



Blackpool Gateway Academy

**SCIENCE POLICY
2019 / 2020**



A Policy for the Implementation of Science Education - September 2019

Introduction

What is Science at Blackpool Gateway Academy?

At Blackpool Gateway Academy, we believe in the importance of Science in nurturing curiosity and creativity. Through a combination of investigative skills, children will develop an understanding of the world in which we live and become equipped with the knowledge required to understand the uses and implications of Science, today and for the future.

Purpose

The purpose of this policy is to describe our practice in Science and the principles upon which this is based.

Aims

At Blackpool Gateway Academy we aim to:

1. Encourage children to raise questions which lead them to search for their own answers to make sense of what they consider to be the real world;
2. Stimulate children by effective questioning, by both supporting and challenging their thinking;
3. Ensure that children are free to work in a secure environment which values the ideas of individuals;
4. Provide a working environment that is stimulating, enriching and challenging;
5. Ensure that children are actively involved in their own learning;
6. Challenge children through a variety of experiences which enable success and progression;
7. Provide a variety of teaching methods and experiences so that children will be able to acquire the necessary skills, knowledge and understanding relevant to their ability;
8. Develop children's understanding and use of scientific language;
9. To fulfil the requirements of the National Curriculum.

Wider school aims/ethos

This policy supports our school aim of 'encouraging all children to enjoy learning, develop their best potential whilst promoting their independence'.

Consultation

This policy was created after discussions with staff and shared within staff meeting time for approval.

Equal opportunities

Science, as a subject, can be used to challenge historically held stereotypes. Therefore, teachers ensure that investigations provide a balance of interest for both girls and boys.

Teachers of children who have Special Needs find the practical nature of scientific investigation helps foster the important attitudes of responsibility and independence and allows the purposeful use of literacy and numeracy skills. Teachers differentiate activities to suit individual needs.

Health and safety

General safety is the class teacher's responsibility. All teachers are responsible for the safety arrangements for their class and must demonstrate the safe use of equipment. They should make reference to the School's Health and Safety Policy and the safety procedures recommended in the CLEAPSS documents (see Subject Leader drive). A copy is held by the science co-ordinators and a copy is also in the staff room for all staff to access.

Planning

FCAT Science Scheme of Work

All members of BGA staff have access to the FCAT Science team drive. The team drive has various planning documents, including a scheme of work for years 3 to 6. During each term, a required practical is to be completed by each year group. Instructions and plans for each required practical can be found on the team drive.

Rising Stars Assessment

Years 3 - 6 use diagnostic assessments and end-of-topic assessments to indicate learning throughout the topic. All assessment results to be inputted into the Rising Stars assessment documents for each year group found in the shared Assessment drive.

Science in the National Curriculum

The programmes of study are set out for science on a year-by-year basis, with expectations for pupils in each year group to achieve. "Working scientifically" gives the key skills required for the particular key stage, with an emphasis on the knowledge being taught through practical tasks and investigations. Progression documents for each topic in science can also be found in the Subject leader drive.

Long-Term

Science is planned for by class teachers, using the learning objectives from the national curriculum. Planning enables all strands of the science curriculum to be taught when appropriate and existing skills are developed and refined as children move through the school.

Medium-Term

The medium-term plans identify a programme of study, learning objectives, activities and expected learning outcomes.

Short-Term

Weekly planning will take into account definitive learning objectives for science, which will, in turn, provide assessment opportunities. This is the responsibility of the class teacher.

Teaching

Science is taught largely through interactive, experiential learning. Investigative activities are used to develop an understanding of the world through specific disciplines of biology, physics and chemistry.

Organisation

Year 1 and 2 teach Science as a stand-alone subject once a week. Both year groups provide 2 hours of Science teaching time per week. Reception and early years gain access to the foundations of Science through the strand 'Understanding the World', within the continuous provision. They complete various mini investigations using exploration resources provided.

Years 3 - 6 teach Science once a week over a 1.5 hour session. They cover a topic per half term and complete a required practical which allows them to use various investigative skills including; predicting, methodical planning, gathering data, presenting data (graphs & bar charts) and analysing results/data.

Assessment

Rising Stars Assessment

Class teachers in Years 3 - 6 will use the 'Rising stars' Assessment tests to make ongoing assessments of the children's progress across the NC themes, with reference to the expected learning outcomes identified in the medium and short term plans. The 'Start' and 'End of Unit' Assessments will inform teaching and define future learning targets, leading to comments on the end of year reports.

Monitoring and evaluation

It is the Coordinators' responsibility to monitor the effectiveness of the policy. They will also review and observe lessons, interview pupils, scrutinise books and monitor coverage in Science to ensure standards of teaching and learning are high and that progress is consistent.

Other documents and appendices

The Science policy should be read in conjunction with our policies for curriculum, learning and assessment.

Date of policy: October 2019

Date of review: January 2020