Rolls Royce Science Prize- January Diary

Since our last entry on December 20th we have been off on our Christmas holidays and then had just under 2 weeks back at school to start planning out the next steps.

Clubs

The pupils thoroughly enjoyed our Science Club for both P4/5 and P6/7 pupils last term. They all worked so hard to complete the chosen Crest Award activities whilst learning new scientific skills. We are very excited about our 3 clubs coming up this term. They will not only be inspiring pupils in a range of STEM areas but will also be involving our local community. Getting our community into STEM is a core aim so we are incredibly excited about this! The clubs are all due to start up in the next 2 weeks and will mean all First and Second level pupils (the scope of our project as Early level follow a separate curriculum and timetable) will have access to a STEM club.

STEM Club –Upper

Castleview are working in partnership to create the Community STEM Festival event in March involving pupils, local schools and members of the community. Therefore this term we will run a p6/7 STEM club where competing teams comprised of pupils and community members will develop, create and present a prototype of something that will be help solve a problem in our community. Parents, carers and community members will be encouraged to come along and join in. We have opened this competition up to the other primary schools in our area, as well as the First Year pupils at the High School. The two winning teams from each school will present a prototype and poster to the expert judges at the festival. This will be done in the same style as the Rolls Royce final event, where teams stand by their stall. This will be an exciting and creative learning opportunity, encouraging children to work with, and for their local community.

STEM Club – Lower

Primary two and three are beginning a STEM club and the focus of this will be the Primary Engineer project (see below). The children will be asked to engage in designing and creating a working model of a truck. Parents and carers will be invited along and be involved in each stage of this process.

Physics Club

A group of local physicists – who live and work nearby- have volunteered to come in to run a science club based on physics. Not only will it be fun and engaging but it will be so inspirational for the pupils to meet scientists from their area!

Coding Club

P6/7 Coding Club will restart in earnest this term. It is run by Kate with support from our lovely volunteer Amy from Barclays!

Dissection Club

Cathy and some students from the nearby university will be coming in to deliver a Dissection Club! As most clubs are after school, and there is a whole section of our pupils who do not attend after school clubs, this club will run in class time, to reach the maximum number of pupils.

Community Events

February Holiday Science Club

Kate and Cathy met with a colleague of Cathy's to discuss the Science Holiday Club. It will run in the February week for two days in a local community space where our children have positive associations with Science- The Whitehouse. Families will need to sign up and children will attend with a parent/carer. This means the whole family will be involved! We are still considering the details for sign ups, older pupils etc but the we have confirmed the club will run.

Following on from this we hope to deliver STEM activities in pre-existing Youth Clubs in the community. We know a lot of pupils in the area attend these and they take part in a range of activities at them. However there is very little STEM focus. The plan is to deliver STEM activities in the Youth Clubs as one offs to model this to the Youth workers and then train them so they can deliver it!.

Lab Sessions at the Centre for Regenerative Medicine (CRM).

Cathy, our local scientist, is working to open up a lab space at her place of work (CRM) so that our pupils can come work like 'real' scientists and see what that sort of work space is like. Kate took her class to the Roslin Insitute last year for a similar thing so will work in partnership to help develop this programme. The aim is to create a suitable space and then series of workshops which can run every year for P6 pupils. The programme at Roslin was brilliant, but this will have the added value of showing the pupils that STEM careers happen right across the park from them! This is so crucial to building our STEM capital and lifting the poverty of ambition in our community. This project, once established, would be on going and open to the other schools in the area. The longevity and broad reach make it particularly exciting.

Science Festival

The latest update for the festival is that Cathy has agreed to work with P5 on the Great Science Share. This will be a pupil led project supported by her and the pupils will present their findings at the festival. This is particularly exciting as none of the P5 team are on the Science Committee. The P6/7 Coding Club will also work on a project to share at the festival.

CPD

Kate and Hannah went on the Primary Engineers training on the 11 of January. We are now ready to deliver exciting engineering projects to our stages. Hannah will deliver hers as a club and Kate will work with her P7 stage partner to support all of P7 (a and b) to complete the Lighthouse Challenge. This will run as an interdisciplinary learning project with a focus on Engineering, Maths and Design Technology as well as art, history, teamwork and literacy. We also learned about the Leaders Award which is a STEM design competition. We will support our colleagues to deliver this to as many classes as possible.

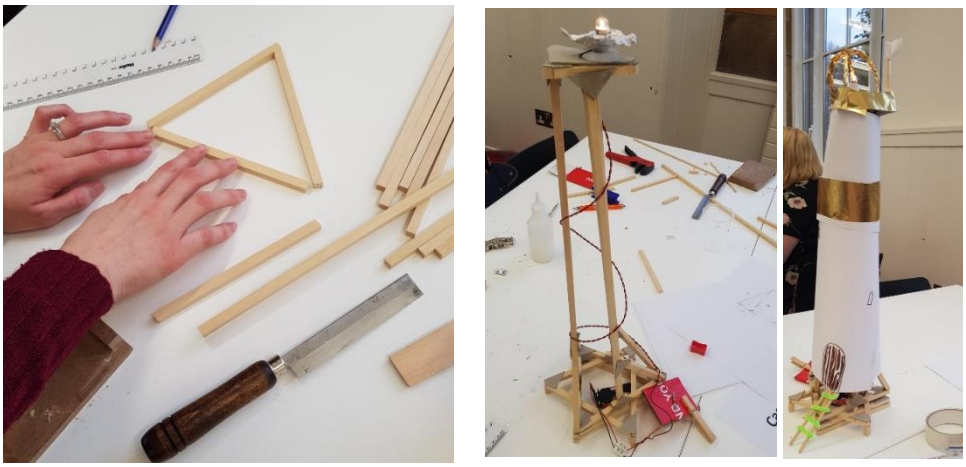

Figure 1 Teachers' creation at the Primary Engineers CPD!

We have emailed schools in Fife to try and visit them as we know there is a good STEM programme in Fife and we would love to have a professional dialogue with colleagues there.

We are about to order a lot of reusable, sustainable STEM kit, to create a bank of resources as part of our legacy from this project. We have not yet put this in, so our current spend still stands at:

Item	**Cost**
Homelab and Usborne Sciecne 365 books for each stage- these are to be used for activity ideas relating to STEM curricular areas and will be linked to our planners.	**£181.86**
Science Club resources	**£76.00**
Running Total Spend	**£257.86**