its contribution to quality learning and teaching in science and technology.
- Surveys of more than 11,000 P2-P7 pupils suggest that the majority enjoyed taking part in a range of science related activities. *Doing experiments in class* and *Going to the science museum or science centres* were particularly popular.
- Learner confidence to engage in science activities and tasks was significantly higher among pupils in schools with higher levels of PCP involvement compared to schools with lower levels of involvement.

Success factors

- The skills, expertise and credibility of the SSERC team and their willingness to support mentors during and after programme input.
- The two-part residential and collaborative developmental activity approaches.
- Strong school leadership, careful forward planning and teacher commitment.