



Filey C E Nursery & Infants Academy

'Inspiring Confident Learners, Reflecting Christian Values'

We endeavour to uphold Christian teaching to:

"Shine as lights in the world and love as Jesus loves us" (Philippians 2:15, John 13.34)

Our school is a Church of England School rooted in 'Compassion, Community and Friendship'.

Science Policy

Rationale

"Science is valuable because it meshes with all our lives and allows us to channel and use our spontaneous curiosity."

Professor Susan Greenfield Director, Royal Institution

Intent

At Filey CE Nursery and Infants Academy we aim to stimulate a child's curiosity in finding out why things happen in the way they do through being inquisitive and having the confidence to ask questions that puzzle them. Our science curriculum fosters an interest in our world and promotes respect for the living and non-living. Throughout the programmes of study, the children will acquire and develop the key knowledge across each year group, as well as learn how and when to apply the scientific skills acquired. Children learn to ask scientific questions to deepen their understanding and make connections in their learning. They begin to appreciate the way in which science will affect the future on a personal, national, and global level. We use the 2014 National Curriculum for Science in Key Stage 1 and the Early Years Statutory Framework (2023) for the Early Years Foundation Stage, in order to ensure that all children:

- develop scientific knowledge and conceptual understanding
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific skills required to understand the uses and implications of science, today and for the future. We understand the importance for lessons to have a skills-based focus, and that the knowledge is taught

confidently so the children continue to ask questions and be curious about their surroundings.

Implementation

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in science. Learning is achieved through first-hand practical experiences and use of appropriate secondary sources such as books, photographs, videos, websites and the internet. In this way children remember new knowledge and can recall it in subsequent lessons or year groups. Our whole school approach to the teaching and learning of science involves the following;

- Science will be taught in well planned, sequenced lessons and will have a practical lesson approach. This approach will enable the achievement of a greater depth of knowledge.
- Through our planning, we involve problem solving opportunities that allow children to find out for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. This curiosity is celebrated within the classroom and school. Planning involves teachers creating engaging lessons whilst using precise questioning in class to promote the acquisition of conceptual knowledge and skills. They assess children regularly to identify those children with gaps in learning, so that they can receive additional support or adapted resources.

The knowledge and understanding of scientific concepts will be developed through:

- identifying the range and level of initial starting points - what do all/most/some of the children know?
- planning suitable activities to build on the above starting points
- discussing the learning objectives with the whole class, groups or individuals
- using appropriate scientific vocabulary when speaking and when writing.

Positive attitudes to science will be encouraged through:

- encouraging children to try things out and to realise that not all questions can be answered
- using a range of stimuli
- valuing all children's contributions
- inviting visitors/speakers with an interest in the topic and where possible arranging visits for first-hand experience.

Scientific process skills will be developed through:

- focusing on working scientifically when teaching all other science attainment targets
- encouraging children to make choices -asking simple questions and answering them in a variety of ways, observing closely using simple equipment, identifying and classifying, performing simple tests and ways of gathering and recording data to help in answering
- planning skills progression appropriate to the age and ability of the class
- clear demonstration of the skill and process, and the opportunity for the children to work independently and solve problems of their own choice.

To this end:

Teachers will differentiate by task, outcome or support given, to enable all children to respond at an appropriate level.

Equal Opportunities

It is the responsibility of all teachers to ensure that all children, irrespective of gender, ethnicity, social circumstance, ability or disability, have access to the curriculum.

Special Educational Needs

The needs of children with Special Educational Needs will be met with reference to the SEND Code of Practice 2014 and the school's SEND policy.

This policy was reviewed and amended in September 2023

To be reviewed September 2024

L Haldenby