



DESIGN AND TECHNOLOGY POLICY

Introduction

At Stanhope Barrington C.E. Primary School, we believe that Design and Technology is an inspiring, rigorous and practical subject that prepares children to participate successfully in an increasingly technological world. Through designing, making, evaluating and improving products, children develop creativity, resilience and problem-solving skills while drawing on knowledge from a range of curriculum areas, including mathematics, science, computing and art. The National Curriculum identifies Design and Technology as a subject that allows pupils to use creativity and imagination to design and make products that solve real and relevant problems, while considering their own and others' needs, wants and values.

Design and Technology encourages children to become innovative thinkers, enabling them to identify problems, generate solutions and evaluate the effectiveness of their designs. Through practical experiences, children learn valuable life skills and develop a greater understanding of how design and technology impact everyday life and the wider world.

Intent

At Stanhope Barrington C.E. Primary School, we aim to provide a high-quality Design and Technology curriculum that inspires, challenges and equips children with the knowledge, understanding and skills needed to become confident designers, makers and evaluators.

Our aims are:

To develop children's creative, technical and practical expertise.

To enable pupils to design and make high-quality products for a range of users and purposes.

To encourage children to identify problems and develop innovative solutions.

To build resilience, resourcefulness and independence through practical learning experiences.

To develop understanding of the design process through researching, designing, making and evaluating.

To enable children to critique, evaluate and improve their own work and that of others.

To develop an understanding of how Design and Technology has shaped the world and continues to influence daily life.

To teach children the principles of nutrition and healthy eating and develop practical cooking skills.

To foster enjoyment, curiosity and confidence within Design and Technology.

As part of our commitment to providing a broad, ambitious and knowledge-rich curriculum, we are implementing the **Enquiring Minds curriculum through Maestro**. This approach places curiosity, creativity and critical thinking at the heart of learning. Children are encouraged to ask questions, investigate problems and apply their knowledge in meaningful ways. Within Design and Technology, pupils engage in purposeful enquiries that develop their ability to research, design, make and evaluate products. Learning is carefully sequenced so that knowledge and skills build progressively over time, enabling children to become increasingly confident innovators and problem solvers. Through practical experiences and reflective evaluation, pupils learn how Design and Technology contributes to the wider world and how they can use their creativity to make a positive impact on their communities.

Implementation

Teaching and Learning

Design and Technology is taught through engaging and practical learning experiences that encourage children to design, make, evaluate and improve products. Lessons provide opportunities for children to:

Investigate and evaluate existing products.

Develop design criteria based on a purpose or need.

Generate and communicate ideas through drawing, discussion and modelling.

Select and use appropriate tools, materials and components.

Learn and apply technical knowledge and practical skills.

Evaluate products against design criteria.

Reflect on and improve their work.

A variety of teaching approaches are used, including:

Whole-class teaching.

Collaborative group work.

Paired learning.

Independent practical activities.

Teacher modelling and demonstration.

Enquiry-based learning and problem solving.

Children are encouraged to take risks, experiment with ideas and learn from the design process, recognising that evaluation and improvement are important aspects of successful design. This reflects the principles of high-quality Design and Technology education identified within the National Curriculum.

Curriculum Planning

Design and Technology is taught through carefully planned units that meet the requirements of the National Curriculum and complement our Maestro curriculum projects where appropriate.

Children experience a range of Design and Technology contexts, including:

Structures.

Mechanisms.

Textiles.

Food and nutrition.

Electrical systems.

Construction and engineering concepts.

Learning is sequenced to ensure progression in both substantive knowledge and disciplinary skills. As pupils move through the school, they develop increasing confidence in researching, designing, making and evaluating products.

Inclusion

We believe that every child should have the opportunity to succeed in Design and Technology.

Teachers provide inclusive learning opportunities through:

Open-ended design challenges.

Differentiated levels of support and challenge.

Flexible grouping arrangements.

Adapted tools, equipment and materials where necessary.

Adult support when appropriate.

Individual targets identified within School Support Plans (SSPs).

The practical nature of Design and Technology allows children of all abilities to participate, achieve and experience success.

Early Years Foundation Stage

Within the Early Years Foundation Stage, Design and Technology is primarily taught through the Expressive Arts and Design and Physical Development areas of learning.

Children are encouraged to:

Explore materials and how they can be manipulated.

Build and construct using a variety of resources.

Investigate how things work.

Develop fine motor skills through cutting, joining, shaping and assembling.

Talk about their ideas and explain their creations.

Solve simple problems through practical experiences.

These early experiences provide strong foundations for future learning in Design and Technology.

Cross-Curricular Links

English

Design and Technology contributes to English through opportunities for discussion, research, evaluation and the communication of ideas. Children develop subject-specific vocabulary and explain their design decisions using increasingly precise language.

Mathematics

Design and Technology supports mathematical understanding through measuring, calculating, estimating, scaling, shape and spatial reasoning. Children apply mathematical skills within meaningful real-life contexts.

Science

Scientific knowledge is applied when investigating materials, forces, mechanisms, structures and nutrition. Children learn how scientific principles influence the design and function of products.

Computing

Children may use technology to research ideas, create designs, record evaluations and present their work. Digital tools are used where appropriate to enhance learning.

Personal Development

Design and Technology promotes resilience, independence, teamwork and problem solving. Children learn to persevere when faced with challenges and develop confidence in their own ideas and abilities.

Spiritual, Moral, Social and Cultural Development

Design and Technology provides opportunities for children to appreciate inventions, innovations and designs from different cultures and time periods. Through collaborative work they learn to respect others' ideas and value different viewpoints.

Impact

The impact of our Design and Technology curriculum is demonstrated through pupils who:

- Enjoy designing, making and evaluating products.

- Show enthusiasm and curiosity when solving problems.

- Apply previously learned knowledge and skills confidently.

- Demonstrate increasing competence in practical and technical skills.

- Understand the design process and can explain their decisions.

- Evaluate products critically and suggest improvements.

- Understand how Design and Technology contributes to everyday life and the wider world.

- Develop creativity, resilience and independence.

- Produce high-quality outcomes which reflect progression in knowledge and skills.

Assessment is ongoing and informs future teaching. Teachers assess children's understanding through observation, discussion, practical outcomes and evaluation activities. Progression is monitored to ensure that skills and knowledge develop across all year groups.

Leadership and Management

The Design and Technology Subject Leader is responsible for:

- Supporting staff with curriculum planning and delivery.

- Promoting high-quality teaching and learning.

- Monitoring standards and progression across the school.

- Reviewing planning and pupils' work.

Supporting assessment and moderation.
Maintaining and organising resources.
Keeping up to date with developments in Design and Technology education.
Developing and reviewing the Design and Technology Policy.
Producing action plans that support continuous improvement.
Promoting Design and Technology throughout the school.

Resources

The school provides a range of resources to support the effective teaching of Design and Technology. Resources include construction materials, textiles, food technology equipment, tools, mechanisms, electrical components and digital technologies.

Resources are reviewed regularly to ensure they remain safe, appropriate and effective in supporting curriculum delivery.

Monitoring and Review

The quality of teaching and learning in Design and Technology is monitored by the Subject Leader through:

Planning scrutiny.

Work and project reviews.

Learning walks and lesson visits where appropriate.

Pupil discussions.

Assessment reviews.

Monitoring of progression across year groups.

Information gathered through monitoring is used to celebrate strengths, identify areas for improvement and support the continued development of the subject.

Policy Review Date: September 2026

Next Review Date: September 2027

Subject Leader: Mei Mei Quiney

Headteacher: Deb Cross