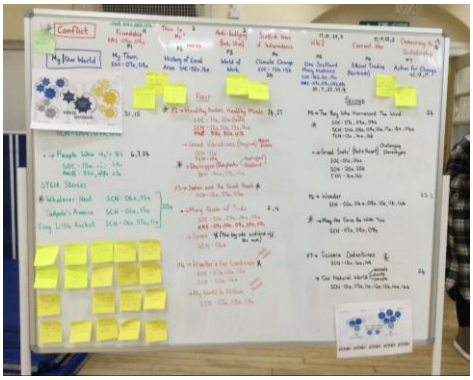
Clackmannanshire Council

Park Primary restructures curriculum to focus on STEM



Park Primary School in Clackmannanshire has launched a redesigned and restructured curriculum, using interdisciplinary learning (IDL) and STEM to address a range of curricular drivers and priorities.

The process involved in-depth consultation, consideration, and collaboration with a wide variety of stakeholders. This process was:

- Attendance at a Head Teacher event from Education Scotland and the local authority's RAiSE STEM Officer focussed on IDL which inspired the vision to redesign the model.
- Questionnaires and focus groups with families and pupils to understand their thoughts on the current curriculum, as well as consultation with staff.
- Three or four contexts were developed for each stage aligned to CfE and the local authority's STEM planners, as well as two whole-school contexts. These included topics such as popular stories.
- The STEM Officer provided guidance in terms of the STEM E&Os to chart progression, as well as highlighting existing resources and support in how to build upon the school's involvement in the SSERC Primary Cluster programme.

Following this exploratory and early preparation work, a full-day in-service focussed on staff co-creation of planners to align to the contexts and to improve confidence in delivering STEM.

There was also a session aligning the E&Os with themes including literacy, wellbeing, DYW, and Learning for Sustainability, highlighting natural links. The STEM Officer identified resources within the school which could be used to deliver the lessons and demonstrated their potential. There was a discussion about additional equipment and engaging partners.

Staff shared the following about the day:

> "The refresh was interactive and hands on and allowed me to see that actually, to integrate science activity across other lessons (embedded) could be achieved with relative ease. The experiments and activities we did were simple but effective."

> "Great variety of ideas of how to link science to a range of curricular areas, and useful examples of ideas for the classroom using resources from the school. Group activities enjoyed by all the staff and led to lots of discussion and sharing of ideas."

The STEM Officer supported the creation of accessible STEM resource kits.

A series of events across British Science Week to enhance the profile of STEM across the school and to utilise the resources were held. The Depute Head Teacher and STEM Officer delivered lessons to classes, as well as inviting local partners such as a representative from SSERC and a reptile enthusiast into the school. Pupils also had the opportunity to take kit home for experiments.

Pupils shared the following about British Science Week, highlighting their excitement around STEM:

"I liked it as I got to try something new and once you've done something new it encourages to try other new things too."

"Sometimes we don't get to do science very often but we have done more science now after science week. I like doing the outdoor stuff and using Chromebooks in class."

"I love choosing to play with magnets [during free play]. I play with them with my friends. I like finding out what they can stick to."

The events gave teachers the opportunity to learn from the delivery of the lessons to increase their confidence.

Jennifer McLean, RAiSE STEM Officer for Clackmannanshire, said:

> "The school has made significant changes to its curriculum to ensure that STEM is fully embedded within their contexts. This will increase the number and quality of STEM experiences for the learners. It will ensure a consistent approach to delivering STEM across the school that is progressive and allows for personalisation and choice."

The new model incorporates a range of areas including STEM, UNCRC, Learning for Sustainability, Global Goals and DYW, with learning opportunities which are connected to the local area and partners.

The new curriculum was launched in August 2022. Evaluation of the approach will be gathered and inform next steps. The STEM Officer has shared the experiences of Park Primary School with other local settings considering embedding STEM and IDL to address curricular drivers.