Summary of Content

This exemplar shows an innovative way of facilitating pupil-led enquiry.

Over the course of a Science week pupils were encouraged to instigate their own investigations – an excellent way to nurture scientific thinking, especially amongst the gifted and talented.
What the school says

Pupil led enquiry is a difficult concept.

We often carry out investigations, but letting the pupils decide for themselves can be daunting.

One way to do this is to give a whole week/project to the pupils so they can ask their own questions and carry out their own independent investigation.

This is a way to raise the profile of practical and investigative science and allow the pupils to put their learning into practice in a fun, open way that could address a variety of interests and abilities.

We think it is a particularly good way to tap into the gifted and talented in science too.
What we did

We invited local schools to join us for a ‘Warwickshire Young Scientists and Engineers’ (WYSE) competition which was held during National Science and Engineering Week 2012.

Pupils could follow any line of enquiry individually or in teams.

Prizes were awarded at a joint exhibition in our school.
A pupil led enquiry into catapults
We just love the extension!
Comments from teachers and pupils

Ella (pupil) ‘It was exciting and adventurous and you never know what might hit you. Like an idea.’

‘The fair was a fantastic opportunity for children to exhibit work and gave them confidence when they were able to share their projects with others.’ Liz, KS1 teacher

‘The science fair gave the children the opportunity to ask their own questions and most importantly test them. They could then discover if their question was open or closed, and whether it could be investigated or was a research type question.’ Dee (teacher)

Matt (pupil: ‘It was really good to see other people’s projects.’

Alex (pupil) I found it good but I would like it if everybody (or more than 1) got to show their projects. (referring to the fact that only one entry per year went through to the inter-school event, although the classes had held their own in school exhibition).

Last year’s WYSE Science Fair was a fantastic opportunity for children to investigate an area of Science of particular interest to them. This created a real "buzz" about Science in school, as children in all year groups were working towards the same goal. As a class teacher, it gave an invaluable insight into children's scientific knowledge and understanding, particularly when each child presented their Science projects in front of the whole class. The children questioned each other after the presentations, sharing their knowledge and analysing each other's observations and data. Rosie, KS2 teacher
The impact for our school was ..... Everyone was very engaged in practical science from preparation to conclusion. Pupils were able to share their work across a broad spectrum. Staff were focused on allowing the pupils to ask their own questions and were able to identify gaps in prior learning and scientific thinking to address in lessons.
What we will do next

Carrying out this project showed us the importance of pupil led enquiry and gave us the confidence to build more independent activities into the curriculum.

We will also give independent investigations for homework so that the skills are developed over time and in different settings.