



Design and Technology Policy



Adopted by Governors: Summer 2023

To be reviewed: Summer 2025

Rationale and Intent

At Dohill Primary School we recognise the importance of design and technology and the importance of encouraging children to think and intervene creatively to solve problems around them. Children will develop technical understanding, skills, learn about design methods and investigate their environment and everyday materials.

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

The core of our design and technology curriculum is the National Curriculum for England.

A broad and balanced creatively driven design curriculum, helps our pupils to develop a creative flair and imagination when designing and making a product. This helps pupils to have a better understanding and increased knowledge of cultural capital and the value that designers have in society.

The curriculum has been specifically sequenced in a logical progression to ensure that new knowledge and skills build on what has been taught before: Early Years to Year 6. This enables our pupils to know more and remember more. End points are clearly identified for each year group; time allocation has been carefully considered to provide children with opportunities to master key concepts and learn about designers who have made valuable contributions. All children have access to a high-quality, ambitious design and technology curriculum that is both challenging, enjoyable and raises pupils' aspirations. We widen their horizons through a context rich curriculum, that gives purpose to their learning, through high expectations for every child to succeed.

Teaching and Learning

Foundation Stage

The EYFS curriculum includes rich opportunities for children to explore how to hold and use a variety of small tools, including scissors and cutlery in a useful and

purposeful way. They learn how safely use and explore a variety of materials, tools, and techniques, experimenting with design, texture, form, and function. Throughout the whole of the Foundation Stage, the pupils will have opportunities to build and apply their understanding of design and technology in both the indoor and outdoor classrooms, bringing nature into their designs at every available opportunity. They will share their creations, explaining the process they have used and celebrate their achievements.

Key Stage 1 and 2

As pupils move through KS1, they have the opportunities to develop a wide range of design and technology skills such as making annotated plans, experimenting with cutting and joining materials and moving mechanisms as well as understanding hygiene and healthy eating within food technology. The children build on skills learnt during EYFS and deepen their understanding of the process; design, make and evaluate. The children learn how to evaluate their design, share their designs with the class and receive feedback from their peers. They also have opportunities to improve their work. The children have opportunities to build and apply their understanding of design and technology outdoors with cross curricular links to science such as making an insect hotel.

Key skills and techniques learnt in KS1 are built upon in KS2, giving pupils the opportunities to master skills of making annotated designs, prototypes, final products and evaluating their work throughout the whole process. They understand it is ok to change their designs and adapt their work to make improvements. Alongside this, they continue to build on their knowledge of great designers with many links to other subjects such as science and computing. The children are encouraged to research themselves and use their creativity when designing.

Within a design and technology lesson, teachers check pupils understanding effectively and address any misconceptions swiftly. The curriculum is designed and delivered in a way that allows pupils to know more and remember more. Key concepts are embedded in their long-term memory so they can apply them fluently.

Curriculum Documents for Design and Technology can be found on the curriculum pages of the school website:

<https://www.dothillprimaryschool.co.uk/key-information/curriculum>

- Design and Technology Curriculum Statement
- Design and Technology Curriculum Overview

- Design and Technology Progression Document EYFS/KS1
- Design and Technology Progression Document Lower KS2
- Design and Technology Progression Document Upper KS2
- Design and Technology Coverage Document

Planning

Every year group has a yearly curriculum map that outlines the key areas of design and technology which will be taught throughout the year. This ensures that an adequate amount of time and coverage is allocated to each key area.

Detailed medium-term planning supports teachers to plan a sequence of progressive weekly lessons and over time, giving the children time to master new concepts and techniques. Within this document, key objectives and vocabulary are outlined. Progression documents are used to support the medium-term plan, to ensure that staff are delivering a consistent and challenging curriculum.

Assessment

Assessment is woven throughout the curriculum and is used by staff to check pupil's understanding of key concepts. At the beginning of each lesson the class teacher will share a learning objective and success criteria with the children. This informs them what they are learning and the steps they need to take to be successful. The teacher will assess the pupils against the success criteria. The assessment will be based on the pupil's application of taught knowledge through class discussion, answering questions, practical activities and if appropriate written work. This supports in identifying gaps in knowledge and understanding enabling teachers to respond appropriately. We also recognise the value of assessment as an important learning tool which provides opportunities for pupils to strengthen their memories through concerted effort.

In design and technology, pupils are consistently assessing their own work and adapting and developing their ideas as their knowledge increases. Children make prototypes and evaluate their design and work throughout the unit of work. Building confidence to critique work they have created to improve is something we take pride in as a school. Teachers assess knowledge retention and use of new skills without imposing ideas, making sure that the child's own creativity is tapped in to, enabling them to blossom into the artists they are as individuals.

