



Design and Technology Policy

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Intent

At Brookfield Community Primary School, our Design and Technology curriculum is designed to provide children with meaningful, real-life contexts for learning. As an inspiring and practical subject, it prepares children to navigate an ever-changing technological world, fostering creativity, resilience, and resourcefulness. Pupils are encouraged to become confident problem solvers who can work both independently and collaboratively.

The national curriculum for Design and Technology aims to ensure that all pupils:

- Develop the creative, technical, and practical skills needed to perform everyday tasks with confidence and thrive in an increasingly technological society.
- Acquire and apply knowledge, understanding, and skills to design and create high-quality prototypes and products for a wide range of users.
- Critically evaluate and test their own ideas and products, as well as those of others.
- Understand and apply the principles of nutrition and develop essential cooking skills.

Our curriculum seeks to motivate and inspire learners through engaging, challenging, and stimulating experiences. It encourages children to think creatively, solve problems, and use their imagination to design, make, and evaluate products that address real and relevant challenges in a variety of contexts. Design and Technology at Brookfield is carefully structured to teach knowledge, understanding, and skills progressively. Each key stage builds on prior learning, ensuring that children develop their abilities in a logical sequence.

Central to our approach is our School Mission Statement, *"Many hearts make a school"*, and our School Values, which underpin all teaching and learning at Brookfield Community Primary School. Through this curriculum, we aim to nurture confident, capable, and creative learners ready to thrive in the modern world.

Implementation

At Brookfield Community Primary School, we implement an inclusive Design and Technology curriculum that meets the needs of all pupils, including those with special educational needs and the more able. Our curriculum is progressive and tailored to the needs of our children, with skills carefully integrated into lessons to develop practical, transferable abilities.

At the start of each unit, children share their prior knowledge, which helps inform planning and teaching. Each unit consists of a series of stimulating lessons with clear knowledge- and skills-based learning objectives, alongside subject-specific vocabulary included in the termly knowledge organisers. At the end of each unit, children evaluate their work, reflecting on their progress, knowledge, and understanding, while teachers assess learning against clearly defined objectives.

Our curriculum is delivered through high-quality, 'quality first teaching' in line with our Teaching and Learning Policy. Enrichment opportunities, including extra-curricular clubs, whole-school events, visits from inspirational professionals, and engaging educational trips, provide pupils with rich, hands-on experiences that enhance learning, deepen knowledge, and inspire creativity.

Impact

Our well-planned Design and Technology curriculum ensures that children acquire essential knowledge and skills. Learning is progressive, developmental, and engaging, providing all pupils with stimulating experiences. Teaching is designed to support each child's growth and confidence, enabling them to reach their full potential.

Curriculum Structure and Progression

Design and Technology units at Brookfield Community Primary School are carefully sequenced throughout the school year, with links to other subjects where appropriate to ensure learning is contextualised. In Key Stage One and Two, Design and Technology is taught once per term, as outlined in each year group's long-term plan. Teachers follow the Kapow Scheme of Work, using progression documents and individual unit overviews to ensure coverage of essential knowledge and skills from the National Curriculum.

Early Years Foundation Stage (EYFS)

Children engage in a range of activities aligned with the Early Learning Goals (Creative Development), providing a foundation for the National Curriculum. EYFS pupils undertake investigative and skill-based tasks during independent working time. Design and Technology activities are planned regularly, encouraging children to complete focused practical tasks through both directed and self-initiated activities. Resources are provided based on classroom topics, supporting independent design and development of ideas.

Key Stage One

Pupils engage in a variety of creative and practical activities to develop the knowledge, understanding, and skills required for an iterative process of designing and making.

When designing and making, pupils are taught to:

Design

- Design purposeful, functional, and appealing products for themselves and others, based on design criteria.
- Generate, develop, model, and communicate ideas through talking, drawing, templates, mock-ups, and, where appropriate, information and communication technology.

Make

- Select and use a range of tools and equipment to perform practical tasks (e.g., cutting, shaping, joining, finishing).
- Select 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 and explore how they can be made stronger, stiffer, and more stable.
- Explore and use mechanisms (e.g., levers, sliders, wheels, axles) in their products.

