



RAiSE

Raising Aspirations in Science Education

Hythehill Primary School Family STEM Event

March 2018

Case Study

Hythehill Primary School's STEM Family Event has part of their STEM week which has been running for three years now during British Science Week in March.

Rationale

The Family STEM Event came about initially from trying to get dads more involved with their children's learning in school. Looking at research into Science Capital and Gender Bias we realised that we needed to get the whole family involved—mums/dads and grandparents. As the school has an enhanced provision base we wanted to make this event accessible to all members of the community and fully inclusive.

We decided to make the science simple, accessible and most of all fun! This year we had the P7 pupils leading the sessions which developed their leadership skills and confidence. They had been trained up as STEM Ambassadors for the school and had been working with younger pupils throughout the year.

Volunteer staff had had specific training to support them to lead these experiments.

Benefits

There was a real buzz in the school before the event from the P7 pupils and the teachers who were excited about leading the experiments.

The first year of this event we focussed on four activities each led by a teacher—all fun and the parents became highly competitive!

Activities: Tallest newspaper structure; Paper Rockets; Most plastic coins in a foil boat; Lollipop stick catapults and examples of STEM Club activities to showcase.

Is it for me?

This case study will be of interest to all schools looking to engage parents using STEM.

What does it cost?

Depending on experiments but can be very simple and minimal. Hythehill PS focussed on kitchen science to make it easy and accessible but wanted parents to be able to have a "take away" from the event e.g. a rocket/paper structure. They charged £2 per ticket for parents which went towards buying more STEM resources (Makey Makeys).

Where can I find out more?

Rachel Wolford; acting Head Teacher of Cullen Primary School and PSTT Fellow can be contacted on:

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Janey Irving; the RAiSE PSDO will be more than willing to discuss any queries you may have and assist in any way with developing similar projects within your school.

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During this event it became clear to parents that this was as much for their learning as for the pupils and an opportunity to engage in STEM with the young people. Although the first year was a bit quieter; word of mouth with parents had them asking when the event would be repeated.

This year the event had evolved and had approximately 90 attendees—parents/grandparents as well as lots of pupils! We were supported by the Parent Council in the event who provided refreshments and used this as an opportunity to meet the parents in an informal setting. The local Fire Brigade also supported the event—they offered fire safety advice and home checks as well as joining in the activities!



There were ten stations of activities with 3 P7 pupils on each one to lead the parents/pupils. One of the noticeable things was parents choosing to try different activities without their children as they got more involved in the event!

The event started at 6.30pm and ran to 8pm to make it easier for people to attend.

Impact

Feedback from parents has been extremely positive:

“The event was inspiring, it was great to see so many generations of people enjoying Science.”

From a parent of a pupil with ASN:

“...had a super time. Total chatterbox all the way home about it. We really enjoyed this after school activity and want to thank the teachers for giving up their time to run it...”

And from another happy parent:

“...has learnt a lot through STEM and doesn't see it as school work...”

The P7 pupils developed confidence and ability to talk to adults and developed their resilience and growth mind set when activities did not go according to plan! They developed their broader understanding of STEM beyond what was learned in the classroom.



The event helped to develop a stronger relationship with parents and teachers as they collaborated on activities in teams. We learned a lot from parents who work in STEM jobs as engineers and aerodynamics (expert with the paper rockets!).

Pupils in Hythehill Primary School now have a keener interest in STEM. Pupils and parents are discussing their STEM learning at school open afternoons and in social media posts. Overall the feeling is that the Science (STEM) Capital of the families has increased due to these events and that parental engagement in all aspects of their children's school life has increased.

This event has expanded into a Technology Tea—intergenerational event focussing on technologies through the ages with the P7s leading the conversation. Next year...bigger and better!

This case study has been prepared by Janey Irving. The views contained in this document are those of the author and do not necessarily represent those of the RAiSE Project, Education Scotland, and/or The Wood Foundation.