FULMER INFANT SCHOOL

DESIGN AND TECHNOLOGY POLICY

Introduction

Design and Technology (D&T) prepares children to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve the quality of life. The subject calls for children to become autonomous and creative problem solvers both as individuals and as members of a team. They must look for needs, wants and opportunities, responding to them by developing a range of design ideas for making products. In their designing and making, children combine practical skills with a developing understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so they reflect on, learn from and evaluate present and past design technology, its uses and effects. Through D&T, all children can develop innovation and become discriminating and informed users of products.

Aims

The National Curriculum for D&T aims to ensure that all children:

- Understand food and nutrition and have opportunities to learn to cook. In meeting this aim, schools without access to a teaching kitchen, nearby kitchen or mobile kitchen may have to adapt what they teach accordingly to the facilities available. Delete this as we have a kitchen in the hall which we will now use as we now have a cooker.

It also aims to ensure that, working in fields such as materials (including textiles), horticulture, electrical and electronics, construction and mechanics, they:

- Develop valuable practical skills and use these safely with a range of resistant and non-resistant materials, drawing media, tools and equipment, in both 2D and 3D
- Design and make well-crafted products that are fit for purpose
- Develop and use a range of common practical skills, in contexts such as mechanical, diagnostic and repair tasks
- Understand and, where appropriate, use the design cycle of planning, developing prototypes, modifying, making and evaluating
- Know about good design, everyday products and use correct technical terminology
- Investigate the rich history of design and technological innovation in Britain and further afield, from the Industrial Revolution onwards, as well as current innovations.

Entitlement and curriculum provision

Teaching and learning

D&T activities are taught in a variety of ways across the school, sometimes in blocks of taught time, as part of a topic, or in short skills-based activities.

Assessment and recording

Assessment is based on a combination of teacher assessment and pupil self-assessment.

Continuity and progression

The scheme of work ensures that tasks provide both continuity and progression. Consolidation of the skills, knowledge and understanding in D&T is carried out by its use to support learning in other subjects, such as English, maths, science and art.

Inclusion

Our school is committed to the provision of D&T to all of its children. Our programme should respond to the diversity of children's cultures, faiths, ethnicities and family backgrounds, so that all children access the national curriculum.

Able, Gifted and Talented, Pupil Premium and SEND

Teachers provide differentiated resources for each task, with extension activities for the more able. Appropriate tools and equipment are provided to ensure that all children have sufficient access to the D&T curriculum.

Organisation

D&T is taught as a discrete subject. During the making phase of some activities and some aspects of food technology, children should work in well-supervised groups.

The curriculum

Planned activities are designed to enable children to develop their skills, knowledge and understanding, being taught through:

- Investigating and evaluating a range of familiar products, including how they work and how well they work
- Focused practical tasks that develop a range of techniques, skills, processes and knowledge
- Design and make assignments where the children use a range of materials.

Learning resources

Teachers provide a range of good quality materials, tools and equipment. Children use a range of materials, including textiles, mouldable materials, food and items that can be assembled to make products.

Staffing

Teachers are responsible for ensuring that all tasks in the scheme are taught**,** teachers are expected to spread activities across each term so that a wide range of skills is covered.

The Learning Environment

Teachers are responsible for ensuring that there are sufficient design stimulus materials available. This should include a range of familiar products for product evaluation activities. Where appropriate, examples of designing and making work are mounted on walls to stimulate children's creative abilities and inform parents of the nature of the work undertaken.

Safe Practice

When working with tools, equipment and materials, children are taught the appropriate health and safety procedures and understand the steps they should take to control risks. Risk Assessments are kept in the RA file in the library area.

Contribution of design and technology to other subjects in the curriculum

English

D&T is a useful vehicle for teaching aspects of the English curriculum. Teachers are expected to use the organisational structure of language, features of recounted texts, use of instructions and non-chronological reports to enhance children's English skills. Children should consolidate their skills in reading by following instructions, seeking information, scanning and skimming text and reading captions and labels in design work. Children are taught the meaning, the use and spelling of technical vocabulary.

Maths

D&T provides ample opportunities for the practical application of mathematics. Children are encouraged to choose and use appropriate ways of calculating measurement. They may be required to use fractions to describe quantities and proportions, read and interpret scales, identify position and direction.

Computing

There are opportunities for children to use Computing in the scheme, they also have access to a range of activities including those where they:

- Use, draw and paint programs to model ideas
- Use database and other information sources for research
- Develop their understanding of sequencing and control systems
- Use the internet (delete CD Roms) to find out about other times and cultures
- Develop their awareness of how computing is used in the wider world.

Spiritual development

Where possible D&T activities are used to encourage children to recognise and value their own and other people's creativity.

British Values

D&T activities help children to reflect on how technology affects the environment and how design gap decisions are influenced by value systems. They are encouraged to recognise the need to consider the views of others when discussing design ideas and explore the contribution of products to the quality of life within different cultures. Children are encouraged to manage their environment to ensure the health and safety of themselves and others, to develop their sense of responsibility in following safe procedures and understand both the importance of personal hygiene and how to work hygienically.

Related Policies and Other Documents

Able, Gifted and Talented Policy
Assessment Policy
Curriculum Policy
Inclusion Policy

Marking (gap) Policy
School Improvement Plan
SEND Policy
Teaching and Learning Policy