



## **Subject Statement**

**“I am the vine; you are the branches.”**

**John 15:5**

Just as the branches need the vine to grow and bear good fruits, so we need each other. Within the District family, each person is valued and loved, reaching out throughout our school, homes, families and the wider community for a stronger future.

This subject statement reflects our Christian vision. We value the efforts of all pupils, supporting them in developing their skills and knowledge through positive reinforcement and constructive feedback. We inspire high standards and encourage ownership and independence to build long-term positive learning behaviours that will take our pupils beyond primary school and into the wider world.

## **Our Vision for Design and Technology**

### **Intent**

We consider our children to have limitless imagination; Design and technology is a subject that helps children to develop their creativity in practical ways. Design and technology encourages children to learn to think and act creatively to solve problems both as individuals and as members of a team. At The District, we encourage children to use their creativity and imagination, to design, create and evaluate products that solve real and significant problems within a range of contexts, considering their own and others' needs and values. We aim to link design and technology to all the strands of the curriculum so children can see how it connects to the wider world. Children are given opportunities to research past innovators and look at the impact and influence of their work. Our school commits to ensuring every pupil, at every stage, has appropriately challenging and engaging learning, informed by the national curriculum.

They will be taught to:

- Learn the importance of a clear design criteria
- Generate and communicate ideas using sketching and modelling
- Learn about different types of structures, fabrics and food found in the natural world
- Understand the importance of cooking and nutrition
- Follow instructions from a plan when cutting or assembling
- Use appropriate tools and equipment for a specific purpose
- Use a range of materials for a specific project
- Consider and evaluate the efficiency of a product

### **Implementation of Design and Technology**

At the District CE, we have a bespoke DT curriculum, which encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. At the District, 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. We aim to, wherever possible, link work to other disciplines such as mathematics, science, engineering, computing, reading and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

It is important to recognise that our scheme of work is adapted in a contextual, relative way to develop essential skills through related, purposeful learning. Our curriculum builds upon previous learning across the key stages. Vocabulary is selected carefully to ensure that it is embedded in pupils' learning.

For every new project in design and technology, we begin by exploring the initial processes and outcomes of the product. We generate critical thinking and discussions within the pupils' current experience and throughout the designing stage, relating to the wider world.

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in a process of designing and making. Using a clear design specification, children design, create and evaluate products that consider function and purpose, and which are relevant to a range of sectors (for example, the home, school, leisure, culture, enterprise, industry and the wider environment).

Each lesson includes:

- Use of the DT process wheel to pinpoint the stage we are working at.
- A vocabulary focus with opportunities for children to use new vocabulary in context.
- A revisit to check learning and progression.
- An opportunity to evaluate learning, which can be in a verbal or written form.

### **Opportunities and Resources**

Wider world opportunities are planned accordingly to address current global and local issues/events e.g. politics and current affairs. We also encourage objectives to be covered in other subject areas and through enrichment activities for example, clubs, workshops, themed weeks, educational trips and visits. We access a range of quality resources and organisations to support our teaching and learning:

- [www.data.org.uk](http://www.data.org.uk)
- [www.stem.org.uk](http://www.stem.org.uk)

### **Inclusion**

As a school, we ensure that all pupils can engage with design and technology learning and develop as young designers, irrespective of their race, cultural background, gender, religion, creed, level of intellectual ability or physical and emotional circumstances. Teachers plan ways to adapt lessons and support pupils, so that all children can participate in learning to the best of their ability.

### **Recording assessment**

At the beginning of each unit, prior knowledge is established. Formative assessment is used in all lessons, in the form of retrieval practice (revisiting recent and past learning.) The outcomes inform future planning and address misconceptions, as well as allowing children to evaluate their learning progress. At the end of a unit of work, class teachers record individual progress and attainment in design and technology on Insight. At the end of the year, an overall judgement is given, based on pupils' attainment over the three projects. This is shared with parents in the end-of-year pupil report.

By the end of Key Stage 1, pupils are expected to:

- design purposeful, functional, appealing products for themselves and other users based on design criteria;
- select from and use a range of tools and equipment to perform practical tasks;
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients;
- have technical knowledge about building structures, exploring how they can be made stronger, stiffer and more stable and explore useful mechanisms;
- use the basic principles of a healthy and varied diet to prepare dishes and understand where food comes from.

By the end of Key Stage 2, pupils are expected to:

- widen their knowledge of preparing and cooking a variety of savoury dishes using a range of cooking techniques;
- use research and develop design criteria to inform their designs of innovative products;
- model and communicate their ideas through discussion, annotated sketches, diagrams and prototypes;

- use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors.

### **Monitoring**

The design and technology lead monitors and reviews the implementation and development of the design and technology curriculum in consultation with the Headteacher, SLT, staff members and governors. Monitoring is carried out through a range of methods including:

- Planning scrutiny
- Learning walks;
- Learning journey observations;
- Teacher observations;
- Pupil voice surveys.
- Book looks