



St. Anne's School and Sixth Form College

Science Policy

Published Spring 2013 and updated September 2018

1. INTRODUCTION

This policy document is written after consultation with the teaching staff and the Governor with responsibility for science and is presented to the Local Education Authority and the Governing Body in the Spring term 2013, and reviewed by the Curriculum Co-ordinator in March 2013. It has been updated in September 2017.

It is a working document, which reflects the ethos and practice within the school in relation to Science. It has been written with due regard to the requirements of the National Curriculum and it will be monitored and evaluated according to changes within these documents as and when they arise.

The Science curriculum aims to support the development of the life-long learning skills identified at St. Anne's: Communication, Taking Part, Choosing, Keep on trying, Working with Others and By myself.

Outdoor learning opportunities are embedded in the Science curriculum and evident in planning. Outdoor learning aims to enhance the delivery of lessons and supports the life-long learning skills identified at St. Anne's.

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Science Co-ordinator: Lesley Banks Cooper

2. FUNDAMENTAL PRINCIPLES

The underlying principle is to provide a balanced and differentiated programme of activities that builds on previous experience, offering opportunities for individual and group work.

The Science curriculum will:

- Develop the pupil's skills at levels appropriate to each pupil.
- Be relevant to the pupil's everyday life and promote increased awareness and understanding of it.
- Provide enriching experiences which encourage the pupil to interact.
- Be fully accessible to each pupil.
- Fulfil the demands of the national Curriculum and enable the pupil to make progress within it.

Through a well-designed curriculum the pupil will:

- Be introduced to the outside world.
- Develop exploratory skills to further independent investigation from the most basic level.
- Will be motivated and so prompted to an enthusiasm for science activities and an interest in the world around.
- Will be encouraged to observe carefully and question what is seen.
- Will be shown that her/his actions can effect changes and that those changes should be considered before the action is carried out.

3. ROLES AND RESPONSIBILITIES

The governing body with the head teacher will determine the school's approach to Science.

The co-ordinator will:-

- ensure a consistent approach throughout the school
- units of work are regularly reviewed
- continuity and progression
- a common approach to assessment
- monitor record keeping
- Liaise with Senior Management to attend in-service training courses and disseminate relevant information to staff.
- Support staff and ascertain their training needs in consultation with Senior Management.
- encourage parental involvement
- collate visual aids relating to units of work
- manage, maintain and up-grade resources
- to represent the school in any suitable curriculum leader meetings
- policy is updated when necessary

4. PRACTICE

The Delivery of Science

We will provide access to a wide range of resources; encourage pupils to develop positive feelings and a sense of achievement so giving each one a sense of their own worth. Through music experiences pupils will be offered opportunities to communicate, gain confidence, explore feelings and emotions and develop personal and social skills.

The delivery of science should reflect the whole school approach to learning in which the pupils are encouraged to be active participants in their learning experiences, develop independence and self advocacy; and make full use of the local and school environments.

The method of delivery should be appropriate to the objectives of the learning experience and have sufficient variety to maximise the pupil's interest. It should reflect the pupil's need in terms of level, methods of communication and pace of progress. Pupils must be given time to interact with materials, respond to experiences and answer questions for themselves.

Experiment is the essence of science. The pupils should be taught in an environment in which they are comfortable, where they know what is expected of them and they can be led to find out for themselves. They must be put in a situation where they can fail safely and have the confidence to try again.

Pupils should be allowed to progress by building on and extending previous experiences. New experiences must be introduced at the point appropriate to the pupil.

Equal opportunities, gender, multicultural, environmental, health, personal and social issues should be considered when planning work in science. Work should make use of the pupil's acquired skills particularly mathematical and linguistic ability.

The use of ICT should be encouraged, where appropriate.

All staff must acquaint themselves with safety aspects when delivering Science and read appropriate documentation and the CLEAPPS guides.

Refer to the COSSH assessment data as appropriate. All staff should be familiar with the school first aid and emergency procedures.

Parents can be encouraged to take part in their child's science learning by the setting of shared tasks as home learning as appropriate.

