

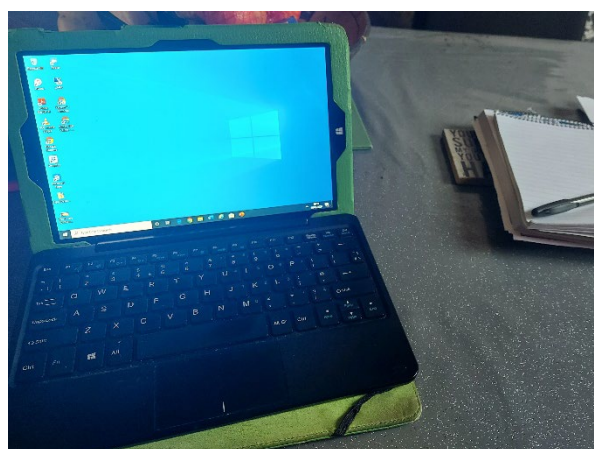


## Coronavirus Diary: Embracing practical science online

Article by Rob Paice

4:30pm on a Friday. That's when I found out the 'bubble' I belonged to were heading into self-isolation for the next two weeks. That weekend became a bit of a blur from setting out Google Classroom groups, managing expectations and the envious task of translating all my planning, slides and resources into accessible online versions for the children.

From day one I took the approach of 'embrace the situation – embrace the technology'. For most lessons, this was simple. The 'Docs' application replaced the 'workbook' and we could harness the technology to support and create new learning opportunities. We used the 'Meets' function to deliver a live input for every lesson for the children and remained there to 'troubleshoot' their questions throughout. We kept the timetable and structure of the day the same. This helped to create a reassuring norm for the children in this bizarre situation.



However, one subject which needed some re-planning was science – after all there aren't many children with Newton Metres at home are there! Week one was simple. We researched Isaac Newton and created a biography about him (Secondary sources – tick, exploring the impact of a scientist – tick). During the input the children were able to discuss and share what they already knew. I was able to tackle misconceptions there and then before setting the children off on the task.

The following week I had originally planned a comparison investigation into weight and mass but I knew full well this would need to change. At the same time, I didn't want the situation to hamper the practical side of science. As practitioners, we are all aware of the positive impacts of learning through hands on activities. Reflecting on the year just gone, I knew that the children had missed out on a lot of practical science in school due to lockdown. I was also aware that spending all day in front of a screen for two weeks was becoming a tad dull and bordering on quite repetitive! I decided week 2 was the perfect time to embrace some child led enquiry – whilst at home, away from the parameters of the classroom!

As we were covering forces, I decided to use my idea for our Awe and Wonder session\* to complete at home. I mean, who doesn't enjoy a parachute investigation into air resistance! I introduced the task to the children, discussed their initial ideas with them and the variables they would need to consider and set them off on their practical tasks. I did throw in a casual reminder not to cut up mum's best cushion covers – but maybe look at the recycling bin for inspiration instead! Children used the Docs app to share their ideas and methods and some were able to upload pictures of their finished parachutes as well as a video of their dad dropping it out of the window!



This session was one of my biggest risks but the feedback from parents was positive. They were impressed with the scientific knowledge and understanding displayed from the children and (most) fully embraced supporting them with a practical task. Children were able to make their own choices throughout and above all else, it created a lasting memory for the children during this strange time.

\*Awe and wonder sessions were an initiative used to expand the science capital of the children at school. Each unit being taught would have an 'Awe and Wonder day' planned in. This could be a trip out, a visitor coming in or a special session dedicated to the topic. Teachers have the flexibility to use this day as a way to introduce the topic, use as a hook for a new idea or as a way to consolidate the learning that has taken place. It gives the children in school a shared experience that they may not otherwise have had access to.

*Our thanks to Rob Paice who is the Science and Computing faculty lead at Round Diamond Primary School in Stevenage. The school is 2 form entry with around 480 pupils on roll. Rob teaches in Year 5 and is a member of the school's SLT. He is also an active STEM facilitator where he enjoys delivering CPD courses and running local network meetings for STEM through the University of Hertfordshire/Herts and Essex SLP.*

*If you would be willing to share some of the work you have been doing in your school to support science, computing or wider STEM subjects, please get in touch with us at [stem@herts.ac.uk](mailto:stem@herts.ac.uk)*