

# Chapelford Village Primary School



## Design and Technology Policy

## **Introduction:**

Design and Technology in primary schools develops children's skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. It encourages children's creativity and encourages them to think about important issues. Design and Technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. This policy outlines how Design Technology is delivered at Chapelford Village Primary School.

## **Aims and objectives:**

Design and Technology encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems.

Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

The aims of design and technology are:

- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- to enable children to talk about how things work, and to draw and model their ideas;
- to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- to explore attitudes towards the made world and how we live and work within it;
- to develop an understanding of technological processes, products, and their manufacture, and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making.

## **Teaching and learning style:**

Within Design and Technology lessons, the principal aim is to develop children's knowledge, skills and understanding. 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. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, 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 this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- setting common tasks that are open-ended and can have a variety of results;
- setting tasks of increasing difficulty where not all children complete all tasks;
- grouping children by ability and setting different tasks for each group;

- providing a range of challenges through the provision of different resources;
- using additional adults to support the work of individual children or small groups.

### **Design and technology curriculum planning:**

Design and technology is a foundation subject in the National Curriculum. Our school maps out a long-term plan of the units covered in each term during the key stage. The Design and Technology Leader plots the skills on the map and links the plans to the topics.

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 and skills covered for each lesson and detail how the lessons are to be taught.

We plan the activities in design and technology so that they build upon the 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.

### **Contribution of design and technology to teaching in other curriculum areas:**

#### **English**

Design and technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. Discussion, drama and role-play are important ways that we now employ for the children to develop an understanding that people have different views about design and technology. The subject reinforces the process of instruction writing. The evaluation of products requires 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.

#### **Information and communication technology (ICT)**

We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making. They use draw-and-paint programs to model ideas and make repeating patterns. The children also use ICT to collect information and to present their designs through draw-and-paint programs.

#### **Personal, social, health and economic education (PSHE) and citizenship**

Design and 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 and 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 and 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 and 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 cul-

tural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

### **Teaching design and technology to children with special educational needs:**

At our school we teach design and technology to all children, whatever their ability. Design and technology forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our design and technology teaching 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. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels.

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, differentiation – so that we can take some additional or different action to enable the child to learn more effectively. This ensures that our teaching is matched to the child's needs.

### **Assessment and Recording:**

Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. They record the progress that children make by assessing the children's work against the learning objectives for their lessons. At the end of a unit of work, teachers make a judgement against the National Curriculum levels of attainment. Teachers then use the levels that they record to plan the future work of each child and to make an annual assessment of progress for each child, as part of the annual report to parents. This information is recorded on our assessment system Target Tracker, enabling future teachers to see how the children have progressed and where any gaps in learning may be.

### **Resources:**

Our school has a wide range of resources to support the teaching of design and technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store. This room is accessible to children only under adult supervision. The subject lead has access to the Design and Technology Association to access updates in the subject and ideas to support the planning of lessons.

### **Health and Safety:**

The general teaching requirement for health and safety applies in this subject. We teach children how to follow proper procedures for food safety and hygiene.

### **Monitoring and Review:**

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. The work of the subject leader also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The design and technology subject leader has specially-allocated, regular management time to review evidence of the children's work and undertake lesson observations of design and technology teaching across the school.