



DESIGN & TECHNOLOGY POLICY

1 AIMS AND OBJECTIVES

1.1 We have taken influences from the National Scheme of Work for Design and Technology to provide a programme of study which 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. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team, considering their own needs and others' needs, wants and values. 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 of functions and industrial practices, including the well-being of the nation. This allows them to develop a critical understanding of its impact on daily life and the wider world. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

1.2 The objectives of teaching 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 things;
- 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 high-quality prototypes and products, whilst following safe procedures;
- to develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- to critique, evaluate and test their ideas and products and the work of others
- to foster enjoyment, satisfaction and purpose in designing and making things.

2 TEACHING AND LEARNING STYLE

2.1 The school uses a variety of teaching and learning styles in design and technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. 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 or 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.

2.2 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 tasks that are open-ended and can have a variety of responses;
- Setting tasks of increasing difficulty, where outcomes are differentiated by ability ;
- Providing challenges in different mediums, where support may be necessary or where pupils will feel confident to attempt work independently.

3 DESIGN AND TECHNOLOGY CURRICULUM PLANNING

- 3.1** Design and technology is a foundation subject in the National Curriculum. Our school uses the National Scheme of Work as the basis for its curriculum planning in design and technology.
- 3.2** We carry out the curriculum planning for Design and Technology within our plans for Art and Design.
- 3.3** Our short-term plans, which we have adopted from the national scheme, 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.
- 3.4** We plan the activities in design and technology so that they build on 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.

4 THE FOUNDATION STAGE

- 4.1** We encourage the development of skills, knowledge and understanding that help reception children make sense of their world as an integral part of the school's work. As the reception class is part of the Foundation Stage of the National Curriculum, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in design and technology. 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.
- 4.2** We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

5 CONTRIBUTION OF DESIGN AND TECHNOLOGY TO TEACHING IN OTHER CURRICULUM AREAS

5.1 Mathematics

In design and technology there are many opportunities for children to apply their mathematical skills through choosing and using appropriate ways of calculating measurements and distances. They learn how to check the results of calculations for reasonableness, and learn how to use an appropriate degree of accuracy for different contexts. Children learn to measure and use equipment correctly. They apply their knowledge of fractions and percentages to describe quantities and calculate proportions. The children will carry out investigations, and in doing so they will learn to read and interpret scales, collect and present data, and draw their own conclusions. They will learn about size and shape, and make practical use of their mathematical knowledge, in order to be creative and practical in their designs and modelling.

5.2 Personal, social and health 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 may also learn about health and healthy diets when cooking.

5.3 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 cooperative 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.

6 DESIGN AND TECHNOLOGY AND ICT

6.1 Design and technology in ICT is taught in specific IT lessons. Information and communication technology enhances the teaching of design and technology, wherever appropriate, in all key stages. Children use software to enhance their skills in designing and making things. Younger children are able to use simple desktop-publishing software to try out designs. The children also use ICT to collect information and to present their designs through a range of design and presentation software.

7 DESIGN AND TECHNOLOGY AND INCLUSION

7.1 At our school we teach design and technology to all children, whatever their ability and individual needs. Design and technology implements the school curriculum policy of providing a broad and balanced education to all children. Through our design and technology teaching we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities and those with special gifts and talents.

7.2 We enable pupils to have access to the full range of activities involved in learning design and technology. Children participate in activities outside the classroom, for example in a museum, a science workshop or on a factory trip, we request a copy of the venue's risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

8 ASSESSMENT FOR LEARNING

8.1 Teachers assess children's work in design and technology as they observe them working during lessons. They assess the progress that the children make. Older children are encouraged to make judgements on ways in which their work can be improved.

9 RESOURCES

9.1 Our school has a wide range of resources to support the teaching of design and technology across the school.

10 HEALTH AND SAFETY

10.1 In this subject the general teaching requirement for health and safety applies. We teach children how to follow proper procedures for food safety and hygiene when cooking and effective tool use when cutting.

11 MONITORING AND REVIEW

11.1 The monitoring of the standards of children's work, and of the quality of teaching, is the responsibility of the Principal.

11.2 This policy will be reviewed at least every two years.

Principal:	Mrs Sharpe	Date:	November 2019
Subject Leader	Mrs Skelton	Date:	November 2019

REVIEW DATE: September 2021