



Deepdale Community Primary School Policy for Design and Technology



“Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others’ needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.”

National Curriculum 2014

Curriculum Intent

School Statement of Intent

At Deepdale Community Primary School, we see every child as a unique individual with the capacity to thrive and be successful. Our school motto of ‘Harmony in Diversity’ underpins a broad and balanced curriculum, which aims to ensure that children leave their primary education as confident, resilient learners with a thirst for knowledge. Our end goal is to teach our children to be mature, curious and eager within the community they are part of. *Anything is possible!* As a result of our ambitious and carefully planned curriculum that meets the needs of all of our pupils, children will continually develop as secure readers with an extensive vocabulary in order that they continue to understand the wider world that they are part of. We encourage problem solving, critical thinking and effective communication across every curriculum subject. By the time our pupils leave their primary phase of education, our valued curriculum will have ensured that they are eager to move on to the next stage of learning; they take pride in their work, can justify their opinions thoughtfully and manage their emotions carefully whilst always taking others in to consideration. At Deepdale Community Primary School, our shared vision is that every child is challenged from their individual starting point onwards. Every child is engaged in their learning and thrives in our continued care.

Our Curriculum Drivers

At Deepdale Community Primary School, we will all: -

- **Celebrate our differences:** By looking at designers from a culturally diverse range of backgrounds, both past and present, we will ensure that our children ‘see themselves’ reflected in the world of design and technology.
- **Have high aspirations:** We will develop our children’s awareness of the range of careers available within Design and Technology such as engineers, designers, chefs and architects. They will design and create products that consider function and purpose and which are relevant to a range of sectors such as home, school, leisure, enterprise, industry and the wider environment.
- **Be passionate about the Wider Curriculum:** Design Technology is an inspiring, rigorous and practical subject. We aim to give our children as many first-hand and enriching experiences as possible to develop and extend their knowledge of the technological world around them.
- **Strive to be healthy:** At Deepdale, Design and Technology will encourage children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. They will learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. As part of food and nutrition, they will learn the importance of a healthy diet.
- **Love language:** Opportunities to talk, question and clarify their understanding will be central to our Design and Technology curriculum. Our children will become confident in using the technical language of Design and Technology.

Statement of Intent for Design and Technology

Design and Technology teaching at Deepdale Community Primary School aims to support all pupils to be able to ‘see themselves’ as potential designers and makers of the modern world. We aim to encourage children to develop their originality and have the confidence to take creative risks, to produce innovative ideas and prototypes and to ensure that there is ambition for all, allowing ALL children have a ‘chance to shine’ (acknowledging that for some children DT will be their chance to succeed). Though a variety of creative and practical activities, they will acquire the specific



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skills and knowledge to help them solve identified problems (real and relevant), considering their own and others' needs, wants and values, broaden their knowledge and understanding and work in an iterative process. Our children will develop the ability to appropriately select and use materials, tools and equipment safely and responsibly. As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating, thus learning crucial life skills to take with them in to the wider world.

Aims:

Our curriculum is designed to ensure that all children are provided with opportunities to:

- Master practical skills
- Design, make, evaluate and improve
- Take inspiration from design and technology throughout history and in the modern world
- Be original
- Solve problems
- Ask questions
- Have a passion for Design and Technology.

Curriculum Implementation

Principles of Teaching and Learning

In KS1 and KS2, Design and Technology is taught for three half terms a year, per year group. Teachers decide on their timetabled delivery, with the equivalent of 1 hour a week being given to the subject.

All units of work take into consideration the following concepts:

Master practical skills – this concept involves developing the skills needed to make high quality products.

Design, make, evaluate and improve - this concept involves developing the process of design thinking and seeing design as a process.

Take inspiration from design both current and throughout history – this concept involves appreciating the design process that has influenced the products we use in everyday life.

Regardless of year group and/or area of Design and technology being taught, all designing and making is carried out with the 6 Design Technology principles in mind.

1. Have the needs of the **user(s)** been identified and met?
2. Does it have a clear **purpose**?
3. Is the product **innovative**?
4. Is it an **authentic** product?
5. Would it **work/ function**?
6. Have **design decisions** been made?

Please see Deepdale DT Curriculum booklet for further details.

Sequencing of Learning

Each unit of work is sequenced in order to allow our learners to explore and evaluate existing products first. Then they will practise and develop the skills required to make the product. At this point, our pupils become designers and plan out their own products with the knowledge of existing products and design briefs from their intended users. Pupils will put in to place their practised skills to create their prototypes and, after evaluations and design adaptations, their final product. After using the products, children evaluate their products in terms of meeting the user needs and also their 'making' skills. These evaluations go on to help inform their future plans/units/ skills practise.



