

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



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)

I have used the start of this autumn term to reflect on the successes of our STEM project and make plans for this next academic year. I have contacted all project members and set out the project dates for this coming term. I have discussed the plans with our Computing Lead and agreed that in order to maximise the expertise of our current Year 5 and 6 pupils, we will provide opportunities for them to share their skills with Year 2, 3 and 4 pupils to use the SAM Labs equipment. This is planned for next half term due to some restrictions still being in place for the pandemic. Should we still have restrictions then, plans are to facilitate small group work outside of the classroom. In Year 5, I have booked a STEM Day at RAF Cosford to link as part of their topic on forces and WW2.

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)

To start this year I have met with Claire to discuss Computing and how we will use SAM Labs to allow pupils from Year 5 and Year 6 to support younger year groups in their learning. This opportunity for peer-to-peer learning is invaluable as all pupils will benefit from having this interaction to build their communication and collaboration skills. I have also looked at the Skills Builders framework and have been looking at where the STEM project and SAM Labs supports children in gaining skills in these areas, particularly in teamwork skills.

Kath (Y4 Teacher and Family Learning Lead)

Year 4 pupils' have begun their electricity topic and have planned in their STEM day for October. This topic is where children learn all about electricity, then they design and build their own home to light up. I have discussed with Claire how we might use the SAM Labs equipment to add an additional element to this by programming lights and an

alarm to come on automatically using solar power or sensors. This will be a great project for all pupils involved, and having Year 5 and 6 pupils support our Year 4s will be extremely beneficial.

Anita (Y3 Teacher and DT Lead)

I have recently taken over as DT Lead and have discussed the project with Claire and other team members. I look forward to starting the project with my Year 3 pupils and exploring how technology will help us in the future.

Laura (Chair of FoRH)

I am looking forward to seeing the results of this project and after discussing with Claire the new project timelines, we have agreed to meet this month to discuss how the showcase event can be organised.

Angela Moore (Chair of Governors)

This is a very positive start to the year and I am pleased that pupils are continuing to receive quality Science and STEM learning opportunities. I look forward to seeing the outcomes of the project in the coming months.

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