

Developing Parental Engagement

Angus Case Study— P1 STEM Bags

This case study will be of interest to primary practitioners who are considering approaches to developing parental engagement in their setting.

Rationale

Warddykes Primary has a high number of children who are categorised as SIMD 1. The school's improvement planning process identified the need to support parents to see STEM as an integral part of learning at home. The aim was to improve parental engagement in STEM learning by enhancing communication between school and parents. The intention was to build the [STEM capital](#) of the children and parents making them more aware of STEM opportunities.

Jennifer Sanderson, P1 Class Teacher, was able to draw on her experiences from attending the Angus Primary Science Leaders Programme, run by RAISE officer Mel Richards, to develop and implement the STEM Bag approach in her setting.

STEM Bags

Jennifer devised two bags: one for each P1 class. Each bag held Sid the Sloth and a 'STEM' outfit of safety glasses and white coat. She created a series of STEM activities; enough so that each child had a different activity to do.

Every Monday, one child from each class took home their class bag with Sid the Sloth and an activity card. The bag also contained resources the family would need to carry out the task, including staples such as glue, scissors and tape. The tasks encouraged the use of recycling materials.

The family was asked to support the child to complete the task at home and to fill in a class journal. The learner then related their experiences to the class on the Friday.



What does it cost?

Costs are minimal. A soft toy and 'STEM outfit' was bought for each of the P1 classes. Each STEM bag was kitted out with everything needed including items such as glue and scissors to ensure that every family could take part. Pupil Equity Fund money was utilised. Each STEM Bag cost approximately £20. Each STEM activity cost between £2 and £5 depending on the contents. Resources such as scissors were reused in each challenge.

Where can I find out more?

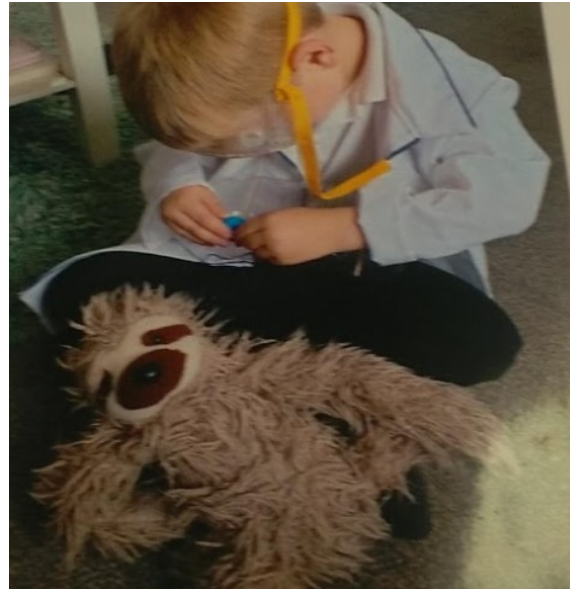
Contact richardsm@angus.gov.uk

Mel Richards

Primary Science Development Officer with Angus Council

Benefits

The potential benefits of this intervention are far-reaching. Many families had not engaged with STEM learning at home prior to this so the project provided a vehicle for change. The communication between school and home has significantly improved with parents taking time to engage with the class journal, commenting on their child's learning from the task, their enjoyment and where they required support. The children have built their STEM capital, as have the parents who themselves may have had little prior knowledge of STEM.



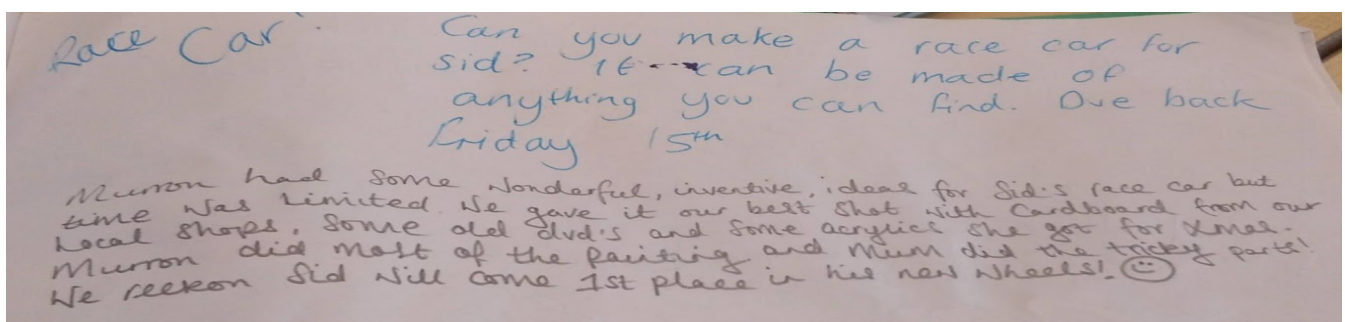
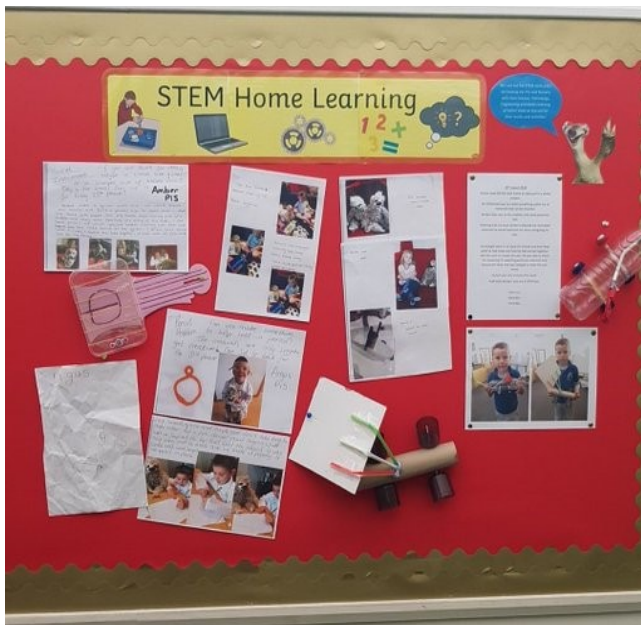
Impact

The school's improvement plan aim was to have 85% of P1 parents/carers actively participating in their child's STEM learning at home and in school. Jennifer has recorded a 97% return rate of the STEM bag homework which indicates that almost all of the families of P1 have engaged in their child's STEM learning to some extent. The feedback from parents has been overwhelmingly positive.

Jennifer and her stage partner have grown in confidence in planning and delivering STEM learning and in the use of STEM language with the learners.

There are now plans for the scheme to be part of the nursery to P1 transition, as well as adapt it to be suitable throughout the school. There are also plans to introduce a STEM club using the same concept.

The ultimate aim is for STEM learning to be part of the 'bread and butter' of what Warraydies does.



This case study has been prepared by Mel Richards. 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.