



Science Policy

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Science Policy

At The Small Schools Multi Academy Trust (TSSMAT) we share values and beliefs based on Christian principles in close association with the Anglican tradition and practice of the Church of England. We believe each person is special and we provide equal opportunities for each individual member of our School family to develop to his or her full potential within guidelines of acceptable behaviour and a set of values, which will fit each child for life and the society in which they live. The achievements of each child are celebrated and the family, the School and the whole community is valued and respected.

The aim of the staff and Directors is to create a happy and stimulating learning environment in which children are helped to develop their natural curiosity and academic ability, as well as to learn physical, intellectual, social and aesthetic skills. We aim to foster and nurture the children's spiritual and moral growth and they are encouraged to adopt friendly, caring and considerate attitudes to one another and a respectful, polite manner to adults while, at the same time, developing a sense of self-reliance, self respect and sensitivity to other people around them and in the wider community. We help them to understand and acquire a moral and social code of behaviour to Christian standards.

The education which we provide at The Small Schools Multi Academy Trust (TSSMAT) contributes to the requirement of the Education Reform Act 1988 that the School Curriculum should:-

1. "promote the spiritual, moral, cultural, emotional and physical development of pupils and society"; and
2. "prepare such pupils for the opportunities, responsibilities and experiences of adult life".

We believe Science plays an important part in fulfilling these aims and objectives.

Science

Children are naturally curious about themselves and their environment. Our aim in Science is to build upon their curiosity and to enable each child to develop an enquiring mind and a thirst for exploration and discovery through first-hand experience by which scientific knowledge and skills will be acquired. Through careful observation and much practical experience, children learn to compare, predict, question, discuss and draw conclusions, and so discover and relate to the world about them.

The immediate countryside environment at Colton, The Howard, Great Haywood, and Kings Bromley and the School's Environmental Area provide a constant source of wonder, enjoyment and opportunity. The Trust has won national, county and Severn Trent Water environmental awards.

Early Years

In the Early Years Curriculum, children will be helped to make sense of their world through first hand experiences by:-

1. Exploring their environment with confidence, enjoyment and a sense of achievement.
2. Stimulating curiosity.
3. Developing powers of observation using all the senses.
4. Providing appropriate vocabulary, encouraging questioning and extending communication skills.
5. Offering the children the opportunity to sort, compare, predict and interpret.

6. Explore and investigate their environment through relevant play activities, pictures, books and materials.
7. Identify their own problems, attempt to solve their own problems and communicate their findings.
8. Gain confidence in handling tools and materials.
9. Ability to make distinctions between objects.
10. Skill in classification based on own perception of underlying attributes of objects.
11. Experience of “cause and effect”.
12. Opportunities for prediction and problem solving.

Experiences will be provided through:-

1. sorting and classifying according to one or more attributes through objects/apparatus/pictures;
2. pattern copying and making, using pegs, cubes, parquetry, etc;
3. storage arrangements in the classrooms;
4. sequencing activities;
5. identification of the whole from part-puzzles, pictures, cut-out books, etc;
6. identifying incongruities, “What’s wrong cards”;
7. development of stories, predicting what comes next; and
8. discussion of cause and effect in every day situations.

Children will be encouraged to evaluate familiar things by asking questions such as:-

- What is it for?
- What is it made of?
- How is it put together?
- How does it work?

Legal Requirements

Science is one of the core subjects within the National Curriculum and is an entitlement of all pupils. The National Curriculum lays down the statutory requirements for Science.

Our Scheme of Work

Our Trust currently has a two year rolling programme for Science. Each year has a mix of biology and physics based units which are organised to support other subjects where possible. If they do not support other subjects, they are taught as stand alone units to ensure coverage of the whole science programme of study. This is followed by all teachers within the TSSMAT to ensure children are getting the correct coverage for their year groups.

Planning is kept on a central system for all teachers to access. The curriculum coverage document ensures coverage and planning highlights where the working scientifically skills are being taught/covered in each lesson. Where possible, links are made between units of work so that children have the opportunity to develop a breadth of understanding in science. At the end of each year in Key Stage 2, children are given the opportunity to further develop their working scientifically skills and apply these to various scientific scenarios.

Management

The co-ordinator will endeavour to:

1. consult with the Headteacher, identify and determine the overall aims and understanding of Science according to the National Curriculum and ensure these are encapsulated in the policy document.
2. review the policy document on a regular basis
3. ensure all staff are aware of the Science policy document.
4. produce a scheme of work for Science with outline guidance for each year/class group
5. review and update the Science scheme of work
6. be a resource to all staff in all aspects of Science planning
7. ensure the requirements on reporting on Science are met
8. identify resource needs, maintaining Science budget spending within agreed priorities
9. maintain the Science resource base
10. in consultation with the Headteacher produce/review a development plan for Science
11. attend relevant meetings/courses, read relevant , recent publications
12. liaise with advisers, LA, Directors as appropriate on curriculum matters relating to Science

Methodologies

Class teachers teach Science to their own classes. Teaching usually takes place within the normal classroom. Science is taught as separate lessons and is allotted specific times on the timetable.

A range of methodologies are used by the teachers e.g. discussion, chalk and talk, videos, whole class teaching, group teaching. The majority of teaching is undertaken by providing for learning through first hand experiments. This allows children to find out for themselves through their experiences. As children move through the school they develop greater independence eventually planning wholly their own investigations using the scientific knowledge and understanding gained from past experiences lower down the school.

Differentiation/SEN

The class teachers are responsible for differentiating work in their short-term planning/lesson plans to meet the specific requirements of children within their classes.

Review

Staff review the Science planning each half term and report any issues to the science co-ordinator. The science co-ordinator and curriculum team review the long term plan once a year.

Assessment and Record Keeping

All class teachers are expected to assess pupils' progress in science against the science Building Blocks once a term. Science is assessed against the working scientifically skills from the science Programme of Study in the National Curriculum. Teachers are then required to assess whether children are working below expected or at expected for their year group and upload this information to the RM Integris assessment tracking system.

The content coverage for science is highlighted in the Curriculum Coverage document and on the Long Term plan kept by the science co-ordinator. The assessment and content coverages is monitored by the science co-ordinator and curriculum team.

Dyslexia

The Small Schools Multi Academy Trust (TSSMAT) is committed to supporting children with Specific Learning Difficulties (SPLD). Staff use a range of teaching strategies and resources in order to develop the Individual.

Currently the School has achieved Level 1 of The Dyslexia Friendly Schools Award and is working towards Level 2.

Further help and guidance can be found in the Dyslexia Friendly Handbook.

Resources

Resources are available in each school.