

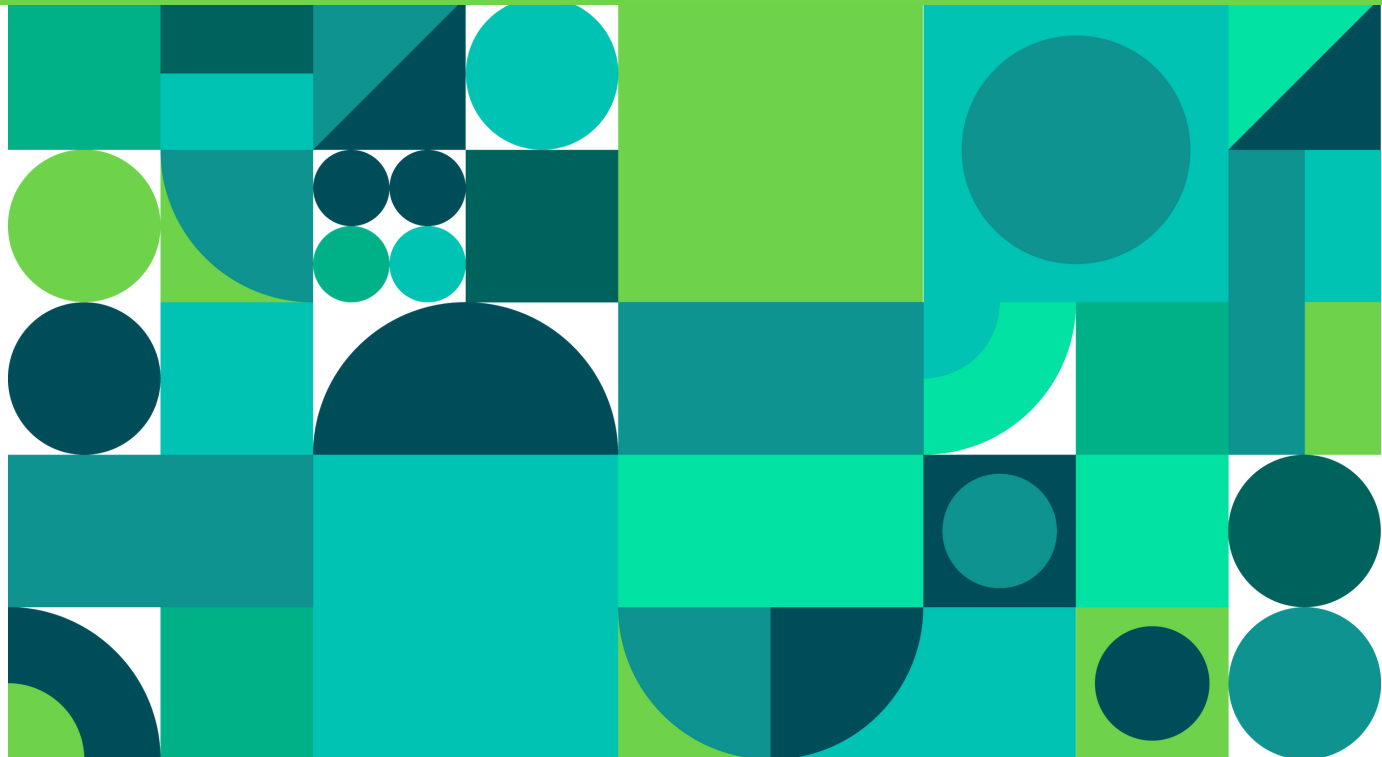
The Curiosity Programme

Year 2 Executive Report

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Curiosity Programme

Aims and Ethos

Year two saw the continuation of the Curiosity Programme. The Curiosity model uses youth sector organisations to deliver projects with informal science learning (ISL) as the core component of their delivery. The organisations funded vary in terms of their core youth offer (sport, mentoring, arts etc) and the types of young people they target (age, demographic and presenting needs). The unifying characteristic of all Curiosity projects is that the young people face a defined disadvantage.

The programme was run in partnership by The Wellcome Trust and BBC Children in Need throughout year one. However, during year two Wellcome Trust retreated from the programme due to changes to their organisational direction and focus. Wellcome Trust remain committed to co-fund the programme throughout the duration of the three-year cycle and are interested to learn of the programme development and impacts. BBC CiN are now the driving lead both strategically and operationally for Curiosity.



Curiosity Projects' Aim is to increase the number of young people who are safe, happy, secure and able to reach their potential, through engagement with ISL.

