

Oaklands Primary School



Explorify and its impacts

About Oaklands Primary School

Oaklands is a community primary school located within Yeovil, England, which caters for over 400 pupils aged between 4 and 11. Oaklands has Special Education Needs (SEN) provision for Autism Spectrum Disorder (ASD) and just over a quarter (29.4%) of pupils are eligible for free school meals. The most recent Ofsted inspection in 2018 gave the school a rating of 'Good'.

How science is led and taught at Oaklands

Science is a core-subject at Oaklands. Science lessons are widely enjoyed by both teachers and pupils, and science has a high profile in the school. Oaklands has a very hands-on approach to science teaching and learning with experiments and investigations featuring as part of lessons.

"There's always something new to learn in science... and the pupils are really keen." (Teacher)

The Science Leadership at Oaklands is highly established; Oaklands supports training at other schools for teachers in the county.

Oakland's Science Leader uses book-looks, learning walks and observations to monitor and guide classroom teachers. More informally, they engage in professional dialogue with colleagues to discuss informal aspects of science teaching.

The impact of the pandemic on science teaching at Oaklands

Whilst the pandemic has presented challenges for science teaching, senior leaders maintain that it has remained a priority and this will continue in the future. Senior leaders continue to emphasise the importance of science within the school and provide high quality resources to teachers to support their science teaching. The science lead has, for example, been able to continue the development of the science curriculum and plan for the future of science teaching throughout the pandemic.

The school has, however, been required to adapt its approach in response to the pandemic and associated disruptions. During the first lockdown, the school delivered teaching and learning to pupils via paper packs and worksheets, which children completed independently. Therefore, practical science lessons were completed from instructions for pupils to carry out at home including experiments.

During the second lockdown, live teaching was provided using online video software. The more collaborative elements of science learning, which teachers felt promoted pupil engagement, were more difficult to implement whilst teaching remotely.

"What they really miss out on at home, which science is all about for me, is talking with others. It's that really rich conversation that they miss at home as their peers are not involved. In science that is huge, that's what we want them to do [...]; it's that conversation that you generate within a classroom where the children's ideas bounce off each other and your questioning deepens their thought processes" (Science Leader)

Investigations were much less common during lockdowns as pupils' access to the necessary resources were limited. The school trips which the school normally offers to aid science learning have not been possible, and much of the support the Science Leader typically offers staff with their science teaching had also been more difficult to facilitate.



How Oaklands uses Explorify¹

We have been using Explorify from its initial launch and introduced it to teachers well before the pandemic. The Science Leader led staff meetings on Explorify, showing teachers how to use the resource effectively. Teachers in the school choose to use the resource as part of their teaching and planning. One teacher also highlighted how they had recommended Explorify to teachers at other schools.

Teachers at Oaklands continued to use Explorify regularly during the pandemic to support both remote and in-class teaching. During the first lockdown in March 2020, teachers found that Explorify made it much easier to arrange learning quickly for pupils who were at home, especially as they had already used Explorify before the pandemic. Without Explorify, teachers believe they would have taken them much longer to find quality content (i.e. videos and pictures).

Many science lessons start with an Explorify activity. This is used as an initial “wow moment” which is then built upon for the rest of the lesson. Oaklands staff also use Explorify at the start of other subject lessons and believe that it is a resource which can be used regardless of whether the activity links directly with the content of their upcoming lesson.

“Sometimes you can do something that's completely unrelated. It doesn't have to be connected. If I'm teaching about plants, it doesn't have to be something about plants. It could just be a scientific video. It really doesn't matter if it isn't linked.” (Teacher)

Teachers sometimes use Explorify at the start *and* the end of the same lesson as an assessment tool; it is used as a means of gauging understanding of a particular subject before and after the lesson. This helps teachers to focus their teaching on areas where there are gaps in knowledge before consolidating learning.

Oaklands also use Explorify as a means of supporting and improving pupils' writing skills by asking pupils to produce a piece of writing based on knowledge acquired through Explorify activities. For example, after learning about rainforests, pupils were asked to write a short piece on tree-dwellers.

