

Rolls-Royce Science Prize Finalists 2017-18

Boston West Academy

October Diary

Our project is about 'Establishing Firm Scientific Foundations in Foundation Stage'. An explicit focus on Science will not only improve children's engagement with the subject and promote an enthusiasm for it, but will be the tool to impact on Communication and Language too. Children and parents will work together to see how Science is relevant in their everyday lives, promoting an enthusiasm for the subject both at home and at school, ultimately setting them off on a scientific journey that lasts beyond their first years at school.

Amanda Pickwell

This month we have allowed new members of staff to settle before now introducing our project and meeting together to share/roles and responsibilities. At the start of term, I put together an action plan detailing the milestones that would need to be achieved each half term to ensure that we stay on track to reach our goal. The milestones have then been amended after our team meeting as we realised that with the dates available we could bring some of our actions forward to the term before so that they had time to make more of an impact. I am sure over the year although it will keep us on track, it will become a working document that we discuss and amend regularly as our project is more fully implemented.

This term I led a meeting with the two Foundation Stage class teachers along with Becky Storey who is the parent of a child in one of the classes. We agreed the specific terminology that we would use with the children such as referring to 'Science', we are 'scientists' and the modelling of 'I wonder if...'. We then together did some of the practical science investigations that Jade and I did on the Early Years course to demonstrate the open enquiry and how the children's communication would play a vital role. One of the activities included us putting skittles in water to see what would happen, before repeating it with M and M's, we then wondered if it would have the same effect in milk! The staff got very involved and it created lots of predictions, discussion, and descriptions about what we could see as well as what we wanted to try next! The meeting was very effective with us agreeing the types of activities we wanted to introduce to the children and already thinking about the impact they would have.

Resources this term have been discussed and agreed between us, with Becky suggesting some books and ideas that as a parent she knows have been successful. We have ensured that we have ordered resources for the start of Autumn Two that will not only promote discussion and so impact on Communication and Language, but also engage and excite the children to want to learn more about 'Science'.

Becky Storey

My first 'hands-on' activity with the Rolls Royce Science team began by participating in an Early Years Science training session, based on a course attended by Amanda and Jade, at the National Science Centre. It was great to participate in the types of activity that will be introduced to the children during the course of the project, and for me to begin to understand how we will encourage their exploration into the world of science. As a result of the session, and my clearer understanding of possible activities that the children might engage in, I have been 'tagging' the rest of the team, as and when I've discovered links to exciting science activities!

I have also spent time with the Foundation Stage children, conducting baseline pupil interviews. I've established their existing knowledge levels, meaning later in the project, I'll be able to determine the impact of our plan's implementation. I hope to become a familiar face within the classroom during the course of the project; it was an absolute privilege to begin my working relationship with this group of 4 and 5 year olds.

Jade Brockington

Since coming back in September, I have set up a science area in my classroom which is enhanced every week. I have supported my partner teacher with weekly planning, ideas for our planning document called a 'PLOD' (Possible line of direction) and various activities for the science area. I have been thinking about ways to resource for next term and have selected various items in catalogues to enhance children's learning through Science which will have a positive impact on their communication and language. I have introduced 'science time' to my class, which is beginning to enhance their questioning and reasoning skills.

Emma Schofield

I am looking forward to seeing the development of the project and the increased use of the outdoors to enhance the science learning in the Foundation Stage classes. As Outdoor Leader I ran a Foundation Stage Outdoor Learning staff meeting (Monday 9th October) where the team explored ideas that they could use in their everyday practice beyond the base. **See photos below.** They have planned an outdoor day, Wednesday 18th October, employing many ideas linked to Autumn, with a Science focus that has a direct impact on communication and language. We have looked into some into purchasing some outdoor resources, including a night vision camera to further develop the learning that we carry out across our school grounds.



Mentor Update:

It was a pleasure to welcome Sam Pink, our Rolls-Royce mentor, to our school earlier this month. She met with us as a team where we had the opportunity to introduce ourselves and explain our role in the project. Sam explained to us the requirements of the prize and how she will support us through the project. We enjoyed showing her around our school and extensive grounds, and look forward to working closely with her to support the implementation of our project.

Expenses Update

Total Awarded: £6000

Date	Purchases	Cost
22.9.17	Disposable materials for adult initiated enquiry: Gelli Baff in three different colours (£74.85) Instant snow powder (£35.50) Slick Sand (£10.98) Space Sand (£8.98) Variety of large food colouring (£34) Sodium Bicarbonate (£16.47)	£180.78
22.9.17	'Early Years Friendly' Resources to be kept in the Foundation Stage classrooms to enable enquiries to take place: Tweezers (£6.49) Litre set containers (£14.99) Disposable pipettes (£11.96) Petri dishes (£9.96) Beakers (£19.99) Large test tubes (£25.98) Mixed test tubes (£15.98) Pots (£6.99)	£112.34
17.10.17	Two packs of Talking Magnifiers in each class room (pack of 6)	£139.90
17.10.17	Two Easi-scope Wireless (one for each class initially)	£139.90
17.10.17	Resources to begin 'wowing' up our science area in the classroom: Sea and sky fabric(£18) Coloured borders (£4)	£22
Total Expenses		£594.92
Remaining Money		£5405.08

