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 I have set up a virtual STEM Club for KS2 pupils who so far have enjoyed sessions on exploring the different shapes of dinosaurs and why they were different, investigating chromatography and used a survey to find out the different ways people drink tea. Four, Year 5 pupils have led the sessions by giving out the packs, explaining the science behind the activities, making their own quizzes and sharing fun facts - keeping the sessions both entertaining and purposeful. The children are working towards a CREST Award from the British Association of Science. To create the packs we had support from the Friends of Ryders Hayes. One parent commented: "I just wanted to say how much [my child] enjoyed the online session yesterday. It was very well organised and lovely to see the children taking a lead."

Year 5s running the virtual STEM Club

I have also been supporting Year 4 teachers and pupils to complete the starter sessions in their SAM Labs sessions ready for their SAM Labs lessons in the final Summer term. After discussions with Year 6 teachers, we are planning to use the 3D digital pens in the final summer term.

So far, we have spent £1,500 on SAM Labs equipment, £600 on coaches, and £183.96 on 3D printer pens = £2,283.96

Bridie (Y6 Teacher and Computing Lead)
This month we have completed the Mars Rover SAM Labs lesson. The children were so enthusiastic about this learning experience that we have decided to extend the challenge by building the Mars Rovers next week and taking the learning outside, giving the children different scenarios and seeing if they can manipulate the coding or the hardware to solve the problems. I have been very pleased with the teamwork skills that the children have exhibited during SAM Labs sessions; the children have also developed their resilience surrounding coding. We are looking forward to using the digital pens with the children and I have met with Claire to test how they work.

Kath (Y4 Teacher and Family Learning Lead)
This month the children have been working on coding in their computing sessions and using coordinates to move an object around the screen . This is excellent pre work for the SAMS Lab that we have started with the support of Claire in our starter sessions. The children are all very excited about using these in class. I have been able to share the work with the PTA in our online meeting and they have supported the after school club. I have also have put forward children for the STEM club from Y4 who have shown a real interest in science learning.

Amy (Y3 Teacher and DT Lead)
This month I have spoken to Claire about using the SAM Labs in Year 3. We are very excited to start on the project in the final term and I have looked at the materials that we will be using.

Laura (Chair of FoRH)
This month I have been into school to help Claire prepare for the virtual session by putting the packs together for the children to go home with. They looked like great fun and I hope they enjoyed the sessions.

Angela Moore (Chair of Governors)
I am really pleased to see a virtual STEM Club set up at Ryders Hayes for children to continue their science learning at home. I am also impressed at the Y5 children leading these sessions as it shows great leadership qualities, which is a great skill for their futures. I look forward to hearing more about the outcomes of this and hopefully the club can move to face-to-face in the near future.

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