Curiosity Programme Aim is to increase delivery of informal science learning (ISL) as science for youth development to improve more disadvantaged young people's lives and their relationship with science.

Evaluation Aim is to demonstrate change on young people and projects and to better understand the distinctive role of ISL in achieving positive impacts for disadvantaged young people.



24
PROJECTS



OVER
425
YOUNG PEOPLE



128
FILES ANALYSED

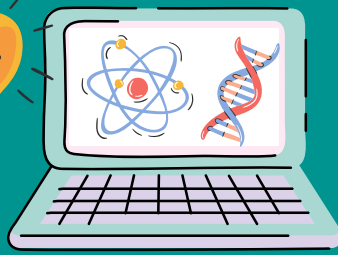


242
SURVEYS ANALYSED

24 PROJECTS ACROSS THE CURIOSITY PROGRAMME - A WEALTH OF SCIENCE ACTIVITIES FOR YOUNG PEOPLE



EXPLORING NEW THINGS



ONLINE PROJECTS



COOKING



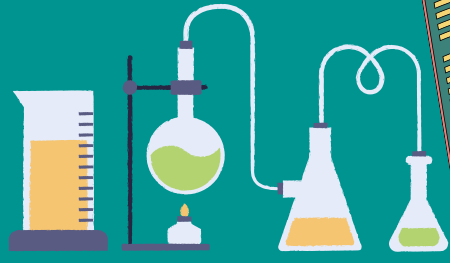
GEOGRAPHY AND EXPLORATION



GROUP LEARNING



THE SCIENCE OF POTTERY



EXPERIMENTS



SCIENCE MAGAZINES



RECYCLING



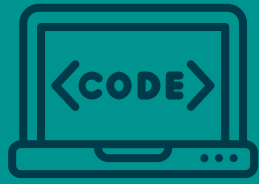
NATURE WALKS & BIODIVERSITY



SCIENCE TRIPS



CLIMATE CHANGE



CODING CLUBS



TEAMWORK



SCIENCE PODCASTS



Curiosity Programme Evaluation

Delivery formats range from weekly drop in's to residential programmes. Projects are located across the UK and Northern Ireland, from urban settings to rural environments. Activity settings range from youth club facilities to beaches, parks and science centres.

Although the COVID-19 pandemic has been a challenging period for delivery, projects have been able to adapt or temporarily change their activities where possible.

Each project was asked to identify the three main positive differences (outcomes) they aim to make in the lives of the children and young people they support. Each of these differences contributes to strengthening one of seven building blocks identified by BBC CiN as essential to ensuring children and young people are able to thrive by being safe, happy & secure and able to reach their potential.

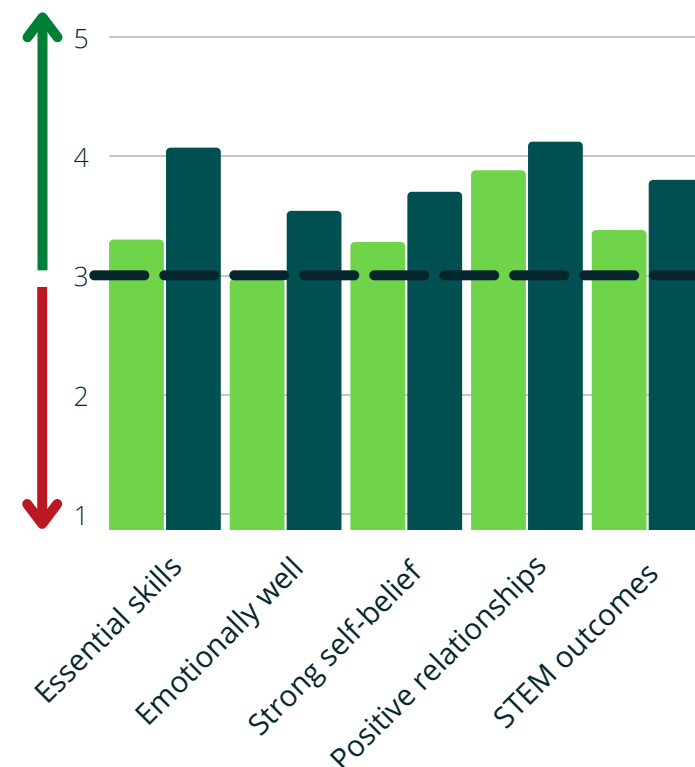
There are 7 Building Blocks: Essential skills; Physically safe; Physically well; Emotionally well; Positively empowered; Positive relationships; Strong self-belief. Curiosity also has STEM outcome aims.

