Holy Trinity Church of England (Aided) Primary School

Design and Technology Policy

The Best for Every Child - a Unique Child of God

See how much the Father has loved us! His love is so great that we are called God's children — and so, in fact, we are (1 John 3:1)

At Cookridge Holy Trinity Church of England (A) Primary School we serve the community by providing a happy, secure and caring Christian environment where all are valued and respected. We pride ourselves on being friendly and welcoming. We believe in the uniqueness of the individual as a child of God and recognise the range of contributions that each can make.

We provide for the spiritual, emotional, physical, mental and social development of the whole child, as a child of God. We seek to foster self-esteem and instil a sense of responsibility to others and the world around them through the teaching of our Christian Values.

We are committed to the pursuit of excellence, and the school curriculum aims to offer all children a broad and balanced, relevant and differentiated curriculum which provides consistency and continuity of teaching throughout the school, enabling every child to maximise their potential.

We work in partnership with parents, the local church, the wider community and other schools to provide an education of the highest quality.

Policy written by: Gemma Elders
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At Cookridge Holy Trinity we believe that Design and Technology helps to prepare children for the developing world. The subject encourages children to become creative problem-solvers, both as individuals and as part of a team. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues. Design and Technology helps all children to become discriminating and informed consumers and potential innovators. It should assist children in developing a greater awareness and understanding of how everyday products are designed and made. We provide for the spiritual, emotional, physical, mental and social development of the whole child, as a child of God. We seek to foster self-esteem and instil a sense of responsibility to others and the world around them through the teaching of our Christian Values.

National Curriculum: Aims

In Design and Technology, our children will have the opportunity to:

- **Master practical skills**

  This concept involves developing the skills needed to make high quality products in Construction, Textiles, Mechanical and Electrical systems, Computing and Cooking.

- **Design, make, evaluate and improve**

  This concept involves developing the process of design thinking and seeing design as a process.

- **Take inspiration from design throughout history**

  This concept involves appreciating the design process that has influenced the products we use in everyday life.

National Curriculum: Breadth of Study

Key Stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, such as the home and school, gardens and playgrounds, the local community, industry and the wider environment.

When designing and making, 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 such as 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, such as 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

Key Stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment.

When designing and making, 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, such as 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, such as gears, pulleys, cams, levers and linkages.

• understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors.

• apply their understanding of computing to programme, 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

As part of our 'Healthy Schools' status, we aim to cook once per term in every year group, with a focus on healthy, savoury meals.

Planning

Planning is carried out by individual teachers across each year group using the Essentials document by Chris Quigley to ensure progression of skills and knowledge. Class teachers liaise with the Subject Lead, Gemma Elders, to regularly update the school long term coverage plan to avoid repetition of learning and ensure that all National Curriculum aims are met and the progression of skills mapped out. We aim to, wherever possible, link work with class topics and to other areas of the curriculum particularly science, computing and art.

Assessment

Evidence of the children's learning in DT can be found as part of the 'topic' packs created by children each half term. This may be through photographic evidence, video, photocopies of

children's work, event programmes, and paperwork. Teachers assess children's work by making informal judgements during each session, particularly looking at skill development. Throughout the term children's progress is monitored using the Depth of Learning website. Within each milestone children will be assessed as either Basic, Advancing or Deep. Evidence of the design and evaluation elements can also be found in the topic folders.

Inclusion

All children at Holy Trinity are entitled to a creative and diverse DT education, irrespective of social background, disabilities, culture, gender, race and differences in ability. We aim to overcome potential barriers to learning, set suitable challenges and respond to pupil's diverse learning needs to ensure that we meet the need and deliver the best for every child.

Equal Opportunities

It is necessary to refer to the School's Equal Opportunities Policy. Boys and girls should be given the opportunity to study and carry out all aspects of Design and Technology work included in the schemes of each year group. Matters relating to religion, race and culture will be dealt with in a respectful and understanding manner.

Health and Safety

Health, safety and welfare are an integral part of all activities in school and all staff take responsible steps to provide safe and healthy conditions for learners and others during the curriculum activities to ensure compliance with all relevant health and safety legislation. All classrooms have been risk assessed outlined in the school generic risk assessment, Staff supervising learners off-site follow the school's agreed procedures and guidelines for such activities and ensure they follow guidelines provided by premises they use. A more comprehensive risk assessment is in place to cover 'Cooking in the curriculum'.