March Diary Entry from Ryders Hayes STEM Project (Rolls-Royce)

Rolls-Royce Schools Prize for SCIENCE & TECHNOLOGY Finalist 2020-2021

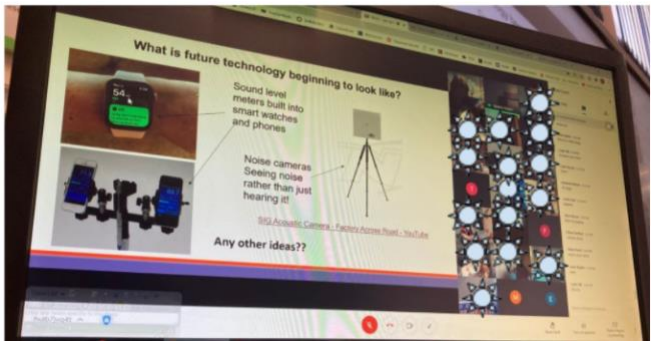
@ Ryders Hayes STEM

At Ryders Hayes Academy, our project is a whole school investigation into the different ways that STEM technology is currently used in industry and considers how it will help us in our everyday lives in the future. Using STEM software and hardware kits (SAM Labs), pupils will create innovative systems and build their code, to provide sustainable solutions to problems within a real-world context.

Claire (Y5 Teacher, Science/STEM Lead and Project Leader)
This month we have welcomed our pupils back to school and got off to a great start with British Science Week. We joined the NFU Live Lessons to learn about how technology is used on farms today, and children joined in the Science competition to make a rainbow set by our local Secondary school partner.

Based on the reflections of last month, we set our Y5 curriculum to some foundation lessons for SAM Labs so the pupils could access the learning at their level. Pupils have had a chance to use the hardware as well as the software to support their learning.

On Monday 22nd February, we had a remote visitor to our assembly, to give a career talk about what technology they use in work, what has changed and what they think it will be like in the future. Our volunteer has his own company managing environmental concerns such as measuring noise and light pollution. I worked with our Chair of Friends of Ryders Hayes (FoRH) to set this assembly up and it was delivered through Google Classroom to all of Key Stage 2.



I have discussed the use of a 3D printer pen with our Rolls-Royce mentor to use alongside the Year 6 SAM Labs project which has a focus on manufacturing, which I am currently researching.

So far, we have spent £1,500 on SAM Labs equipment and £600 on coaches = £2,100.

Bridie (Y6 Teacher and Computing Lead)
This month we have welcomed our children back to school and launched the SAM Labs curriculum in Year 6. The children have started the ‘starter lessons’ and have enjoyed getting used to understanding how the hardware and software interacts. They have spoken about how

much they enjoyed the lesson and are looking forward to the next one. I can see a real drive and enthusiasm towards STEM activities and that the children are continually thinking forward about how their current understanding might impact on their future careers.

Kath (Y4 Teacher and Family Learning Lead)
This month having welcomed the children back in school we have been involved with the Science week activities**.** We joined the NFU Live Lessons to learn about how technology is used on farms today, we then linked this to home learning where children could see how hard it is to pick out weeds without spoiling some crops and how the new machines can detect weed from the crop. They had to pick out peas in a field of sweet corn. Children joined in the Science competition to make a rainbow set by our local Secondary school partner. We have also joined in with assemblies online to learn about innovations.

Amy Wall (Y3 Teacher) DT Lead
Last week marked the deadline of the 2021 Fluor Paper Tower Competition and the entries received were fantastic! The children enjoyed this STEM challenge in school and at home and we look forward to hearing the results in the coming weeks.

Laura (Chair of FoRH)
Although I have been limited in the support I can give, I did watch the assembly with my daughter in year 6 as she was home schooling and it was really good. It has created some excitement and interest for when these can take place in person & was great to see students asking questions.
As a parent my daughter is really enjoying the Stem activities/lessons taking place now she is back in school.

Angela Moore (Chair of Governors)
This is a very positive to the children being back at school and as Governor I am really pleased this has continued throughout the school closure and has hit the ground running on return to school.

Link to updates on our project:
https://www.ryders-hayes.co.uk/school/our-community/ryders-hayes-stem-project