



Clutton Church of England Primary School



Design and Technology Statement

Intent

At Clutton Church of England Primary School, we aim to create lifelong learners with a passion and curiosity to learn and achieve. Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils 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. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Implementation

Design and Technology lessons are planned in such a way that children can apply their knowledge in thinking/problem solving contexts, aligned with the national curriculum. Outcomes of work are regularly monitored to ensure that they reflect a sound understanding of the key identified skill. Progression of skills are followed for each subject; showing how each curriculum area will be covered.

Impact

Children will be taught to grow with enthusiasm and confidence in their abilities, encouraging them in their first steps towards being life-long learners. An inclusive and exciting design and technology curriculum will equip our pupils with the skills to use materials and techniques to experiment, invent, create and evaluate their own designs and creations. Independent and engaged learners will be well prepared for the next stage of their education, building on skills already learned. Children will leave Clutton Church of England Primary School with high aspirations for their own future, and a desire and curiosity to learn more. We strive to provide our pupils with the skills to equip them for life. We encourage all children to 'REACH' by developing their resilience, engagement, ambition, creativity and encouraging them to make healthy life choices.

Design and Technology in the Early Years

As part of the Early Years Foundation Stage curriculum, pupils should be taught to:

- safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;
- use what they have learnt about media and materials in original ways, thinking about uses and purposes;
- represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories;
- recognise that a range of technology is used in places such as homes and schools;
- select and use technology for particular purposes;

Design and Technology in Key Stage One

In Key Stage One, Design and Technology can be split into five distinct skill areas – designing, making, evaluating, technical knowledge, and cooking and nutrition. Pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria;
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology;

Make

- select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing);
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics;

Evaluate

- explore and evaluate a range of existing products;
- evaluate their ideas and products against design criteria;

Technical Knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable;
- explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products;

Cooking and Nutrition

- use the basic principles of a healthy and varied diet to prepare dishes;
- understand where food comes from.

Design and Technology in Key Stage Two

In Key Stage Two, Design and Technology can be split into five distinct skill areas – designing, making, evaluating, technical knowledge, and cooking and nutrition. Pupils should be taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups;
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design;

Make

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately;
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities;

Evaluate

- investigate and analyse a range of existing products;
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work;
- understand how key events and individuals in design and technology have helped shape the world;

Technical Knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures;
- understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages);
- understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors);
- apply their understanding of computing to program, monitor and control their products;

Cooking and Nutrition

- understand and apply the principles of a healthy and varied diet;
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques;
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Equal Opportunities and Inclusion

Through the school's REACH acronym, we are committed to providing a teaching environment which ensures all children are provided with the same learning opportunities regardless of social class, gender, culture, race, special educational need or disability. Teachers use a range of strategies to ensure inclusion and also to maintain a positive ethos

where children demonstrate positive attitudes towards others. All pupils are entitled to access the DT curriculum at a level appropriate to their needs.

To ensure inclusion, teachers use a range of strategies in line with the school's Inclusion Policy. Independent tasks, as well as teaching, are also well-adapted to ensure full accessibility and reasonable adjustments are made when needed, as well as to provide appropriate challenge to different group of learners. The school makes full use of additional adults who are deployed effectively to ensure that identified children are able to make progress in each curriculum area, according to their full potential.

Assessment

Assessment for learning is continuous throughout the planning, teaching and learning cycle. Assessment is supported by use of the following strategies:

- observing children at work, individually, in pairs, in a group and in class during whole class;
- teaching using differentiated, open-ended questions that require children to explain and unpick their understanding of ideas and techniques;
- providing effective feedback in line with our school's marking and feedback policy;

British Values and Christian Distinctiveness

As a Church of England School, mutual respect is at the heart of our values. Children learn that their behaviours have an effect on their own rights and those of others. All members of the school community treat each other with respect and follow our three school rules: 'Be kind, be safe, be respectful'. As a friendly and welcoming primary school in Clutton, our children learn about British values like respect, tolerance, democracy, liberty and law. We appreciate and celebrate diversity through the teaching of stories, values and celebrations from a variety of faiths and cultures.