Early Years Foundation Stage

Children develop the knowledge, skills and understanding that help them to make sense of the world. This forms the foundation for later work in science. Their work will be supported through offering opportunities for them to use a range of tools safely; encounter creatures, people, plants and objects in their natural environments and in real life situations; undertake practical 'experiments'; and work with a range of materials.

Lower School Key Stage 1 and 2

Science is delivered through topics which integrate a range of subjects and experiences around a common theme. There are 6 topics taught over the 6 years of Key stage 1 and 2 which provide a broad and balanced curriculum so that areas can also be revisited and consolidated. The primary aim is to present the pupils with a wide range of materials and experiences which develop skills in Investigation and Exploration. Teachers are asked to provide contrasts in these experiences so that the pupils are given maximum opportunity to notice differences and be aware of changes as they occur. In this way the pupils are prepared for the more formal approach to science in the upper school.

Upper School

Work is differentiated to suit the individual at the short-term planning stage so that all pupils have parallel but appropriate learning experiences within the current programme.

Materials, particularly pupil's methods of recording, are differentiated to enable the pupil to get the most out of the science content without causing confusion over putting down on paper and at the same time allowing maximum independence. This is done by using recording charts supported by symbols. While pupils are encouraged to produce neat work for ease of reading, too much emphasis put on this will mean that the impact of the science content of work is diminished.

Key Stage 3

In the Key Stage 3 science is taught as a discrete subject and at present is time-tabled for one session per week for each group. Pupils are taught in their groups following group programmes of study as laid out in the long-term plan. Each programme of study concentrates on one aspect of the science curriculum eg. 'Electricity' but is designed to incorporate common on-going themes such as how the subject relates to the pupil, to the environment, safety, the passing of time and the changing seasons.

Key Stage 4

In Key Stage 4 pupils are taught in their tutor groups one lesson per week. The 2 year rolling programme is appropriate for the skills they require in their adult life. Several units are related to Greenstem Heta which concentrates on green issues such as water and waste management.

Sixth Form

Science is not a compulsory subject in the Sixth form. There are no regular Science lessons timetabled.

Planning, Recording and Assessment.

Individual assessment against identified learning outcomes is reported on in the EHCP.

This policy will be updated when necessary by the post holder/or curriculum Co-ordinator who will make recommendations and amendments in consultation with the Management Team.

Each pupil's level of attainment is assessed against P Levels/Bsquared (from Summer 2013) entered on the termly accumulative records and an end of year assessment form. In the Early Years Foundation Stage, pupil's level of attainment is assessed against the Development Matters Statements and the Early Years Foundation Stage Profile. Pupils in the PMLD group

will be assessed on their 5 areas of learning. If applicable the information will be transferred onto P level assessments.

5. RESOURCES

All pupils are entitled to have a variety of motivating resources to encourage a broad and balanced curriculum in Science. Resources include:

- Topic based boxes
- Attainment target boxes KS1 and 2
- Themes boxes for KS3 and 4
- Heta resources KS4
- Photo packs
- DVD's CD's
- Puzzles jigsaws
- Digital microscopes
- Digibox for data
- Light box
- Educational visits
- Outside areas including Forest School Campfire Area.
- Switch access
- iPads
- Recording equipment

6. DOCUMENTATION .

Teachers will record science experiences for pupils and continually update their records.

7. SPECIAL FACILITIES

The themed days in Key Stage 1 and 2 will incorporate Science, educational visits and special guests to the school e.g. Zoo Lab. Two Science Days will be held throughout the school.

8. INSET

We review how and when we will deliver in-service training to staff and to the school population.

The CPD co-ordinator advises staff on suitable courses and they will feedback to staff and evaluate the course they attended.

9. LIAISON WITH OTHER SCHOOLS

St Anne's School and Sixth Form is part of the Hunsley Partnership of schools, and Heads meet on a regular basis to discuss ways forward e.g. Inclusion.

Liaison between the Head and Curriculum co-ordinator from other partnerships.