Key Stage Two

Pupils further develop their knowledge, understanding, and skills to engage in a more advanced iterative design and making process.

When designing and making, pupils are taught to:

Design

- Use research and develop design criteria to inform the creation of innovative, functional, and appealing products aimed at specific individuals or groups.
- Generate, develop, model, and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces, and computer-aided design.

Make

- Select and use a wider range of tools and equipment to perform practical tasks accurately.
- Select and use a wider range of materials and components, considering functional properties and aesthetic qualities.

Evaluate

- Investigate and analyse a range of existing products.
- Evaluate their own ideas and products against design criteria and consider the views of others to improve their work.
- Understand how key events and individuals in design and technology have shaped the world.

Technical knowledge

- Apply understanding of how to strengthen, stiffen, and reinforce more complex structures.
- Understand and use mechanical systems (e.g., gears, pulleys, cams, levers, linkages) in products.
- Understand and use electrical systems (e.g., series circuits with switches, bulbs, buzzers, motors).

- Apply computing skills to program, monitor, and control products.

Cooking and Nutrition

Cooking and nutrition are integrated into the Design and Technology curriculum to develop essential life skills, creativity, and an understanding of healthy eating.

Key Stage One

- Use the basic principles of a healthy and varied diet to prepare simple dishes.
- Understand where food comes from.

Key Stage Two

- 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.

Teaching and Learning style

In Design and Technology lessons, teachers use a variety of teaching and learning approaches to develop pupils' technical knowledge, skills, thinking, and understanding. Focused tasks are used to teach specific skills prior to making, ensuring that pupils can apply these skills when generating ideas, planning, and creating their products. Pupils are also given dedicated time to evaluate their work throughout the design and making process, using a mix of whole-class, group, and individual activities.

Within lessons, pupils have opportunities to work independently as well as collaboratively, listening to and respecting the ideas of others. They are encouraged to critically evaluate existing products, their own work, and the work of their peers. Teachers promote high standards by providing guidance, praise, and constructive encouragement, fostering confidence and ambition in all pupils

Assessment

At Brookfield Primary School, all children experience achievement, success, and progression when learning and being taught Design and Technology. Pupils are supported at each stage of the curriculum in the key areas of designing, making, evaluating, and developing technical knowledge.

Assessment is ongoing and can take a variety of forms, including:

- Monitoring children's discussions and questioning individuals or groups.
- Peer assessment within pairs, small groups, or the whole class.
- Marking designs and idea development, looking for evidence of creativity and problem-solving skills.
- Evaluating the aesthetic quality, functionality, and overall effectiveness of the finished product.

This range of assessment methods ensures that teachers gain a clear understanding of pupils' progress, knowledge, and skills, while also encouraging self-reflection and critical evaluation.

Inclusion and Differentiation

During Design and Technology lessons, all children have the opportunity to work with a wide range of materials, tools, and techniques, regardless of ability. Tasks are differentiated where necessary to meet individual learning needs and ensure full participation. Staff are aware of, and sensitive to, medical conditions (e.g., allergies) and the diverse beliefs and practices within the school and local community that may affect pupils' work with food, materials, or design.

Health and Safety

Safety is of paramount importance in all Design and Technology activities. Teachers are responsible for maintaining a safe learning environment by:

- Providing a safe working area, including appropriate furniture, secure materials storage, and well-maintained tools.
- Teaching and enforcing safety rules and good practice, including hygiene procedures.
- Ensuring the correct and safe use of tools and materials.
- Keeping working areas clean and tidy.
- Considering the storage of partially completed work.
- Ensuring proper disposal of waste.

Teachers are also responsible for supervising children at all times when using tools and for ensuring that any other adults in the classroom understand and follow safety procedures. Safety rules and key safety considerations are explicitly taught to all children within each Design and Technology unit of work, reinforcing safe and responsible practice.

Role of the Subject Leader

The Design and Technology subject leader is responsible for:

- Reviewing and updating policies related to Design and Technology.
- Supporting and advising colleagues in the teaching of Design and Technology across the school.
- Monitoring standards of achievement and progression.
- Maintaining centrally stored tools and materials.
- Promoting and raising the profile of Design and Technology throughout the school.