

The Saints' Federation

- St Augustine's First School, Draycott in the Clay
 - All Saints' First School, Denstone
 - St Peter's First School, Alton



Science Policy

Established June 2016

Adopted by the Full Governing Body

June 2016

Signed by:

Chair of Governors:

Mr T Davies

Executive Headteacher:

Miss S Robson

Review

June 2016

The Saints' Federation

SCIENCE POLICY

This policy will take note of the schools' approach to inclusion and will recognise both the content and the purpose of the policies on Dyslexia and Special Educational Needs in all practice. All children will have their individual learning needs recognised in the implementation of this policy.

1. Introduction

- 1.1 Science is one of the three core subjects in the National Curriculum. This policy outlines the purpose, nature and management of the science taught across our schools.
- 1.2 The federations' policy reflects the consensus of opinion by all the staff. It has been drawn up in the Summer Term of 2016 as a result of staff discussion following the publication of National Curriculum in England 2014.
- 1.3 The implementation of this policy is the responsibility of the headteacher and all the teaching staff.

2. Aims and Objectives

- 2.1 The aim of this area of the curriculum is to develop the skills of science in a structured way. This will be achieved, as far as possible, through practical activities. However, whilst much of the content can be acquired through practical experience, some aspects of science will have to be taught to the children through specific directed teaching. Discussions, reading and written work will play an important part in this process.
- 2.2 More specifically the programme aims to:
 - stimulate curiosity;
 - relate to the interests and everyday experiences of the pupils;
 - appeal to both boys and girls and to those of all cultural backgrounds;
 - develop scientific strategies and skills;
 - develop attitudes appropriate to working scientifically
 - develop basic scientific concepts;
 - encourage children to work co-operatively and communicate ideas to others;
 - help pupils to understand the world about them through their own mental and physical interaction with it;
 - develop an understanding of the relationship of scientific ideas to ethical and moral dilemmas;
 - help children to begin to understand how scientists work.

3 Entitlement

- 3.1 In the National Curriculum in England 2014, science is set down under the following programmes of study. For Key Stage 1 these headings are: Plants, Animals including Humans, Everyday Materials and Seasonal Changes. For Key Stage 2 these are: Plants, Animals and Humans, Rocks, Light, Forces and Magnets, Living things and their habitats, States of Matter, Sound and Electricity.

- 3.2 Working Scientifically is an element of the curriculum that is to be embedded throughout the programmes of study. Children must experience practical scientific methods, processes and skills and learn how to ask relevant questions and plan different types of enquiry to answer them.

4. Implementation

- 4.1 The schools have a statutory responsibility to cover all the Programmes of Study for Key Stage 1. Pupils from The Saints' Federation leave at the end of Year 4. This is half-way through Key Stage 2. Most pupils from All Saints' and Saint Peters' Schools transfer to Ryecroft © Middle School, Rocester. Whereas most of the pupils from Saint Augustines' School will transfer to Oldfields Hall Middle School. Close and regular liaison with the Science Department of Ryecroft School and Oldfields Hall Middle School ensures that all the Programmes of Study are covered comprehensively. Also collaborative approaches to planning teaching and assessment are undertaken as a Federation.
- 4.2 At Key Stage 1 and Key Stage 2 Science is taught as a "stand-alone" subject or as part of a topic cross curricular links are encouraged wherever relevant and possible.
- 4.3 In the Early Years Foundation stage, Science is taught as part of the area of learning, 'Understanding the World'. This is done through a topic based approach and staff ensure, through planning, that all areas and aspects of Science are covered.
- 4.4 The time allocated for Science is approximately 8% of the total teaching time.
- 4.5 The coverage of the Programmes of Study is set out in Appendix A.1
- 4.6 Health Education is integrated where relevant.

5 Classroom Organisation

- 5.1 Everyday science equipment is in each of the schools in the federation.
- 5.2 There is a selection of resource books in each school.
- 5.3 The school embeds ICT across the curriculum. At all stages during the science programme ICT is used where possible.
- 5.4 All children will be made aware of the relevance of health and safety when undertaking work in science.
- 5.5 Whole class, individual and group teaching will be used where appropriate. Group organisation is usually most effective during practical sessions since it allows children to:
- work collaboratively to solve problems;
 - confront alternative ideas

- learn from each other.

6. Recording

6.1 Recording encourages children to organise their thoughts, perceptions and attitudes into a coherent framework. The general aim throughout Key Stages 1 and 2 will be for children to move towards more detailed recording as their abilities develop.

6.2 Children will be encouraged to record their work in a variety of ways:

- through finely observed drawings;
- with annotated diagrams;
- through written descriptions of their observations and investigations;
- through class-based displays;
- through the use of I.C.T.

7. Different Abilities

7.1 Since science is essentially practical, it often allows children the opportunity to reveal abilities, insights and attitudes that can sometimes be difficult for some children during non-practical subjects. Our teaching of Science is aimed at the full ability range within the class but differentiation will be evident in the responses of children, the work produced and the level of understanding the children acquire.

7.2 The Science syllabus will be structured to offer:

- core activities accessible to all children;
- extension activities which can be used to extend the more able children;
- open-ended activities which enable individual children to practise their developing scientific abilities at their own levels.

7.3 The staff are aware of the special requirements of pupils with dyslexia and those showing dyslexic tendencies. Differentiated approaches are presented to children with speech, language and communication difficulties depending on their needs and circumstances.

8. Equal Opportunities

8.1 To ensure that science appeals to all children we will ensure:

- the social and cultural processes used to teach the subject appeal to all;
- confidence and skills of all can shine;
- everybody gets chance to take a leadership role in practical activities;
- that science is put into its social context.

9. Assessment

9.1 The Federation use an assessment system called 'Not As You Know It' to cover the 2014 Curriculum. Pupils attainment will be tracked each half term against the National

Curriculum requirements for their year group and at the end of the year the pupils will be judged as emerging, expected or exceeding the year group expectations.

- 9.2 Teachers' own assessment will include oral and written tasks to check content and classroom based activities through which the development of children's skills can be observed.

10. Review

The Executive Headteacher and staff will review this policy annually in the Summer Term 2017. Any suggested amendments will be presented to the governors for discussion at their first meeting following this review.

Established June 2016

Review Summer 2017