Warton St Paul's
Church of England Primary Academy
A member of CTDARI

Design Technology Policy

Reviewed September 2023

Next review September 2024

Our Mission Statement

‘Believe, Belong, Be the Best that you can Be’

"Whatever you do in word or deed, do everything in the name of the Lord.” Colossians 3:17

1. **AIMS**

The aim of Design and Technology is to encourage children to learn to think and work creatively to solve problems both as individuals and collaboratively as members of a team. We encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. Where possible, we encourage children to make connections to other subjects, such as mathematics, science, computing and art. The children are also given opportunities to reflect upon and evaluate past and present technology and its usefulness.

Pupils at Warton St. Paul's Primary School will leave Year 6:
• Able to perform everyday tasks confidently
• Applying a repertoire of knowledge, understanding and skills in order to design and make prototypes and products for a wide range of users
• Understanding the principles of nutrition and how to cook
• Able to critique, evaluate and test their ideas and products

2. **STATUTORY REQUIREMENTS**

Statutory requirements for the teaching and learning of Design Technology were laid out in the National Curriculum (2014) and in the Expressive Arts and Design, Understanding the World and Physical Development sections of the Statutory Framework for the Early Years Foundation Stage (2017).

The Statutory Framework for the Early Years and Foundation Stage (2017) is based on five areas: Moving and Handling, Health and Self-Care, Technology, Exploring and Using Media and Materials and Being Imaginative.

The National Curriculum (2014) is divided into Key Stages. By the end of each year, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. The National curriculum 2014, gives detailed guidance of what should be taught in each key stage.

In the Foundation Stage (Reception) children have frequent opportunities to develop practical skills with a range of materials. They are given chances to explore construction kits and existing products. Activities are appropriate to children's prior experience and context is sometimes set by teacher, sometimes by the children.

At Key Stage One (Years 1 and 2) pupils are taught a clear process of research, design, create and evaluate. Through a variety of creative and practical activities, they are taught the knowledge, understanding and skills needed to engage in the process of designing and making.

At Key Stage Two (Years 3-6) Children build upon their prior learning. They are able to explore a range of existing products and formulate opinions on these, in order to make design decisions for their own product. Children are encouraged to ask questions and plan enquiries.

The Governing Body receive regular reports on the progress of Design Technology provision.

3. **SUBJECT ORGANISATION**

Foundation Stage

In Foundation stage, children have opportunities to develop their communication, enquiry and understanding of Design Technology in both adult led and in child initiated activities during continuous provision.

Key Stage 1 & 2

Design Technology is taught in 3 blocks throughout each year, so that children achieve depth in their learning. Teachers have identified the key knowledge, skills and techniques of each topic and consideration has been given to ensure progression across topics throughout each year group across the school.

5. **DESIGN TECHNOLOGY CURRICULUM COVERAGE**

In most classes, DT is taught every other half term, ensuring that full coverage is taught by the time pupils leave at the end of year 6. Due to our mixed year class in Years 3/4, topics taught in Design Technology are on a two-year rolling programme. As this is the first year of separate year 5 and 6 classes, to ensure pupils are not missing any of the curriculum, the same DT units will be covered by both years 5 and 6 this year and they will have a different curriculum from next year:

2022-2023	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Manipulate objects with good fine motor skills. Draw lines and circles using gross motor movements. Hold pencil/paint brush beyond whole hand grasp.	Fine Motor activities. Develop muscle tone to put pencil pressure on paper. Use tools to effect changes to materials. Show preference for dominant hand.	Begin to form letters correctly. Handle tools, objects, construction and malleable materials with increasing control. Encourage children to draw freely. Holding Small Items / Button Clothing / Cutting with Scissors	Threading, cutting, weaving, playdough, Fine Motor activities. Hold pencil effectively with comfortable grip. Form recognisable letters mostly correctly.	Develop pencil grip and letter formation continually. Use one hand consistently for fine motor tasks. Cut along a straight line with scissors. Start to cut along a curved line, like a circle. Draw a cross.	Form letters correctly. Copy a square. Begin to draw diagonal lines, like in a triangle. Start to colour inside the lines of a picture. Start to draw pictures that are recognisable. Build things with smaller linking blocks, such as Duplo or Lego.
Year 1				**House Building** Build a house for the Three Little Pigs that cannot be blown down. -Build structures, exploring how they can be made stronger, stiffer and more stable.	**Moving Pictures** Create a moving picture for the first flight. -Explore and use mechanisms, for example, levers, sliders, in their products.	**Food and Nutrition** -Use the basic principles of a healthy and varied diet to prepare dishes -Understand where food comes from.
Year 2	**Vehicles to explore the world, including a vehicle with wheels and axles.** -Explore and use mechanisms [for example, levers, sliders, wheels and		**Food** Tasting, evaluating and making Chinese food (no bake recipes)	**Design and make a replica castle** -Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]		

	axles], in their products.			-Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.		
Year 3 and 4		**Food** Understand and apply the principles of a healthy and varied diet. 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.	**Structures** Apply understanding of computing to program, monitor and control their products. Select from and use a wider range of materials and components according to their functional properties and aesthetic qualities.	**Electrical Systems** Understand and use electrical systems in their products. 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.		
Year 5		**Electrical Systems** Understand and use electrical systems in their products. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.		**Food** Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Understand how key events and individuals in design and technology have helped shape the world.		**Mechanical Systems** Understand and use mechanical systems in their products (Pulleys or gears) 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.
Year 6		**Electrical Systems** Understand and use electrical systems in their products. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.		**Food** Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Understand how key events and individuals in design and technology have helped shape the world.		**Mechanical Systems** Understand and use mechanical systems in their products (Pulleys or gears) 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.

5. **CROSS-CURRICULAR DESIGN TECHNOLOGY OPPORTUNITIES**

Teachers will seek to take advantage of opportunities to make cross-curricular links. They will plan for pupils to practise and apply the skills, knowledge and understanding acquired through Design Technology lessons to other areas of the curriculum.

6. **THE USE OF IT**

We recognise the important role ICT has to play in our school in the development of Design Technology skills. ICT is used to enhance the teaching of Design Technology

and to give all children the opportunity to create and edit pieces of digitally. The use of ICT is cross – curricular.

7. **ASSESSMENT AND TARGET SETTING**

Work will be assessed in line with the Assessment Policy and teachers will use it to inform their daily differentiation. Assessment will be reported in half termly Pupil Progress Meetings. Pupils will have Design Technology targets where appropriate and will know their 'next steps' to ensure progression.

8. **INCLUSION**

We aim to provide for all children so that they achieve as highly as they can in Design Technology according to their individual abilities. We will identify which pupils or groups of pupils are under-achieving and take steps to improve their attainment. Gifted children will be identified and suitable learning challenges provided.

9. **ROLE OF SUBJECT LEADER**

The Subject Leader is responsible for improving the standards of teaching and learning in Design Technology through:

• monitoring and evaluating Design Technology:
    - pupil progress
    - provision of Design Technology
    - the quality of the Learning Environment

• taking the lead in policy development,

• auditing and supporting colleagues in their CPD,

• purchasing and organising resources,

• keeping up to date with recent Design Technology developments.

10. **PARENTAL INVOLVEMENT**

We aim to involve parents in the development of children's skills, knowledge and understanding in Design Technology. Parents are encouraged to work with their children at home and support with homework.

There are opportunities each term when parents can discuss their children's progress with their teacher.

This policy will be reviewed according to the emerging needs of our school.

Signed ……Date …… (Chair of Governors)

Signed ……Date …….. (Headteacher)