

Rolls-Royce Science Prize Finalists 2017-18

Boston West Academy

November 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

What a busy month! Although initially an Early Years project the whole school is keen to get involved and support in any way they can. The Year six children on the school council offered to support with the videoing of our project. For our initial introduction they made suggestions about the content, interviewed staff and with the support of our Deputy Headteacher (Ceri Braybrook) were able to illustrate how passionate and proud they are about our school!

Earlier in the month I had the honour, alongside our headteacher, of representing Boston West at the Rolls-Royce Science Prize Awards ceremony in London. It was an invaluable opportunity to see how the projects have developed over this year and hear about the impact they had on the children in their schools. I was blown away by the tours around the Rolls-Royce facilities in Derby as it made me realise just how important it is to harness and nurture the enthusiasm and interest young children have in Science. These children are our next generation of engineers and scientists so it is our responsibility to ensure their interest and enthusiasm develops. They will then be able to take advantage of the multitude of fantastic opportunities that are open to them when they are older and looking for a possible career in Science.

Whilst in Derby it was also a great opportunity to catch up with our Rolls-Royce mentor Sam, and to update her and chat about the progress of our project so far.

I have been lucky enough this month to see some of the Science in action in the two Foundation Stage classes! They now have now regular 'Science time' planned in where a practical 'hands on' investigation takes place, this has really caught the children's interests! I witnessed the other day a 'Science Time' odd one out activity and was amazed with the children's ideas and their explanations for their thinking. One child who has English as an additional language not only had the confidence to share his idea with the class, but his reasoning for it showed a really deep level of Scientific thinking for a four year old. This is only the beginning of our project and I can't wait to see the further impact it will have on our children!

My next task this month is to look at the Science taking place each week and plan some simple scientific investigations that children could do with their families for a home activity task. This is something that we have brought forwards as we feel that the initial impact with the children has been so positive, in order for that to now broaden and deepen we want to begin getting parents involved earlier before we hold the big parent events in the Spring term.

Becky Storey

As the project gains momentum, I constantly find myself wanting to share my experiences as a parent, and other things that come to my attention, with the rest of the team. I have shared a variety of science-based information books, which my son loves, (about the senses, lifecycles and simple physical concepts) which are really suited to the Early Years age range due to their quality illustrations but limited text. In addition, 'O', who is an avid fan of all things electrical, has enthusiastically demonstrated some of his 'scientific' toys to the team (Snap Circuits and Code-a-pillar).

As a result of the Early Years Training session I participated in last month, I tried out one of the activities at home with 'O', as part of a homework activity. He really enjoyed watching how food colouring 'chased' along lines of salt, as he created fireworks pictures.

I have continued to bombard the team by 'tagging' them when I discover even more exciting science activities! The Dad Lab is a great source of inspiration.

The results of the Foundation Stage baseline pupil interviews have now been shared with the team. Overall, the children's responses were limited, with only a couple of children saying they had heard of Science, however, they were very keen to find out about how things work in the 'real world'. In response to my question, "What would you like to find out about the world or how things work", there was clearly lots of curiosity amongst the sample children, E.g. 'How does a caterpillar make a cocoon?' 'How do phones work?' 'How do fish blink?' 'How do the leaves fall off trees in winter?' Some of the responses were very 'interesting' and at times entertaining! E.g. 'Birds have a drink and take water up to the clouds' 'How do my brother and sister work?' 'How will I spend my birthday money at Asda?'

Jade Brockington

Focusing on science in the outdoors, we planned an outdoor learning day for the children to enjoy. We made bird feeders, created natural pictures, made a healthy meal for a hedgehog in the mud kitchen and then had a story in the fire circle. The children were able to identify signs of autumn that they spotted and describe the changes that were happening. More recently, to tie in with our learning about bonfire night and how to keep safe, we decided to make our own bonfire at school. The children loved finding 'snappy sticks' to help build the bonfire and enjoyed watching it set alight. During the fire, we encouraged the children to discuss whether we were able to get the sticks back, why not and which part they thought the hottest bit of the fire was. The explicit focus on Science is encouraging the children to ask more questions and they are beginning to notice more and discuss their observations with fewer prompts.



Emma Schofield

Visiting the Foundation Stage classes today I was met by many excited little Scientists exploring a very exciting new I-Pad app and practical activity going on in the 'Science Area'. Each room in the base had a lovely Science display, including many pictures of Science in action, that the children were excited to share with me. Their colour mixing and Smarties chromatography experiment were on show.

Back to the I-Pad animals however, Noah introduced me to the tiger, monkey, frog and giraffe all of which could leap out from the screen. David marvelled at the noise and how it was all happening- they were not hiding under the table!! The 4D experience was proving a huge hit. The children were keen to share the experience with each other, taking turns and talking excitedly about what the animals were doing and eating.

I asked them about what they had been doing with regard to their outdoor learning too and was delighted to hear that they had been out into the wider grounds to take part in a fire building activity with their class teachers.

It was clear to me these little Science experimenters are developing their enjoyment of Science and wanting to ask lots of questions about the world around them. I can't wait to pop along to find out more!

Expenses Update

Total Awarded: £6000

Date	Purchases	Cost
Money spent to date		£594.92
31.10.17	Small world Science resources to promote speaking and listening- Polar regions small world (two sets at £16.99) Kinetic sand Dino dig (two sets at £19.95) Dinosaur matching bones £29.95, Dinosaurs £20.55, Animal and Dinosaur 4D flashcards £66	£190
Total Expenses		£784.92
Remaining Money		£5215.08