

St Matthew's Church of England Primary School

Design and Technology Policy

St. Matthew's Church of England Primary School's mission statement

We aim to provide a positive learning experience in a safe and respectful environment. We strive to teach an inspiring and inclusive curriculum that promotes a love of learning. As a Christian school, we endeavour to develop the spiritual and moral values of all members of the St. Matthew's family, and a meaningful, loving relationship with God. We want our children to be cheerful and independent individuals who reach their potential and are proud of their achievements. We hope to develop confident, caring citizens who are well prepared to enjoy happy and rewarding lives.

Our motto: Live, Love, Learn

Aims and Objectives

Design and technology helps to prepare children for the developing world. The subject encourages children to become creative problem-solvers, both as individuals and as part of a team. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues. Design and Technology helps all children to become discriminating and informed consumers and potential innovators. It should assist children in developing a greater awareness and understanding of how everyday products are designed and made.

The aims of design and technology in our school are:

- to develop imaginative, creative and technical thinking in children and to enable them to confidently communicate likes and dislikes when designing and making
- to draw and model critique and evaluate their own and others' prototypes and final products
- to develop vocabulary so children can talk about their ideas and how things work
- to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures
- to build up different skills and apply them to their designs to good effects
- to foster enjoyment, satisfaction and purpose in designing and making
- to use ICT software to assist our designing and learning
- understand nutrition and a healthy diet and learn how to prepare and cook it
- to study the designs and the significance of buildings and technology in our local area.

Teaching and Learning Style

We use a variety of teaching and learning styles in design and technology lessons. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole class teaching and individual/group activities. All ideas will be treated with respect. Children critically evaluate their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT. In all classes there are children of differing ability. We recognise the fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child.

Design and Technology Curriculum Planning

We carry out the curriculum planning in design and technology in three phases: long, medium and short term. The long-term plan maps out the units covered in each term during the key stage. The design and technology subject coordinator works this out in conjunction with teaching colleagues in each year group.

Our medium term plans give details of each unit of work for each term. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across each term. Class teachers complete a plan for each design and technology lesson. These list the specific learning objectives for each lesson and detail how the lesson will be taught. The class teacher keeps these individual plans, and the class teacher and subject leader discuss them on an informal basis.

We plan the activities in design and technology so that they build upon prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

The planning will be completed through a cross curricular approach ensuring the DT has a link to the topic being studied. Teachers will give each DT theme a purpose.

Each topic will need to be reviewed, informally by the teachers and TAs within the year group to ascertain the enjoyment had by the children, the effectiveness of developing skills and the quality of purpose.

The Foundation Stage

We encourage the development of skills, knowledge and understanding that help reception children make sense of their world as an integral part of the learning within our Reception class. Design and Technology projects and activities are planned to teach and assess skills, knowledge and understanding in the Primary Areas of Communication and Language, PSED and Physical Learning, as well as linking to the Specific Areas of Expressive Arts and Design, Understanding the World, Literacy and Mathematics. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control. These activities, indoors and outdoors, attract the children's interest and curiosity.

Contribution of design and technology to teaching in other curriculum areas

Art and Design across the Curriculum

Art and Design is taught through cross curricular experiences and lends itself particularly well to links with History, Geography, Science, English, Maths, PSHE and R.E.

ICT

We use ICT to support design and technology teaching when appropriate. Children use software, particularly Purple Mash scheme of work, to enhance their skills in designing and making, and use draw and paint programs to model ideas and make repeating patterns. The children also use ICT to collect information and to present their ideas through draw and paint programs.

PSHE and Science

We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Through their understanding of personal hygiene they also learn how to prevent disease from spreading when working with food.

Spiritual, moral, social and cultural development

Our groupings allow children to work together and they understand how we expect them to do this. Collaborative work in design and technology develops respect for the abilities of others and a better understanding of themselves. In addition, they develop a respect for the environment, for their own health and safety and that of others. They learn to appreciate the value of similarities and differences. A variety of experiences teaches them to appreciate that all people are equally important.

Inclusion and Equal Opportunities

We teach design and technology to all pupils, whatever their ability. We provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. An ICAN may include, as appropriate, specific targets relating to design and technology.

Where pupils are to participate in activities outside school, we carry out a full risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

Assessment and Recording

Teachers assess work in Design and Technology by making observations of the children working during lessons. They record progress made against the learning objectives for that lesson. At the end of a unit of work, children undertake a review of their work that focuses upon an evaluation of the finished product and an overview of the various tasks undertaken. Teachers make annual assessment of progress for each child, as part of the annual report to parents. Each teacher passes this information on to the next teacher at the end of each year.

Due to the practical nature of Design and Technology, evidence of work undertaken by children can be in the form of teacher's notes or as a photographic record. Samples of the design process and end product are valuable evidence for teacher assessment.

The Design and Technology subject leader can review evidence of the children's work through scrutiny of children's Creative Curriculum books, displays and photographs.

Resources

Our school has a wide range of resources to support the teaching and learning of this subject across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store.

Monitoring and Evaluation

The monitoring of the standards of children's work and of the quality of teaching in Design and Technology is the responsibility of the Design and Technology subject leader. Their work also involves supporting colleagues in the teaching of this subject, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. Lesson observations are also, occasionally, undertaken and the subject leader regularly reviews evidence of the children's work.

Design and Technology Policy Statement regarding the use of Food

When working with food teachers will:

- supervise activities involving cooking and food handling/preparation
- adhere to the appropriate Health and Safety procedures
- ensure that all children follow personal hygiene guidance (tie back hair, clean apron and wash hands)
- check the dietary needs of the children in their class to identify any foods that should not be available to specific children, or groups of children
- store perishable food in a fridge
- ensure that the plastic work sheets, especially for use with food, cover the desk area. This sheet should be wiped down with a steriliser.
- dress appropriately and follow the same procedures as the children with regard to any rules regarding personal hygiene.
- ensure that all equipment is cleaned and put away.
- ensure that all children use their own equipment when tasting food.

See the school's Health and Safety policy for further details.

Appendix 1

Health and Safety

All adults leading DT lessons/ activities should ensure that they have read and understood the D and T Health and Safety section of the Policy.

Adults should ensure that:

DT equipment is not left out and unsupervised, Floors and work surfaces are kept clean and tidy and all tools used must be of good quality, in good condition and stored safely.

Direct safety instructions should be given to children each time they undertake a design and technology activity.

Children should be given suitable instruction on the operation of all equipment before being allowed to work with it.

Children should be strictly supervised in their use of equipment at all times. Adult to child ratio must be appropriate to the activity e.g. closer supervision on activities such as use of a glue gun.

Children should be taught to recognise and consider hazards and risks and to take action to control these risks, having followed simple instructions. Children should be encouraged to assess the risk of certain activities or tools before their use.

Specific health and safety points will need to be included onto topic plans. These will help teachers to identify activities of a high risk and highlight any areas in which they need to reduce risk or ensure safe practice.

Risk assessments for specific tools should be referred to during the planning and use of equipment. These will be found in the risk assessment file on the staff shared area of the network.

Written by Caroline Minoprio-Nicholson (Design and Technology Subject Leader)

Date of last review: November 2019

Next review due: November 2022