Evaluation Methods

- Developed both programme level and project level Theories of Change (ToC)
- Used the ToC and the BBC Children in Need Building Block framework to develop a robust evaluation framework
- Bank of qualitative tools - 4 key methods to explore outcomes further
- Standardised cross-programme surveys tailored to the building blocks each project works towards
- Year 2 Research Ambassador launch - project participant voices
- Multi-year case studies comprising interviews, focus groups and observations in addition to the key research methods

STEM = Science, Technology, Engineering and Maths

Year 2 biggest outcome areas:



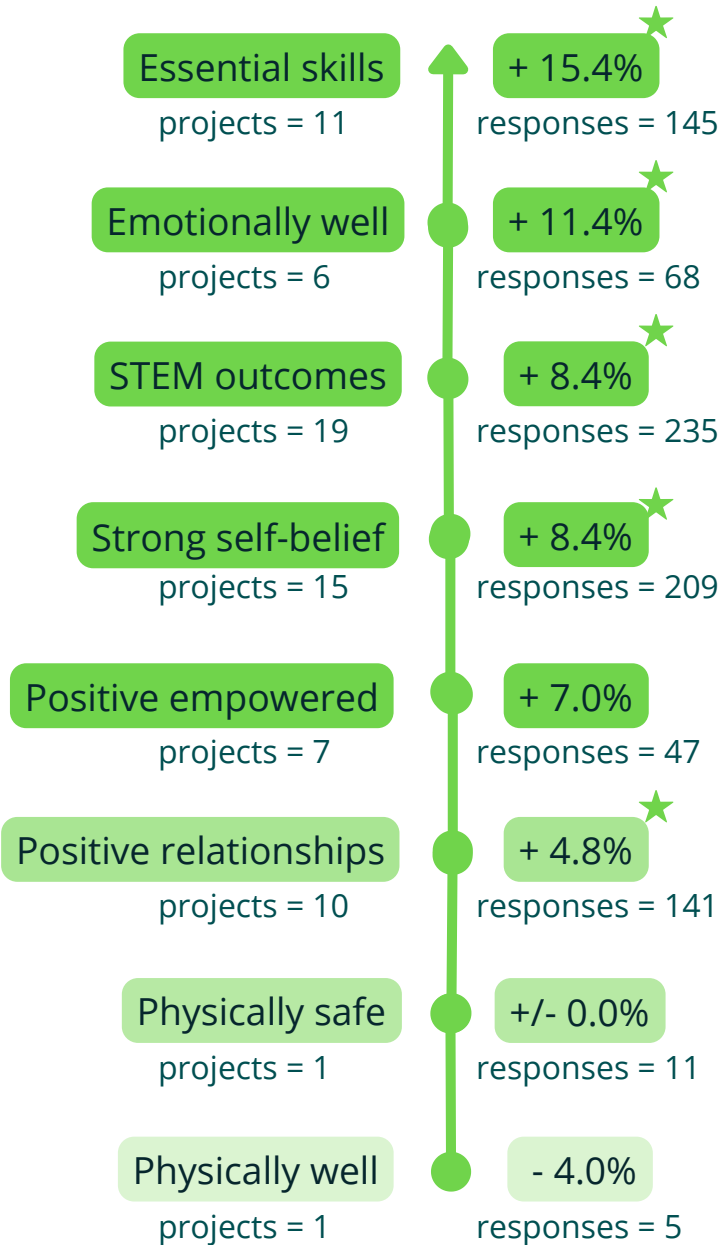
Survey participants were asked to rank their responses out of 5. A score of 1 or 2 indicates a negative response, a score of 3 indicates a neutral response and a score of 4 or 5 indicates a positive response.

The survey data showed statistically significant increases in 5 areas: essential skills; emotionally well; strong self-belief; positive relationships; and Science, Technology, Engineering and Maths (STEM) type outcomes, such as problem solving skills and critical thinking.