What works well about Explorify?

Staff at Oaklands established the use of Explorify within the school because it aligns with core development plans to meet whole school improvement. Teachers find it fits well within the curriculum and is easy to use and navigate. Without access to Explorify, teachers would find it much more time-consuming to find engaging and relevant teaching resources. Teachers also appreciated, and were surprised, that such a useful resource was available to schools for free.

Impact of Explorify

Impact on teachers and the school

The Headteacher observed that Explorify helps the teaching of science to be less prescriptive as teachers now use the resource as a tool for gauging pupils' progress before and after the introduction of certain topics. For example, teachers use Explorify to introduce a topic, determine pupils' level of understanding and shape their teaching to build on this knowledge.

“We're seeing a lot more brainstorming within the lessons. We have got far more open ended questions being asked before and during a topic.” (Headteacher)

Teachers spoke about how Explorify helps them ensure that they fully understand a topic themselves before presenting ideas to their class. One teacher also reports that the videos on Explorify give them new ideas on how to present scientific concepts, and help present concepts in a more visual way than would have been possible otherwise. By reinforcing subject knowledge and lending new ideas for content delivery, Explorify has positively impacted teachers' confidence delivering science.

Explorify is particularly useful when preparing materials for pupils with SEN and those for whom English is an Additional Language. Teachers find the additional information provided through each activity, for example, is useful if they engage in any 'pre-teaching'.

“for pupils with additional needs, prior learning has been incredibly powerful. It allows us to pre-teach vocabulary which is particularly useful when supporting children with English as an additional language or certain SEN needs. These support groups continued during the lockdown. (Headteacher)

¹ For more information about Explorify please visit: <https://explorify.uk/>

School staff have seen children's engagement in the classroom grow using Explorify, and they found it to be useful during periods of remote learning in the pandemic. During lockdowns, one teacher posted direct links to Explorify activities on their school website so pupils could access the learning directly and view it in their own time.

"I was using the links and putting them onto our website and saying, 'Look at this,' and it was a direct place for them to go to look at the different videos. It was useful because it was almost science on their doorstep. All they had to do was go to that link on their browser, they didn't even have to have a log in. It was really good." (Teacher)

Teachers also often use Explorify during their lesson planning and one teacher, who is changing year group next year, is already using Explorify to develop their plans for approaching teaching science with an older year group.

Impact on pupils

Oaklands' aim for science is not just to deliver content knowledge, but also to develop pupils' communication and questioning skills. Teachers have found that Explorify fits well with this aim by promoting curiosity and discussion amongst pupils. Explorify also contributes to the creation of highly engaging lessons and teachers have noticed pupils are more confident with new concepts.

"Explorify, because of the high-quality resources, engages and really motivates the children [...]. It excites them. It makes them thinkers, it makes them enquirers, it makes them good communicators because of the language and the resources available. Very often there is no right answer, which is quite nice. It's a very non-threatening approach, open to all levels of ability." (Science Leader)

Explorify encourages pupils to engage in discussion without fear of being wrong; this has meant that lower achievers and children who might normally be apprehensive about contributing feel more confident in discussions. Overall, staff have seen a real improvement in all pupils' ability to talk about science as a direct result of using Explorify in lessons, including improved vocabulary through increased discussion.

"It generates scientific conversation, words that they might not have heard before. Some children will know more than others, so you've got ones that haven't had the same experiences picking up words that they wouldn't have heard of before from other children" (Teacher)

Staff at Oaklands believe it is important to relate science to real life, never more so than during the COVID-19 pandemic. Teachers recognise how Explorify draws on real life examples and, in doing so, helps pupils to see how science relates to their own lives.

"It's the real-life examples that are so good for the children. The photos and videos allow children to see science in action are able to discuss and ask questions for themselves" (Headteacher)

This relatability is especially important amongst pupils at Oaklands who may have some limited life experiences, and staff believe that Explorify has been instrumental in helping children realise that science is a subject for everyone.

"We can offer real-life, hands-on opportunities so that they can realise that everybody is a scientist. That we can all be scientists." (Headteacher)