



Hinchley Wood Primary School

Using Explorify to deepen pupils' scientific understanding

About Hinchley Wood Primary School

Hinchley Wood Primary School is part of the Hinchley Wood Learning Partnership in Surrey. It is a three-form entry school with 623 pupils aged between 4 and 11. The percentage of children eligible for free school meals is 5.1% compared with the national average of 24.6%. The most recent Ofsted inspection in 2024 rated the school as 'Good'.

How the school uses Explorify¹

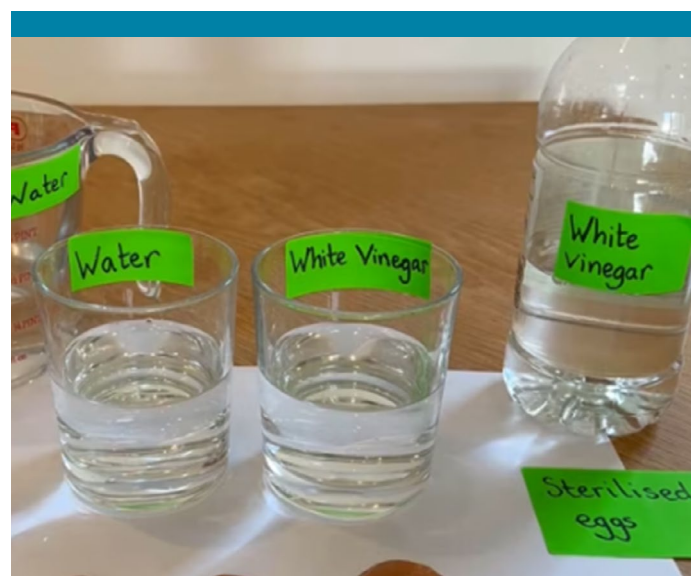
The science leader has been using Explorify for three years and has been actively promoting it to other teaching staff in the last twelve months, as a resource that can support lesson planning and as a trusted source of informative and user-friendly activities. They view the "Science Leader Toolkit" and the "Helpful reads" as particularly valuable for preparing CPD sessions for teachers on when and how to use Explorify in the classroom.

Classroom teachers across all year groups incorporate short 5-minute Explorify sessions into their lesson plans for all science units as a starter to consolidate previous learning. Think/pair/share sessions at the beginning of the lesson allows teachers to ask questions and formatively assess what the children can recall from prior learning, e.g. vocabulary and knowledge, and any misconceptions around the subject.

When introducing a topic about teeth, the Disappearing Eggshells 'What's going on?' video supported a practical investigation. "Odd one out" and "Zoom in, Zoom out" activities stimulate excitement and discussion, enabling teachers to introduce new topics and encourage pupils to make predictions about what is coming up next.

How science is taught at the school

Science is a standalone subject taught once a week with a new unit linked to the national curriculum introduced every half term. The science leader encourages all teachers at the school to link science to the wider curriculum in order to support the current focus on retention and retrieval of prior learning in science. For example, when teaching pupils about geology and rocks it is in the context of the Bronze Age, Iron Age and Stone Age topics covered in history. Teachers also support pupils in their science learning by making connections to their reading material in English. The science leader reports that this approach improves children's knowledge retention and supports them to develop a deeper understanding of the importance of science in a wider context.



What's going on? - Disappearing eggshells

¹ For more information about Explorify please visit: explorify.uk

Impact of Explorify at the school

Improving pupils' scientific understanding through discussion

The user-friendly background information and visual resources provide the tools to make science more relatable for pupils. As a result, pupils engage in more detailed and meaningful discussions during lessons.

"Science is about that background knowledge, and what the misconceptions might be and using resources like Explorify gets to the 'nitty gritty' before you then do the new learning." **Science Leader**

Teachers perceive that the regular discussions between pupils, supported by the visual cues in Explorify, has improved pupils' scientific understanding, their oracy and observation skills. The science leader has seen first-hand how the "Zoom in, Zoom out" activity can have a positive impact on younger children.

"The children love to predict what the [image] is and then celebrate when they are correct or close." **Science Leader**



Zoom In, Zoom out - Fluffy and Ginger

"I watched a "Zoom in Zoom out" activity in early years a child put their hand up and said that they knew now it was an animal because it looked like soft fur. It could not be a fox, because although foxes have triangular ears, the ears are further back, so it must be a different animal. You know, this is coming from a 4-year-old. Then someone said, 'No, no, it is a squirrel. Squirrel's ears are triangles, and they are further to the front of the animal's head.'" **Science Leader**

The videos and imagery used make the science lessons more meaningful and accessible. This has been especially helpful for children for whom English is an additional language (EAL), who can build on their use of scientific key words and speaking skills year on year through the repeated engagement with Explorify.

"If you have children with EAL where you're using words that they might not even have heard before and you're trying to teach new vocabulary, if they're coming back to that learning and things that they've built on from previous year groups, it's that understanding and that visual [in Explorify] that helps." **Science Leader**

Discussions about science facilitated by an Explorify activity encourages pupils to apply reasoning to their arguments. Teachers observe how pupils are now asking more questions and expanding their answers using new terminology, demonstrating a deeper understanding of scientific concepts. They report that Explorify supports children to think more like a scientist and to understand that science is evidence-based. It also helps them to appreciate that teachers do not always know the answer and that it is OK to investigate and research what the answer might be. This realisation has led them to answer questions more readily and to 'have a go' with more confidence and with less fear of being wrong.

Activities provide teachers with exciting 'hooks' into science topics which successfully engage pupils. The visual features of these activities help to build anticipation, which leads to pupils being more active in discussions and asking more probing questions.

"[Explorify activities are] brilliant because you put the children in-charge of them, so they can be getting that discussion going, answering their own questions, disagreeing with each other."

Science Leader

Real world examples in Explorify activities help pupils to make connections in their learning beyond the classroom. Teachers report how the images and explanations aids pupils' understanding about how science fits into the world around them.

"The more that we can link science into every day, the more the children engage, the more the children want to understand, and that's when you then find them out on the playground pointing out things that they've seen on the screen and can link, because they've already started to make those pathways."

Science Leader

Reducing teacher workload

Teachers at the school state that scientific concepts are harder to teach if pupils cannot relate to them, but finding real-world examples suitable for primary aged pupils can be challenging and time consuming. Explorify provides a central and navigable bank of engaging resources suitable for all year groups that provide these relatable real-world examples. This reduces teachers' workload and enables them to plan lessons more efficiently.

"Just starting pupils thinking about real world experiences and linking it to the wider world. [For example] condensation, are hard to show in a lesson if you do not have an example, and you can spend a lot of time looking for something on the Internet to show them." **Science Leader**

For further details about Explorify and its impact a full independent evaluation report can be found [here](#).