Impact Data

Building block

% Change



★ statistically significant change

"I learnt to be resilient and not give up, even when things don't go to plan" (YP)



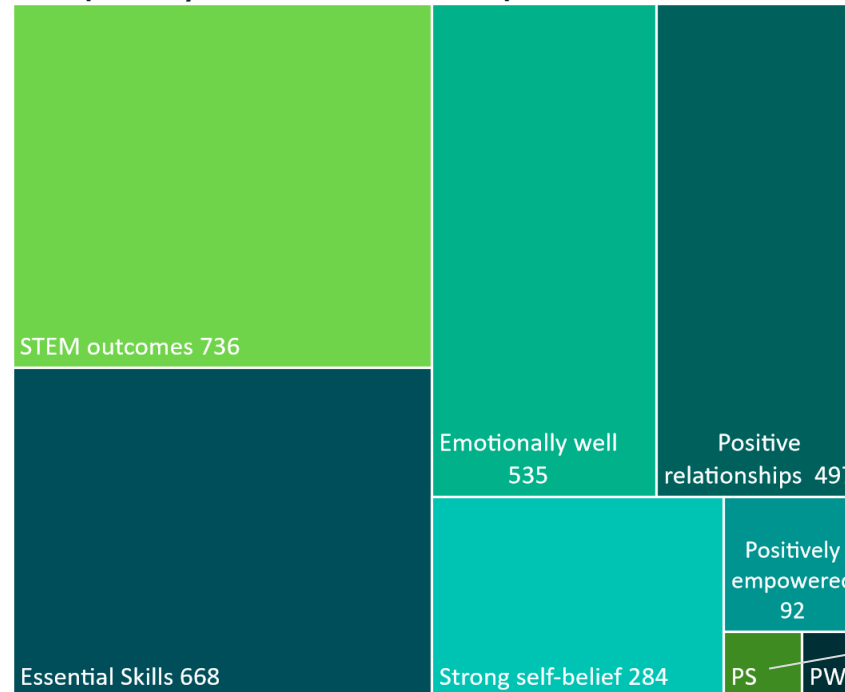
Outcomes

Whilst it has been suggested that participating in informal science activities contributes to youth development outcomes, some specific areas are now emerging that illustrate a distinctive role and influence of informal science. Amongst these are positive influences on working through challenges, confidence in learning, and collaborative working in order to problem solve and try new things.

STEM-type outcomes and essential skills are the most commonly described in the qualitative data. In particular, progress towards STEM specific skill development, improved collaborative working, improved life and social skills, and better communication skills, are highlighted.

Having fun and enjoyment is the most frequently described aspect of being emotionally well, with friend and peer relationships the most described aspect of having positive relationships

Frequency of reference in qualitative data



"I've learned that working with others is like a very, a very useful skill because if you do it by yourself, sometimes it's very hard" (YP)

"Through the project and activities the young people have been exposed to engaging and learning science in a different way to school and in different ways than they would expect. It has been beneficial to their personal development, growth and future plans" (Project lead)