At the beginning of each unit of work the pupils will independently take a quick quiz, that will assess to see what they already know. The quick quiz will assess pupils' knowledge of technical vocabulary and key knowledge. This quiz quick will then be taken at the end of the unit of work to show progress.

Recording

In design technology children's work can take various forms. It may be exploring and developing ideas or producing a piece of work e.g. a model or a design. Children can record their work individually, as a group or class. Work from design and technology lessons will be recorded in each pupil's foundation book. Where a task is practical or includes group work, a photograph with a short explanation or a sticky note that captures the pupils voice will be more appropriate evidence for the foundation book.

Examples of children's work (written and photographs) may be displayed in classrooms or in year group corridors to share with others.

Resources

Resources are kept in the resources room and are clearly labelled. It is the responsibility of each adult to keep the resources neat and tidy, to inform the co-ordinator termly if any resources need replacing and to ensure hazardous materials (e.g. used batteries) are disposed of safely. Other waste from used resources should be recycled accordingly. Alongside books in school, the Shropshire Library Service provides a variety of texts and picture poster packs which staff can request to borrow for a term. These can either be ordered online and delivered by the library service or teachers may visit the library in person to choose specific books. The Shropshire Library Service will arrange for items to be returned at the end of each term. Artefacts are also available from the Shropshire Library Service for loan at a cost.

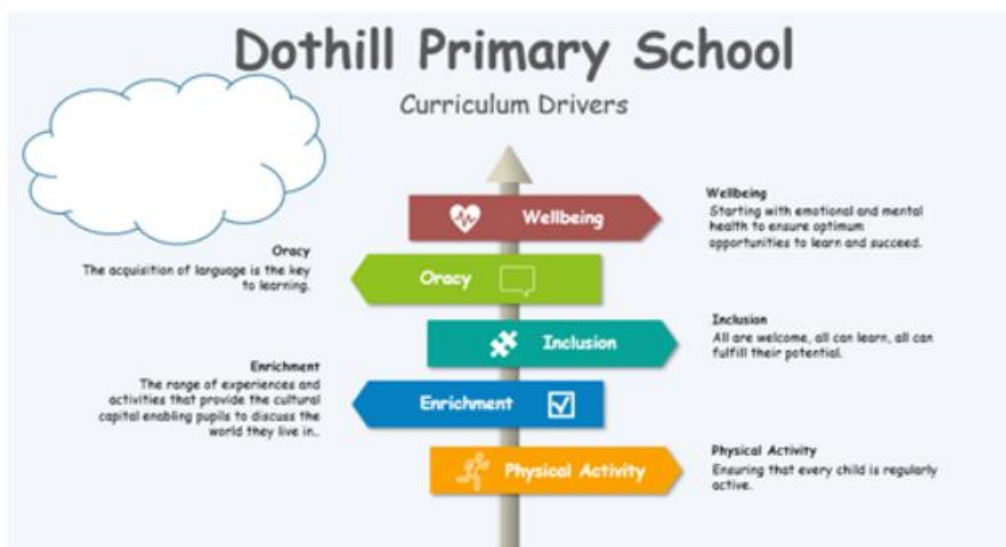
Role of the Subject Leader

The role of the subject leader is to:

- Audit, identify, purchase and organise all design and technology resources ensuring that they are readily available and well maintained.
- Document and review the agreed ways of working through a written policy document and scheme of work
- Advise and support staff in the planning and teaching of design and technology and developing their design and technology subject knowledge.
- Monitor the teaching and learning of design and technology through learning walks, work scrutiny, the monitoring of planning and pupil voice.
- Monitor outcomes for pupils and track pupil progress.
- Use feedback from monitoring to develop an action plan for the design and technology with realistic and developmental targets.
- Report to SLT and Governors

Curriculum Drivers

At Dothill we have five curriculum drivers that are central to our school vision and ethos.



They help to drive and shape the curriculum and are incorporated across all subjects and themes.

Enrichment - A range of visits or visitors into school are planned across the curriculum. These are organised by teachers, in order to offer a range of experiences that help to broaden the understanding of curriculum content, enrich the curriculum delivery with real-life experiences and most importantly help the children embed and retrieve their learning. In design and technology enrichment includes outdoor creative lessons which enable the children to utilise natural resources to join and build for example, an insect hotel. Design and technology is also referenced throughout the curriculum on trips and visits across the whole school.

Wellbeing - We place emphasis on a curriculum that develops the whole child. Through our core values - happiness, respect, responsibility, creativity, honesty, enthusiasm, confidence, kindness, cooperation and fairness - we ensure that the wellbeing of all members of the community is at the centre of our life in school and the key to raising academic success. Our children gain a sound knowledge of their own value and purpose, with the ability to make choices and decisions. In design and technology we encourage children to explore and express their creativity, giving them the skills they need to develop confidence in expressing their own ideas and messages in a variety of ways.

