



Science Policy

Intent

The manner in which our curriculum is organised enables all children, including those with additional needs and EHCPs, to fully participate in learning activities. Our “**ACHIEVE**” curriculum ensures:

All children are provided with the very best learning experiences.

Classrooms are stimulating and a safe space where children develop their love for learning.

Happiness of all is paramount.

Individual needs are recognised and met; an inclusive curriculum for all.

Early Years expertise is used to meet the unique needs of the children from the ages of 3-7.

Voices of the children are heard and listened to, ensuring that they are at the heart of everything we do and every decision we make.

Each and every child makes the best possible progress, leading to lifelong academic and personal achievement.

We have developed an active approach to learning and teaching which enables us to respond to the needs of our children as they move from Nursery to Reception and then on to Year 1 and 2.

At Torpoint Nursery and Infant School we believe that Science/ Understanding the World (UTW) has a fundamental role in ensuring children develop the skills necessary to adopt a natural curiosity and help them to develop a scientific approach to solving problems that can be applied throughout cross-curricular learning.

We develop children's enjoyment and interest in science and an appreciation of its contribution to all aspects of everyday life and the world around them. We use our natural areas and locality to build on children's curiosity and sense of awe of the natural world and to extend the learning environment.

Our science curriculum ensures that all children develop the fundamental knowledge, skills and understanding to excel in all aspects of science. Children are provided with a breadth of curriculum coverage including animals, plants, materials and seasonal change. Objectives from the EYFS Development Matters guidance and Key Stage 1 National Curriculum inform the comprehensive and progressive Programme of Study.

We teach science in ways that are imaginative, purposeful, well-managed and enjoyable, including, through first hand experiences, within school and during educational visits in each year group.

We teach both the skills and knowledge, promoting the science specific language and vocabulary, whilst developing skills of investigation including observing, measuring, predicting and experimenting alongside the knowledge of animals, plants, materials and seasonal change.

Implementation

Our approach to all children as individuals, including those with SEND, alongside our accurate and on-going assessment, together with our curriculum organisation (see curriculum Teaching and Learning and Assessment document) mean that all children, including those with additional needs, can access the curriculum on offer.

Teaching and Learning

Teachers ensure that all children meet learning objectives in the Programme of Study through a discrete or specific approach to teaching and learning, as well as cross-curricular learning as part of our ACHIEVE curriculum. Themed Wow moments provoke questioning, encouraging children to use existing knowledge to make predictions and observations of the world around them.

Science within EYFS is covered within the specific area of learning: Understanding the World: The Natural World, with an understanding that each area of learning is impacted by children achieving the statements related in each of the Prime areas of learning. Children have opportunities to practically experience and explore animals, plants, materials and seasonal change through carefully planned child-centred learning environments linked to current themes and interests.

In Key Stage One, teachers will ensure that the skills children have acquired in EYFS will be built upon and utilised to enable children to gain further skills and new knowledge. The key skills are:

- Questioning
- Making predictions
- Observing and using equipment
- Performing simple experiments
- Identifying and classifying

Skills are revisited throughout the year to enable children to gain knowledge about animals, plants, materials and seasonal change.

Assessment

Progress is tracked through the school's comprehensive assessment documents which have specific end points that the children are assessed against, in the form of 'I can' statements.

These 'I can' statements link directly to what has been taught in the Programme of Study.

Children will need to demonstrate that they have achieved the statements within their independent work, over time and in a range of contexts. Teachers will need to draw on a range of evidence (learning journeys, floor books, work books) alongside their summative assessments to inform their final teacher assessment.

At the end of the year, children in the Early Years foundation Stage are assessed against the Foundation Stage Profile and in Key Stage One children are assessed against the Teacher Assessment Framework.

The Subject Leader will monitor the progression throughout the school from Nursery to Year 2; observing and evaluating lessons, outcomes and assessments and by examining work in books and talking to children.

Extra Curricula opportunities (clubs)

Children are provided with a vast range of opportunities to develop their science skills and knowledge. They have opportunities to take part in a range of lunchtime and afterschool clubs which include Eco Club, Gardening Club, Science club and Outdoor Learning.

Educational visits

Each year group, throughout the year, partakes in an educational visit with a focus upon the science curriculum. These visits take place in areas in our locality and enable the children to make first hand observations of the world around them, using their knowledge from the classroom to predict, understand, test and evaluate the real life science as they encounter it.

Impact

Children, including those with individual needs and EHCPs, leave us as independent learners. Our knowledge of research relating to one to one support ensures that children do not become reliant upon adult support to complete their learning activities.

The science curriculum inspires children to adopt a natural curiosity and to develop a scientific approach to solving problems, creating an interest in science as a discrete area of enquiry but also an appreciation of its contribution to all aspects of everyday life and the world around them. Through the use of our natural areas in school and the locality, we build on children's curiosity and sense of awe of the natural world and this, in turn, contributes to the development of responsible citizens for the future.

This exciting curriculum encourages children to see that a scientific way of thinking is particularly important and that there are many ways in which they can use the skills and attitudes taught in school as they grow and chose careers in later life. They will have learnt to question and observe aspects of the science around them and to make informed comments about the similarities and differences that may impact their successes in the future.

Our motivating and inspiring science curriculum encourages children to utilise the underpinning skills learnt both independently and effectively in order to extend and continue into life-long learning.

When the children leave us at the end of Year Two they will be able to:

- Understand how to create and conduct a fair test.
- Record scientific findings in a variety of ways.
- Use a wide range of scientific language, such as; predator and prey, herbivore and carnivore. Also language linked to testing and scientific skills, such as; variable and prediction

- Observe the world, ask questions and devise methods to help them to find answers to their enquiries.

Review

This policy will be reviewed as appropriate by staff and governors.

Effective Date

Reviewed September 2021

Next to be reviewed September 2022