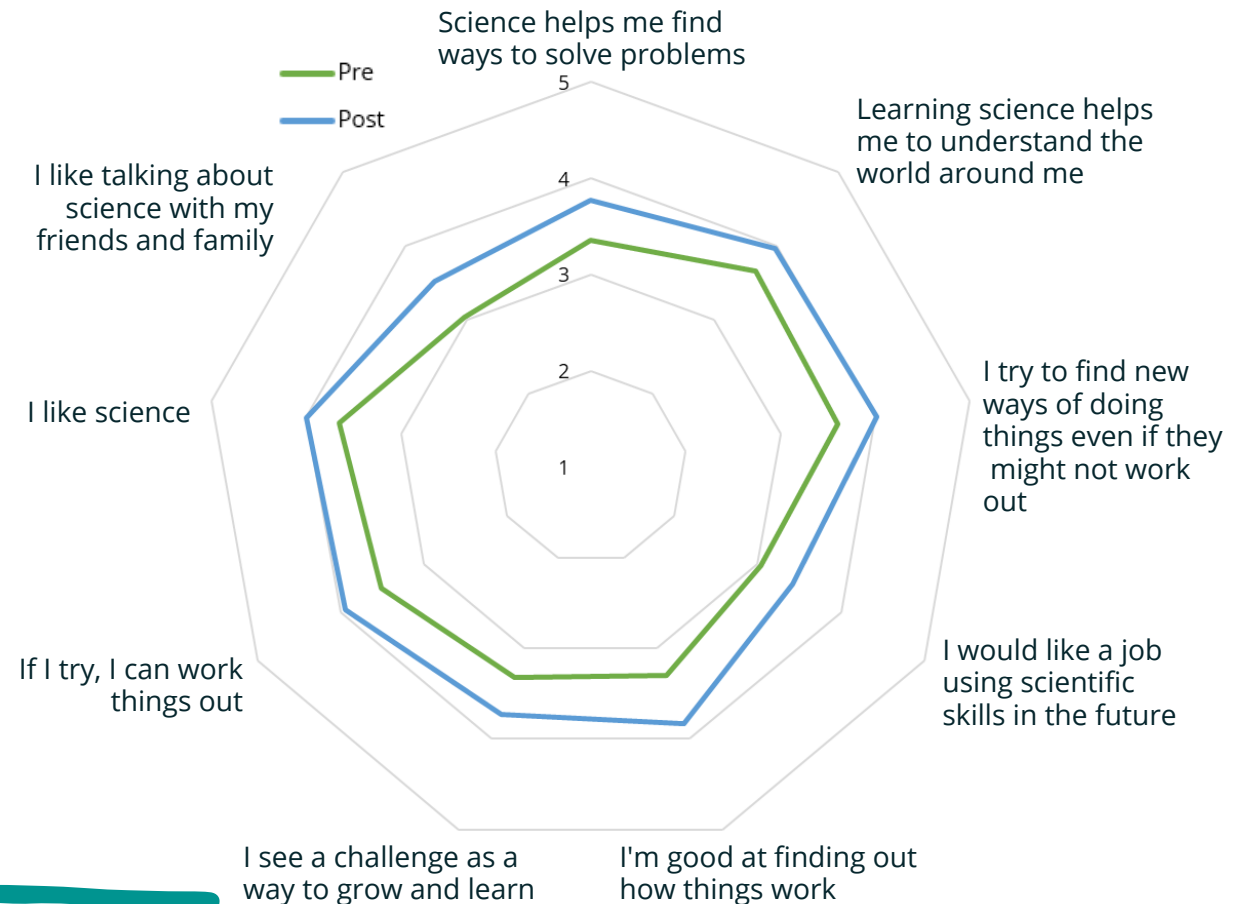
Programme level results

How does this relate to STEM? Quantitative evidence

From the responses to the survey, there has been an **overall improvement in agreement with the STEM indicators** as shown in the radar web diagram.

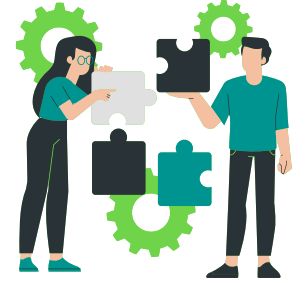
Young people generally **agree more with the notion that science helps them understand the world around them**. This has a practical application in their lives which helps their independence, knowledge and understanding of the world around them.

Crucially, the pre-engagement data shows that the majority of YP was indifferent to science scoring 3 out of a possible 5. This meant that Curiosity was not naturally attracting science-focused individuals and therefore was opening up science to a wider group of disadvantaged young people. **The informal nature has switched them on to science in a way that the classroom has not. It is accessible, relatable and transferable.**



"A theme we carry across in our Curiosity Project is about how in science if you make a mistake, you can learn from it and/or adjust your experiment or project. Several comments mentioned helping someone within the group and also learning from experiments and adapting them to make it work."- Curiosity Project Lead Kingston Carers.

Programme level results



What is unique about informal science delivery?

To develop understanding into what specifically about science led engagement is achieving this, evidence collected from across the programme was used to explore this across 4 key themes, here described by our FAIL framework. This was inspired by a key feature of engaging with science and becoming comfortable with failure through various components.

F Friendship and connections



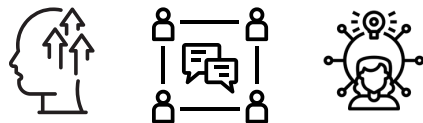
A Achievement and Aspirations



I Independent and Interested learning



L Life Skills



Friendship and Connections

The collaborative nature of science related delivery across the Curiosity Programme has resulted in young people achieving differences relating to positive relationships, emotionally well, and strong self belief. Working as team, either during an experiment, or choosing an activity, encourages connections to be built - not just between peers, but as demonstrated across the programme, with trusted adults and family members too.

Achievement and Aspirations

Science delivery is unique in that 'failure' is also an achievement - learning from failure allows science to progress and evolve. The Curiosity Programme allows achievement to be redefined, and removes the formal forms of achievement more commonly measured in young people in the school environment.

Independent and Interested Learning

By encouraging young people to independently research and present their findings, the informal nature of the Curiosity Programme nurtures natural interests, in contrast to the formal school curriculum.

Life Skills

The practical nature of informal science delivery has allowed Curiosity projects to utilise a hands on approach, whether through cooking, craft or outdoor sessions. Physical experiences allow young people to develop science knowledge in direct context. As a consequence much evidence has been found across the programme demonstrating young people acquiring practical skills that are applicable in their daily lives.



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