Oracy - Our curriculum aims to develop learners who can think critically, reason together and have the vocabulary to express their knowledge and understanding.

In design and technology oracy is developed through the children learning to articulate their opinions and feelings towards a range of creative work both of their own and when exploring the work of famous designers. Children learn to evaluate their work and the work of their peers through discussion and celebrations. Importance is placed on being able to articulate the processes that have been used to design, make and evaluate a piece of work overtime.

Physical activity - Sport England Survey shows that active children are happier, more resilient and more trusting of others and it's also shown a positive association between being active and higher levels of mental wellbeing, individual development and community development. At Dohill we build physical activity into design and technology through exploring and manipulating a variety of resources, tools and materials. When making a new produce children will often stand and move around to collect the resources and tools they need.

Inclusion - All pupils participate in design and technology. Each learner is an individual and we use a child centred approach to adapting our teaching to meet their need.

We make the following adaptations to the curriculum to ensure all pupils needs are met:

- Differentiating our curriculum to ensure all pupils are able to access it, for example, by grouping, 1:1 work, teaching style, content of the lesson etc.
- Adapting our resources and staffing.
- Using recommended aids, such as laptops, coloured overlays, visual timetables, larger font etc
- Differentiating our teaching, for example, giving longer processing times, pre-teaching of key vocabulary, reading instructions aloud, visual cues to accompany verbal instructions.

We use the NASEN 'Teacher Handbook: SEND' (2021) to further inform our inclusive practice by considering specific adaptations for each curriculum area.

Spiritual, Moral, Social and Cultural Development

We recognise that the personal development of pupils, spiritually, morally, socially and culturally, plays a significant part in their ability to learn and achieve. Through our design and technology curriculum we aim to provide pupils with opportunities to explore and develop an awareness of SMSC.

Spiritual: Design and Technology supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through

creativity and risk taking in analysing, designing and manufacturing a range of products. It instils a sense of awe, wonder and mystery when studying the natural world or human achievement. Encouraging creativity allows pupils to express innermost thoughts and feelings and to reflect and learn from reflection, for example, asking 'why?', 'how?' and 'where?'.

Moral: Design and Technology D.T supports moral development by raising awareness of moral dilemmas by encouraging pupils to value the environment and its natural resources and to consider the environmental impact of everyday products. It educates pupils to become responsible consumers.

Social: Design and Technology supports social development by providing opportunities to work as a team, recognising others' strengths and sharing equipment. Design Technology promotes equality of opportunity and provides an awareness of areas that have gender issues e.g. encouraging girls to use equipment that has been traditionally male dominated.

Cultural: Design and Technology supports cultural development by encouraging children to reflect on ingenious products and inventions, the diversity of materials and ways in which design technology can improve the quality of life. It investigates how different cultures have contributed to technology and reflects on products and inventions, the diversity of materials and ways in which design can improve the quality of our lives.

Use of ICT

Information and communication technology enhances the teaching of design and technology wherever appropriate in all key stages. Software can be used to enhance children's skills in designing and making. Children can also use ICT to research different designers and designs via search engines on ipads and laptops. ICT can be used to present their designs using PowerPoint presentations and word documents. Ipads can also be used throughout the design and making process.

Online Safety

As part of our commitment to safeguarding, online access during lessons is carefully planned for and monitored. Pupils may use specific content, videos, models, images on the computer. These will be carefully selected by the teacher to ensure that they are appropriate and safe. SENSO software is used across school to monitor and manage computer activity on any computer device.

Equal Opportunities

Equal opportunities are considered when we decide upon the teaching strategies that we employ and the resources that we provide. In our curriculum planning we ensure that all pupils, with due respect to their culture, religion and background, have equal access to all areas of the curriculum, extracurricular activities, all

areas of the grounds, equipment and resources, the staff and time to contribute to whole class and group work.

Impact

The impact of our design and technology curriculum is that:

- Pupils make progress in a range of design processes and techniques through taking risks, becoming resourceful, innovative and enterprising.
- Pupils know how design and technology has shaped the modern world, historically and culturally.
- Pupils understand the value of DT and how it is used in everyday life.
- Pupils are prepared for their next stage in DT education and beyond.
- Pupils understand and can apply the principles of a healthy and varied diet.

Signed..... *R Butcher* Date..... 5.7.23.....

(Head teacher)

Signed..... *L Goodfellow* Date..... 5.7.23.....

(Chair of Governors)