

# Greens Norton C of E Primary School



## The Policy Statement for Design and Technology

Approved by

## Definition

Design and Technology prepares pupils to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of life. The subject calls for pupils to become autonomous and creative problem solvers, as individuals and members of a team. They must look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems. They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so, they reflect on and evaluate present and past design and technology, its uses and effects. Through design and technology, all pupils can become discriminating and informed users of products, and become innovators. Because it is a subject with practical emphasis and relevance to real life applications it enables all children to experience success and achievement.

*“The key aim of design and technology is to enable pupils to learn how to contribute towards and intervene creatively and constructively to improve the world in a rapidly changing technological society.....Design and Technology fosters learning through doing and provides an excellent basis for enhancing and consolidating work in other areas of the curriculum”.*

## Introduction

This policy outlines the teaching and learning of Design and Technology at Greens Norton Primary School. The development of Design and Technology capability is important in preparing all pupils for citizenship in an ever increasing technological world. The ability to use technological skills is a vital life skill in modern society. Using these skills in a purposeful way provides the opportunity to extend and enhance teaching and learning experiences in the National Curriculum as a whole. Design and Technology can motivate pupils and promote self-esteem and confidence in **all** pupils, including those with Special Educational Needs.

At each Key Stage a programme of study sets out what pupils should be taught. Lesson content is based upon the QCA scheme of work, but may be adapted to meet the needs of individual classes, or to make links with other subject areas. Progression of skills outlined in the curriculum map must be maintained.

## **Aims and purposes of Design and Technology**

Design and technology offers opportunities for children to:

- develop their designing and making skills;
- develop knowledge and understanding;
- develop their capability to create products through combining their designing and making skills with knowledge and understanding;
- nurture creativity and innovation through designing and making;
- explore values about and attitudes to the made world and how we live and work within it;
- develop an understanding of technological processes, products, and their manufacture, and their contribution to our society.

## **Design and Technology Objectives**

In design and technology, children acquire and apply knowledge and understanding of materials and components, including food, textiles, resistant and mouldable materials, mechanisms and control systems, structures, quality and health and safety.

Children develop designing skills, including generating and developing ideas, clarifying a task, creating design proposals, communicating ideas, planning and evaluating.

Children acquire and refine the practical skills associated with making products including working with materials, components and tools.

## **How Design Technology Links to and supports our School Aims.**

Design and Technology enables children to develop values and attitudes that support our school aims. In particular children work both independently, encouraging them to be independent learners, and with others, listening to others' ideas and treating these with respect. They take pride in, and celebrate their achievements and the achievements of others by reviewing end products, and recognising the progress made in reaching that result.

The subject enables children to develop a respect for the environment and for their own health and safety and that of others. They are encouraged to recognise the strengths and limitations of a range of technologies and appreciate which are appropriate for particular situations.

Through an examination of products pupils develop their own cultural awareness and understanding, and appreciate the value of differences and similarities. They develop an understanding that all people are equal regardless of age, race, gender or ability and that there needs to be alternative solutions to meet the needs of individuals and groups of people.

## **Cross curricular opportunities**

Design and Technology develops and enhances skills in other curriculum areas. Our curriculum map allows children access to the following cross curricular opportunities during Key Stage One and Two:

English, Mathematics, Science, ICT, Art, P.S.H.E. and Citizenship:

## **Progression In Design and Technology at Key Stages 1 and 2**

Teachers refer to the Progression of Skills curriculum map, when planning content of lessons.

Progression in design and technology can be characterised by:

- an increase in knowledge, skills and understanding;
  - moving from familiar to unfamiliar concepts;
  - meeting needs which demand more complex or difficult solutions;
- an increase in a child's own understanding of their learning.

## **Expectations**

Broad issues of progression can be expressed as expectations for each key stage. The following expectations are set out in The National Curriculum.

**By the end of key stage 1**, most children will be able to:

- use a range of materials to design and make simple products;
- select materials, tools and techniques and explain their choices;
- understand simple mechanisms and structures;
- measure, assemble, join and combine materials in a variety of ways using basic tools safely;
- investigate and evaluate simple products, commenting on the main features.

**By the end of key stage 2**, most children will be able to:

- use knowledge and understanding of a range of materials, components and techniques to design and make quality products;
- evaluate work as it develops and, if necessary, suggest alternatives;
- produce designs and plans which list the stages involved in making a product, and list tools and materials used;
- accurately measure, mark, cut, join and combine a variety of materials, working safely and recognising hazards to themselves and others;
- understand the use of electrical and mechanical systems and more complex structures;
- evaluate what is or is not working well in a product.

## **Equal opportunities**

We believe that it is important for all children to experience the range of design and technology activities. We will use opportunities within design and technology to challenge stereotypes.

## **Special needs**

All children will be encouraged and supported to develop design and technological capability through a range of materials. We recognise the importance of identifying the specific difficulties that individual children might have, and the teaching and organisational strategies that can be adopted.

## **Health and Safety**

The school agrees to abide by statutory health and safety guidelines as outlined by the LEA. Regular checks will be undertaken to ensure compliance with legal requirements.

In general, teachers will always teach the safe storage and use of tools & equipment, and insist on good practice.

The craft knives will only be used by responsible children under direct supervision.

Staff have access to 'Make it Safe' Handbook.

### **Food-hygiene and safety**

Food will be bought and used on the day it is needed. Teachers and adult support staff will oversee that cupboards, table tops, cooker etc. are clean and in working order. Aprons will be worn by adults and children and they are always to follow strict hygiene principles.

## **Resource Management**

The school:

- is committed to reviewing the position and use of technology resources;
- will ensure the efficient deployment of existing resources;
- is committed to updating and renewing their replacement when necessary, considering further purchasing to meet future needs.

## **Role of the co-ordinator**

- lead the development of design and technology in the school
- provide guidance to individual members of staff
- keep up to date with local and national developments in design and technology and disseminate relevant information
- regularly update staff on new tools, materials etc.
- review and monitor the success and progress of the planned units of work
- order stock linked to the planned units of work at the end of each term
- be responsible for the organisation and maintenance of design and technology resources.

## **Assessment, Recording and Reporting**

Assessments are made in line with the school assessment policy, and are made at the end of each Unit of Study, in line with level descriptors in the National Curriculum.

Teachers assess a child's capability and attitude towards the process rather than the product or a body of knowledge.

Children's progress is reported annually to parents in the reports issued in the summer term.

Individual records are on-going as it is highly unlikely that a pupil's response in any one task or activity will provide evidence for all aspects at the AT's at any one level. The succession of tasks and activities provides opportunities for gaining an overall view of a child's technology capability.