Lew Trenchard Church of England Primary School

Explorify and its impacts

About Lew Trenchard Primary School

Lew Trenchard Church of England Primary School is a rural school in Devon and part of the An Daras Multi Academy Trust (MAT). The school has 95 pupils aged between 2 and 11 years old, and 14.7% are eligible for free school meals. The most recent Ofsted inspection in 2020 gave the school a rating of 'Good'.

How science is led and taught at Lew Trenchard

Science is a priority across the MAT and the Science Leader at Lew Trenchard supports teaching staff with their science teaching across all eight schools, alongside support from a designated lead within each school. Teachers are given freedom to teach science in a way that suits their class but must ensure that certain strands of science learning take place over the course of the year using thematic learning across the curriculum. Science is a particular focus for one term, with other subjects the focal point for the remainder.

Impact of the pandemic on science teaching at Lew Trenchard

During the pandemic the Science Leader encouraged teachers to maintain their focus on science and to teach it in the same way as normal, although the school placed a particular priority on literacy and numeracy. By the second lockdown, teachers were delivering one hour of live lessons every day. These daily live lessons covered English or maths, but the school ran daily drop-in sessions on Teams to support the wider curriculum if needed for those families at home. Science was also taught weekly in school and was set for home learning weekly.

> *"Its presence probably did drop off in the fact that we weren't teaching it to our planned curriculum, but its presence was there every week as it always is in the school... We did our best to make sure that it was still very much an important part of their learning." (Science Leader)*

Teachers attempted to make remote science lessons as creative and practical as possible; for example, by encouraging children to go outside and explore their environment. Science teaching was more difficult because pupils did not have access to the same equipment at home. The school dedicated an afternoon a week to a science theme across year groups so that siblings could learn together. These sessions utilised simple household equipment as the basis for investigations.

> *"I think the non-core was what was tricky to try and adapt. Again, in the non-core, it's about the children exploring and investigating and it's them not having those resources and tools available to them from home to be able to do that." (Science Leader)*

ClassDojo was used as the school's online learning platform throughout the pandemic and lessons and activities were uploaded for pupils to complete independently, with links to supportive resources provided. Engagement with these tasks and resources varied significantly across families - some completed all activities every week, whilst others did not engage at all. To support families who were struggling with the technology required to connect with online learning, the school provided a weekly paper-based learning pack for families on request which the Science Leader ensured always included science topics. This allowed all families to continue their children's learning although it posed a significant additional task for teachers.

> *"Every week I would message on Dojo and on Teams, 'This is the science, this is the theme.' So I would link to either Explorify or Tigtag too so they had support videos to back up that learning and the knowledge, the focus that it would be, just to try and help and make it accessible for a wider audience but its the fact that you can't control whether they are going to or not." (Science Leader)*

The Science Leader not only delivered live science lessons during lockdowns but also taught their bubble and supported other teachers with their CPD. This meant that they have had less release time than normal and less time to reflect on science teaching across the MAT. It has also been more difficult to monitor how and

what science was being taught across the school. 'Teach meets' were utilised during the pandemic; these saw science leads from across the MAT coming together to discuss the priorities for science and share resources (including Explorify) for dissemination to other staff.

For some teachers, the process of thinking about how to deliver science for a remote setting is changing how they teach science in the classroom. The pandemic has given teachers the opportunity to reflect on how pupils react to different types of learning; for example, some pupils enjoyed the practical aspects of remote science teaching and investigations so the school is considering how to maintain this moving forward.

> *"Feedback that we've had since [is that they] wanted more science like it because it was very practical. They wanted that to continue when they came back into school which, again, makes us reflect and think, well, how were we teaching science before? How have we presented it in lockdown? Tried to take that feedback now as we move forward." (Science Leader)*

How Lew Trenchard uses Explorify[1]

The Science Leader introduced Explorify to teachers before the pandemic and all agreed to use it for developing scientific enquiry in the school, something which had been identified as a support need for teachers. Following the success of a trial of Explorify, it became part of the curriculum and is used every Friday in all classes. This routine began before the pandemic and ran throughout it. During lockdown, a new theme would be set on the ClassDojo platform each Friday and links to related Explorify activities sent out so pupils could access these remotely.

