

Halsall St Cuthbert's CE Primary School



DESIGN & TECHNOLOGY POLICY

Design and Technology Policy

At Halsall St. Cuthbert's Primary School, all children are encouraged to solve real problems in a creative way. Our Design and Technology curriculum gives children the opportunity to develop skills, knowledge and understanding of designing and making functional products. Throughout the school, children are given the opportunity to plan and evaluate ideas and improve their practical skills. We feel it is vital to nurture creativity and innovation through design, and by exploring the designed and made world in which we all live and work.

INTENT:

At Halsall St. Cuthbert's, our aims are to: fulfil the requirements of the National Curriculum for Design and Technology, provide a broad and balanced curriculum, to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making, to enable children to talk about how things work, and to draw and model their ideas, to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures, to explore attitudes towards the 'made' world and how we live and work within it, to develop an understanding of technological processes, products, and their manufacture, and their contribution to our society and to foster enjoyment, satisfaction and purpose in designing and making. Our curriculum covers a wide range of topics that ensure knowledge, skills and understanding are covered throughout the sequence of lessons. Each unit encourages children to identify real problems, critically evaluate existing products, and take risks and innovate when designing and creating solutions to problems.

IMPLEMENTATION:

We have adopted the Design and Technology Association scheme of work, Projects on a Page. This scheme of work has an age appropriate focus for learning to help with progression and avoid repetition. Projects on a Page provides scope for teachers to meet children's needs and interests through creative and motivating projects. The six essentials of good practice in Design and Technology (user, purpose, functionality, design decision, innovation and authenticity) are embedded in the Projects on a Page scheme of work. By the end of each Key Stage the children will have covered all 5 areas of Design and Technology (design, make, evaluate, technical knowledge and cooking and nutrition). Three half-termly units are taught throughout the year. Through a mixture of whole-class teaching and individual/group activities, Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including computing. See our long-term overview for the variety of choices that are on offer to the children at Halsall St. Cuthbert's. At the end of each unit the children reflect on their finished pieces and take part in a class gallery, offering supportive advice and compliments to their peers.

IMPACT:

Through the teaching of Design and Technology, we enable all children to;

- develop creative, technical and imaginative thinking in children and to develop confidence to participate successfully in an increasingly technological world.
- talk about how things work and to develop their technical knowledge.
- apply a growing body of knowledge, understanding and skills in order to design and make prototypes and products for a wide range of users.

- select appropriate tools and techniques when making a product, whilst following safe procedures.
- develop an understanding of technological processes and products, their manufacture and their contribution to our society.
- foster enjoyment, satisfaction and purpose in designing and making things,
- critique, evaluate and test their ideas and products, and the work of others.
- understand and apply the principles of nutrition and to learn how to cook.
- understand how key events and individuals in design and technology have helped shape the world.

By the time children leave Halsall St. Cuthbert's Primary school, they will be able to:

Design

- 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.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make

- Select from and use a wider range of tools and equipment to perform practical tasks, for example, cutting, shaping, joining and finishing, accurately.
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

Evaluate

- 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.
- Understand how key events and individuals in design and technology have helped shape the world.

Technical knowledge

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- Understand and use mechanical systems in their products, for example, gears, pulleys, cams, levers and linkages.
- Understand and use electrical systems in their products for example, series circuits incorporating switches, bulbs, buzzers and motors.
- Apply their understanding of computing to program, monitor and control their products.

Food and nutrition

- 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.

EQUAL OPPORTUNITIES:

It is the responsibility of all teachers at Halsall St Cuthbert's Primary School to ensure that all pupils, irrespective of age, faith, gender, sexual orientation, race and disability are given full access to the

Design and Technology curriculum and make the greatest progress possible. Provision is made for children with Special Needs and Disabilities within the context of the classroom. Teachers provide differentiated learning opportunities matched to the needs of the children with learning difficulties. Children are encouraged to seek solutions to their own problems and challenge and extension activities are given to the children to ensure that progress is made.

RESOURCES:

We have a wide range of resources to support the teaching of Design and Technology across the school. All our classrooms have a range of basic resources, but we keep the more specialised equipment in the Design and Technology resource area.

HEALTH, SAFETY AND HYGIENE:

Children are taught to work safely, using tools, equipment, materials components and techniques appropriate to the task. Risk assessments are carried out prior to undertaking DT projects. As part of their work with food, children will be taught how to cook and apply the principles of nutrition and healthy eating. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. All staff members who are teaching food and nutrition must hold a level 2 food hygiene certificate or equivalent.

EYFS:

In the Early Years Foundation Stage, teachers encourage the development of skills, knowledge and understanding that help Reception children make sense of their world as an integral part of the school's work. Teachers relate the development of the children's Knowledge and Understanding of the World to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in Design and Technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control. Teachers provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

RECORDING AND ASSESSMENT:

At Halsall St. Cuthbert's, we believe that children should have ownership of their own journey and should be involved in the assessment process. During the lesson, constructive feedback and positive praise is given to the children. They are then encouraged to act upon this feedback and advise by annotating their work and making improvements to their products. We assess the children's work in Design and Technology whilst observing them working in lessons and by ongoing formative assessment. We also gather evidence of assessment through pupil voice, self-assessment and peer assessment. Teachers track the progress made by children against the learning objectives for the lesson. Summative assessment takes the form of an end of unit record as to whether the pupil is working towards or has met the objectives for the unit. This method of recording also enables the teacher to assess progress for each child, as part of the child's report to parents. The Design and Technology subject leader monitors attainment throughout each Key Stage in order to evaluate the teaching and learning of Design and Technology.

ROLE OF THE SUBJECT LEADER:

The subject leader's responsibilities are:

- To ensure a high profile of the subject

- To ensure a full range of relevant and effective resources are available to enhance and support learning.
- To ensure the progression of key knowledge and skills identified within each unit.
- To monitor workbooks and ensure that key knowledge and vocabulary is evident.
- To oversee the teaching of Design and Technology.
- To co-ordinate any displays of Design and Technology work.
- To order stock linked to the planned units of work.
- To attend regular opportunities for CPD
- To support colleagues in the teaching of Design and Technology.

Version 3

Adoption September 2024

Review Date September 2027

Senior Member of Staff Responsible Kate Hampson

Designated Member of Staff Kelly Kendall is the subject lead. Standards of teaching and learning will be judged using work sampling and assessment data review. The policy will be reviewed regularly, on a 3-yearly basis.

Governor Responsible Miss Zoe Wakefield