Benhall St Mary's C of E Primary School

Be the best you can be.

Let your light shine before others; that they may see your good works and glorify your Father who is in heaven.' - Matthew 5:16

Design and Technology Policy

2024-2026

Purpose of the Policy

The purpose of this policy is to provide a clear framework for the teaching and learning of Design and Technology (D&T) at Benhall St. Mary's Primary School. This policy is based on the Kapow Primary scheme of work, which promotes practical learning, creative problem-solving, and the application of technical knowledge across a variety of real-world contexts. It ensures that Design and Technology is a valued part of the school's curriculum, enabling children to develop essential life skills, independence, and resilience.

Intent

At Benhall, we aim to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. Through our scheme of work, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

We want our children to:

- Be inventive, resourceful, and solution-focused.
- Understand the design process from concept to completion.
- Develop competence in using tools, materials, and technology safely and effectively.
- Reflect on their work and the work of others critically and constructively.
- Gain an awareness of design influences in their everyday environment.

Key Concepts:

Function, form, innovation, construction, evaluation, user, purpose, resilience, problem-solving, systems, materials, nutrition, sustainability, safety.

Our Locality

Our rural surroundings present rich opportunities for contextual learning in D&T—whether designing for outdoor use, sustainable living, or integrating local farming practices into food and nutrition units. References will be made to local engineers, craftspeople, and product designers whenever possible.

Implementation

The Design and technology National curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and nutrition has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality.

The National curriculum organises the Design and technology attainment targets under four subheadings: Design, Make, Evaluate, and Technical knowledge.

Pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in the six key areas.

Each key area follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum. The Kapow Primary scheme is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Adaptive guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

At Benhall St. Mary's, we aim to:

- Provide a hands-on, enquiry-based D&T curriculum rooted in real-life contexts.
- Use the **Kapow Primary** scheme to deliver a balanced progression of technical knowledge, practical skills, and creative design thinking.
- Expose children to a range of materials and processes, including construction, textiles, digital components, and food technology.
- Ensure lessons include clear design briefs, opportunities to research and experiment, and time for making, evaluating, and reflecting.
- Promote teamwork, independent learning, and responsible risk-taking in the classroom.

Benhall D&T Blueprint

Introduction to Key Skills and Processes

- **Objective:** Introduce and build confidence in using tools, techniques, and structured planning.
- **Method:** Deliver practical lessons using Kapow's scaffolded projects across structures, mechanisms, food, textiles, and electrical systems.
- **Approach:** Allow time for modelling, trial-and-error, and feedback loops to improve outcomes.

Themed Design Projects

- **Objective:** Explore purposeful design through imaginative, real-world challenges.
- **Method:** Use Kapow's project-based units, like designing a sustainable snack or building a moving toy.
- **Approach:** Encourage creative ownership over designs, with flexible outcomes that suit children's needs and ideas.

Cross-Curricular Integration

- **Objective:** Deepen learning by connecting D&T with other subjects.
- **Method:** Align projects with themes in science (e.g. circuits), geography (e.g. shelters), or PSHE (e.g. healthy eating).
- **Approach:** Collaborate with subject leaders to create meaningful and integrated units.

Assessment and Reflection

- **Objective:** Track pupil progress and promote critical thinking.
- **Method:** Use Kapow's skills progression documents and assessment tools to support formative assessment.
- **Approach:** Provide time for peer and self-evaluation, and maintain clear evidence through pupil portfolios or photographic logs.

Showcasing Design Thinking

- **Objective:** Celebrate pupil creativity and ingenuity.
- **Method:** Exhibit finished products during assemblies, classroom displays, or digital galleries.
- **Approach:** Invite children to explain their design process and learning journey to build confidence and pride.

Teaching and Learning

Our approach emphasises:

- **Progression:** Building upon prior knowledge in an age-appropriate sequence.
- **Process-Focused Learning:** Valuing research, idea generation, making, and testing equally.
- **Contextual Problem Solving:** Engaging with meaningful problems to develop empathy, function, and creativity.
- **Hands-On Activities:** Ensuring tactile, sensory, and visual engagement with tools, materials, and systems.

Curriculum Coverage

The D&T curriculum at Benhall St. Mary's ensures a rich variety of content, in line with the National Curriculum:

- **Structures:** Understanding stability and strength through designing and building models.
- **Mechanisms:** Exploring movement and simple machines through cams, levers, pulleys, and sliders.
- **Electrical Systems (KS2):** Learning to build circuits and incorporate switches, buzzers, and lights.
- **Textiles:** Designing and creating fabric items using stitching, joining, and embellishing.
- **Cooking and Nutrition:** Preparing simple, healthy dishes; understanding food hygiene and nutrition.
- **Digital and Technical Innovation:** Using software or coding for design and evaluation tasks (KS2).

EYFS

In Reception, Design and Technology is taught through the **Expressive Arts and Design** strand of the EYFS curriculum. Children engage in designing, constructing, and cooking through structured play and open-ended exploration. Emphasis is placed on:

- Using a variety of tools and materials.
- Developing fine motor skills and spatial awareness.
- Talking about their creations and ideas.
- Working collaboratively on simple projects.

The Role of the Teacher

Teachers at Benhall St. Mary's will:

- Use the Kapow scheme to deliver structured yet creative lessons.
- Promote open-ended exploration while teaching key skills and knowledge.
- Model effective tool use and problem-solving strategies.
- Provide formative feedback and encourage self-assessment.
- Adapt to meet the needs of all learners, including those with SEND.
- Embed cross-curricular connections to enrich learning.

Impact

Pupils are constantly assessed through both formative and summative opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives.

Furthermore, each unit has a unit quiz and knowledge catcher which can be used at the start and/or end of the unit. Pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society.

By the end of each year, and by the time pupils leave in Year 6, we want children to:

- Be confident in the design process: investigating, designing, making, and evaluating.
- Work safely and competently with a variety of tools and materials.
- Understand the value of design in everyday life.
- Apply problem-solving strategies and communicate ideas effectively.

Children's work will demonstrate increasing independence, technical fluency, and imaginative solutions to design challenges.

Assessment and Feedback

Assessment is ongoing and recorded through:

- Teacher observations and questioning.
- Review of design journals or planning sheets.
- Evaluation discussions and peer critique.
- Final product comparison against design criteria.

Verbal feedback is central during practical lessons, with reflection encouraged at all stages of the design cycle.

Inclusion

All children are entitled to quality D&T education. Our approach ensures:

- Scaffolded tasks and accessible tools.
- Use of visuals and adult support for children with SEND.
- Opportunities for challenge and leadership for high-attaining pupils.
- Cultural representation in projects, promoting diversity in design.

Community Engagement and Celebrating Design

We aim to build a culture where D&T is recognised beyond the classroom. This includes:

- Hosting product showcases or exhibitions.
- Partnering with local makers, engineers, or businesses.
- Entering regional competitions and STEM events.
- Encouraging family engagement through design-themed home tasks.

The Role of the Subject Leader

The D&T subject leader will:

- Ensure coverage and progression through Kapow's curriculum map.
- Support staff in delivery through CPD and resource guidance.
- Monitor planning, teaching, and outcomes across year groups.
- Maintain and audit D&T resources.
- Promote D&T across the school and ensure high expectations.

Monitoring and Review

This Design and Technology Policy will be reviewed regularly to ensure that it continues to meet the needs of the children and reflects developments in the curriculum and pedagogical practice. The effectiveness of the policy will be monitored by the subject leader, in collaboration with teachers and other staff, to ensure high standards of teaching and learning are maintained.

Reviewed May 2025