> *"We're always revisiting areas that have been taught for them to use and apply that existing knowledge… in lockdown, we've still used [Explorify] in that way. We would use it within school and our bubbles as a learning task and also I used it on occasions that I would basically present it as a document that would go home. It would be that discussion based with opportunities at home." (Science Leader)*

Explorify links supported lessons and added a visual element to science teaching, which teachers feel 'brings the subject to life'. Each lesson normally focuses on one activity; for example, *Odd One Out* or an observational task. Some teachers use Explorify activities as a starter, others as a plenary. Explorify is used to help plan lessons.

Explorify has also been used as a whole school activity with classes working on different parts of a theme for the day. Lew Trenchard has four houses and, as part of their science week, the school set up a day where each house rotated around four Explorify activities. Houses bring pupils of different ages together and groups for the Explorify activity were made up of pupils from all year groups. Staff found this worked particularly well and are likely to arrange a similar event again.

> *"I think it worked very well, I think especially because you had the older ones who then would guide the younger ones, also listening to their different conversations, they could take each other's ideas on board." (Classroom teacher)*

What works well about Explorify?

The school uses Explorify to support their focus on helping pupils to become more reflective about their learning and to utilise a common scientific language across the curriculum. The school regularly uses Explorify to start lessons and teachers are increasingly using Explorify to assess prior learning. Using the resource helps pupils make links between what they already know and new topics. The nature of Explorify activities also ensures that pupils do not feel under pressure to have the 'right' answer; they are encouraged to express their opinions and feel able to change these opinions as more evidence emerges developing their learning.

> *"There's not really a wrong answer so the children don't feel as pressured, especially the Zoom In Zoom Out, and the kids really engage with it because they then realise, I don't have to stick with my first original answer, I can change my thinking depending on my observations." (Classroom teacher)*

Impact of Explorify

Impact on teachers and the school

Teachers at Lew Trenchard view Explorify as a high-quality resource which is simple to use with easy to understand explanations. Lesson plans from Explorify can be quickly picked up and taught so that teachers feel better able to teach areas of science they know less about. This positively impacts on teachers'

[1] For more information about Explorify please visit: https://explorify.uk/

confidence and increases their enjoyment of teaching science. The Science Leader sees Explorify as a useful tool because it is reliable and accessible. Teachers feel that Explorify helps them deliver high-quality, creative and practical science teaching.

> *"I was never that confident with the science, especially not with the scientific inquiry, which is probably not my strongest area, so it's nice to just see actually, 'Okay, this is what they need to achieve, and this is how I could plan it." (Classroom teacher)*

Impact on pupils

Pupils find the links that Explorify makes to real life examples interesting and relatable because of the excellent visuals and easy to understand language. Explorify exposes pupils to new topics and encourages greater dialogue about science, and pupils make more connections in their learning as a result. This is particularly important for children with limited opportunities for learning outside of school. Teachers can use this to better understand individual pupil's knowledge development and identify areas in which they need additional time or support to fully understand.

> *"It gets them to look at things differently and think about it differently. It's an exposure to seeing and thinking about things that they perhaps wouldn't have a conversation at home about. So again, it's that opening thought and dialogue about things that they might not have even considered." (Science Leader)*

Teachers have noted how pupils' observational skills have improved since using Explorify, as has their ability to interpret and explore what they observe. Pupils are explaining things in greater depth and are beginning to apply scientific thinking to their observations. As pupils engage more with science they are enjoying the subject more.

> *"I'd say their observations have got a lot stronger and their reason behind it through Explorify and I think they then start to apply it to other aspects of the science." (Classroom teacher)*

There have also been impacts on pupils' oracy skills. Pupils are providing more detailed descriptions of their thoughts and ideas and are more willing to talk through their thinking which encourages better understanding of topics. This change has been particularly noticeable amongst pupils who find it more difficult to write down their ideas in science.

> *"There are a couple I've got in my class where, especially at the start of the year, they were struggling to write down their ideas. So just being able to have that oral conversation was good for them because they could get their ideas across, but it also helped me with my understanding of where they're at. Where, not necessarily, they might be able to do if they were having to write it." (Classroom teacher)*

Staff also believe that the improved questioning skills and confidence they have seen in pupils as a result of Explorify transfers to other subjects. Teachers have seen improvements to pupils' reading comprehension, problem solving and numerical reasoning.

> *"We want them [pupils] reflecting in all areas of their learning so it's almost a shared language that you can take across. I know my class have got really good. […] I certainly feel that Explorify also has allowed that to happen." (Science Leader)*