



# DESIGN TECHNOLOGY POLICY

## Intent

Design Technology brings learning to life. It is a motivating context for discovering literacy, mathematics, science, art, PSHE and ICT. At St Clare's, Design Technology education involves two important elements - learning about the designed and made world and how things work, learning to design and make functional products for particular purposes and users. Through Design Technology at St Clare's, we aim to provide opportunities for all our pupils to develop their capabilities in these areas. By combining their design and making skills with technical knowledge and understanding, they learn to create quality products.

At St Clare's, the DT curriculum aims to:

- Develop pupils' critical thinking, enabling them to talk about what they like and dislike when designing and making things.
- Enable pupils to investigate and talk about how things work, and to draw and model their own ideas.
- Encourage pupils to select the most appropriate tools and techniques for making a product, whilst following safe procedures.
- Develop an understanding of technological processes and products, their manufacture and their contribution to our society.
- Appreciate the work of contemporary and historic designers and their contribution to the world in which we live.
- Foster enjoyment, satisfaction and purpose in designing and making things.
- Develop evaluation skills to critically analyse and improve products and designs.

- Develop the cross-curricular use of Design Technology in other subjects, particularly Computing, Maths and Science. Through the DT curriculum, children should be inspired by engineers, designers, chefs and architects to enable them to create a range of structures, mechanisms, textiles, electrical systems and food products with a real-life purpose.

### Implementation

Our long term planning throughout the school ensures coverage of the National DT curriculum. Design Technology at St Clare's is taught in discrete topics throughout the year. The subject is taught over three half terms per year, focusing on the knowledge and skills stated in the National Curriculum.

At St Clare's, we have identified the key knowledge and skills of each blocked topic and consideration has been given to ensure progression across topics throughout each year group across the school. Pupils are encouraged to develop DT skills in lessons and are challenged by a curriculum.

In accordance with the National Curriculum's expectations, we aim to ensure that all pupils:

- Produce creative work, exploring their ideas and recording their experiences.
- Become proficient in craft and design techniques.
- Evaluate and analyse creative works using the language of art, craft and design.
- Know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.

Design technology topics are taught discretely but links across subjects are planned to promote distance learning.

### Impact

At St Clare's Primary School, Design Technology is a popular subject with our pupils. They favour making decisions for themselves, planning purposeful projects and doing practical work to see their ideas come to life. Children learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. Our children are becoming creative problem-solvers, both as individuals and as part of a team.

## Curriculum Planning of Design Technology

Long and medium term curriculum planning is based upon the statutory requirements of the National Curriculum 2014 Programme of Study for Design Technology. The overview for DT shows how DT coverage is ensured across Foundation Stage, KS1, LKS2 and UKS2, using the 'Projects on a Page' scheme units of work, covered in each year group every term. The teaching of DT should follow the research, design, make and evaluate cycle. These units of work have been compiled, planned and agreed by the DT subject leader. DT plans, teaching and learning are monitored by the DT lead for coherence and progression.

## Teaching and Learning Styles

All teachers are encouraged to develop a repertoire of flexible, active learning methods, as well as an understanding of how pupils learn. At St Clare's, teaching methods may include a variety from the following:

- Effective strategies for starting and ending lessons, sharing objectives with pupils.
- Encouraging an active, questioning approach among pupils.
- Providing opportunities for pupils to work both individually and as part of groups.
- Problem solving, deciding on their own lines of enquiry.
- Developing strategies to encourage independent learning.
- Focusing on key skills, concepts and attitudes of the subject.
- Time for reflection, review and evaluation.

## Cross Curricular Links

### **English**

The children explain their designs orally or on paper and later, the evaluation of their products require children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

## **Mathematics**

Many of the Design Technology units provide the opportunity to use their mathematical skills in real-life situations and contexts. The main areas of mathematics covered in these units are:

- real-life problems
- measure
- shape and space
- Handling data

## **Science**

Many units provide opportunities for children to use and develop scientific knowledge and understanding. There are opportunities for pupils to use their knowledge and understanding through:

- working with a range of materials, e.g. a range of fabrics
- a range of types of paper and card
- working with electrical circuits and switches
- working with food products related to healthy eating.

## **Computing**

We use Computing to support Design Technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw-and paint programs to model ideas and make repeating patterns. They use the internet to source a range of information and gain access to images of people, technological images and environments. The children also use Computing to collect information and to present their designs through draw-and-paint programs.

## **Art and Design**

Many units provide opportunities for pupils to use and develop creative skills, knowledge and understanding. Opportunities exist for pupils to use their creative knowledge, skills and understanding through:

- the use of pattern, texture and colour
- experimenting with visual elements such as pattern and shape
- investigation of products from a range of cultures
- safe use of materials and tools

## **Personal, Social and Health Education**

(PSHE) and Citizenship Design Technology contributes to the teaching of personal, social and health education and citizenship. 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. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

## **Spiritual, Moral, Social and Cultural Development**

The teaching of Design Technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in Design Technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, including the contribution that people from other cultures have made to the Design Technology industry.

## **Equal opportunities**

Children, irrespective of ability, are given full access to the Design Technology curriculum.

## **Resources**

Our school has a wide range of resources to support the teaching of Design Technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the resource cupboard. Audits will be carried out regularly to monitor the resources, any shortfalls should be reported to the coordinator who will arrange for replenishment. This room is not accessible to children without adult supervision. Classrooms also contain a selection of Design Technology books.

## **Health and Safety**

The general teaching requirement for health and safety applies in this subject. At St Clare's, we teach pupils how to follow proper procedures for food safety and hygiene. All adults leading DT lessons/ activities should ensure that they have read and understood the following:

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 pupils each time they undertake a Design Technology activity.
- Pupils should be given suitable instruction on the operation of all equipment before being allowed to work with it.
- Pupils should be strictly supervised in their use of equipment at all times. Adult to pupil ratio must be appropriate to the activity e.g. closer supervision on activities such as use of a glue gun.
- Pupils should be taught to recognise and consider hazards and risks and to take action to control these risks, having followed simple instructions. Specific health and safety points must be included on unit of work plans. These help teachers to identify activities of a high risk and highlight any areas in which they need to reduce risk or ensure safe practice.

### Assessment and Recording

Assessment is based upon 'Projects on a Page' units of work and built into DT planning and teaching, either regularly in small steps, or on completion of a unit of work. All class teachers are responsible for short term planning based on the 'Projects on a Page' scheme and medium term plans.

Class teachers will:

- Identify the appropriate teaching and learning strategies required
- Provide a balance and variety within the classroom - of content and organisational opportunities for pupils
- Assess and plan for the specific needs of pupils within their own class whilst adhering to the progression laid down through the DT scheme of work.

### Extra-Curricular Activities

Cookery after school classes are offered to children in KS1 and KS2 throughout the year.

### Our Statement of SMSC

Through our varied curriculum our children will have

- A sense of enjoyment and fascination in learning about themselves, others and the world around them, including the intangible.
- imagination and creativity in their learning.
- A willingness to reflect on their experiences.
- An understanding of the consequences of their actions.

- A willingness to participate in a variety of social settings, cooperating well with others and being able to resolve conflicts effectively.

