

Developing learners' capacity for scientific enquiry

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After recently taking on the role of Science Lead in her school, Jessica wanted to take on an active role developing provision and practice in the subject. She noticed how much children enjoyed completing enquiries when schools went into lockdown and wanted to continue this when her school reopened.

I began by consulting my headteacher about the idea of running a science club in our school, which had never been done before. I read about how this had been carried out in other schools to understand the benefits of having a science club. I also collected resources and ideas and developed these for use in the club.

The club sessions were focused on developing children's capacity for enquiry. Pupils were invited to use a range of equipment and were often tasked with solving a problem or predicting a result before they carried out an experiment. I took pictures of the activities which were uploaded onto social media. To help evaluate my project's impact, I asked children to reflect on their learning in the first and last sessions. I shared the evidence of the impact of the club with the school community and spoke about my project at a Network Event and at the Annual Conference. Next year, I plan to continue to run this club with a wider age group.

The following strategies were particularly impactful:

- talking with children at the beginning and end of the club to understand the shift in their thinking of science
- predicting and summarising after each activity – this helped children to use scientific vocabulary and understand why something had happened
- providing resources without telling them how to solve the problem – this developed perseverance levels and made them think logically.

1

KEY LEADERSHIP LESSON:

Reflection is key to leadership. It helps us identify our strengths and weaknesses and consider possible solutions.

2

KEY LEADERSHIP LESSON:

Leadership is about supporting others.

3

KEY LEADERSHIP LESSON:

It's how you face challenges that is important. Asking for help or guidance from those around you is part of the process.

PUPIL IMPACT

- increased confidence using equipment
- increased levels of engagement.

PROFESSIONAL IMPACT

- improved colleagues' knowledge of working scientifically
- increased cross-curricular links due to sharing the project with colleagues.

PERSONAL IMPACT

- further developed subject knowledge
- increased confidence to lead an initiative.

SYSTEM IMPACT

- shared my development work, resources, and knowledge with others across the HertsCam Network & sister international networks.

One of the children said, "Science is magic!" He was amazed when he could see things changing or happening in front of him.