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EYFS

The EYFS framework gives us a set of common principles to deliver quality early education and experiences to all children. We do this by acknowledging and instilling the themes of EYFS: 'unique child'; 'positive relationships' and 'enabling environments'. We relate the *Design and Technology* aspects of the children's work to the Early Learning Goals as set out in the statutory framework and non-statutory guidance materials including the newly structured development matters and Lancashire's '*Planning for Learning*' document. These underpin the curriculum for children aged three to five. Through our planning, we reflect on the different ways in which children learn implementing characteristics of effective learning. These are: playing and exploring, active learning and creating and thinking critically. In the early years, we often refer to our Design and Technology learning as 'creating with materials'.

Progression

Our curriculum is split into four discrete areas:

- Food and nutrition
- Textiles
- Structures
- Mechanisms (Mechanical and Electrical systems and ICT)

Food and Nutrition is covered in each year group and the other 3 areas, at least once in each Key stage

EYFS: Ongoing coverage of all DT areas.

Year 1: Food and Nutrition, Basic Mechanisms (cards), Basic Structures.

Year 2: Textiles, Food and Nutrition, Basic Mechanisms (vehicles/toys).

Year 3: Food and Nutrition, Complex Structures, Mechanical systems.

Year 4: Food and Nutrition, Mechanical (Electrical) Systems, Textiles.

Year 5: Food and Nutrition, Structures and Mechanical Systems, Computing.

Year 6: Textiles, Food and Nutrition, Mechanical and Electrical Systems.

Pupils at Deepdale have regular opportunities to return to the different areas of Design Technology throughout their primary school career. Skills are revisited and extended further as the children progress through school. For detailed information about skill coverage and progression as well as language progression, please refer to 'Deepdale DT Curriculum Booklet'.

Reading across Design and Technology

Children at Deepdale are given the opportunity to foster their love of reading and continually develop their reading and comprehension skills through being provided with a range of engaging challenging texts that are used across Design and Technology. For example, recipe books, amazing structures, stories of construction.

Relationship to other subjects

Wherever possible, links are made between subjects such as by linking 'Cooking and Nutrition' with 'Healthy Living' objectives, as covered in PSED, PSHE or Science. In some areas of learning, children may design a product and this may be linked to a specific writing task in the same week. Please see the year group long-term maps that are available on the Deepdale Community Primary School website for further information of curricular links.



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Inclusion and Equality

At Deepdale Community Primary School, we are committed to ensuring that equality of opportunity is available to all members of the school community. All children have a 'chance to shine' in Design Technology. School planning is differentiated when required, to ensure that all children can access the curriculum. Similarly, those with a talent in the subject are recognised and stretched through the use of careful and effective questioning. We understand and tackle different barriers which could lead to unequal outcomes for different groups of pupils in school. Through our teaching of Design & Technology, we aim to provide suitable learning opportunities irrespective of race, gender, disability, faith, religion or socio-economic background.

Curriculum Impact

Assessment

Assessment is on-going and is a vital tool to aid future planning. Children are assessed on their oral responses as well as their written and practical work. In KS1 and KS2, teachers will assess the children using the end of key stage expectations (see DT curriculum document) and in the Foundation Stage children will be assessed using the Development Matters document along with ELGs.

Assessment is used to inform future planning and to provide information about individuals throughout their time in school. The Assessment Policy should be referred to for general comments. We will ensure that we will assess the on-going design process and not just the finished products or outcomes. This may take form of:

- Teachers' observations of pupils;
- Teacher-pupil discussion and teacher questioning;
- Pupils' drawings, notes, models, comments and written work;
- Artefacts made by pupils;
- Photographs of children engaged in the design process;
- Use of ICT as appropriate;
- Self-assessment.

When reviewing the children's progress, we assess children's:

- Knowledge and understanding of materials and components;
- Understanding of mechanisms and structures;
- Ability to use materials and equipment safely and accurately;
- Interest and motivation in designing and making;
- Ability to appreciate and produce items of quality.

Reporting

Children's development in Design Technology is reported to parents in their annual report.

In EYFS, parents are informed where the children's abilities lie within 'Expressive Arts and Design' and 'Understanding the world', which has a technology sub-section.

Recording

In KS1 and KS2, the children have a Design and Technology book which is used to record learning through written work and photographs. In the Foundation Stage, classes have learning journals and busy folders which are used to record images and discussions throughout the year. All work is marked in accordance with the 'Feedback, Review and Improve' policy (please see separate policy for further guidance). Feedback is mainly verbal.



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Monitoring and Evaluation

The subject leaders for Design and Technology will take an overarching lead for the monitoring and evaluation of pupil's progress. Subject leaders will look to conduct pupil interviews as well as scrutinies to ascertain children's knowledge of Design and Technology.

Resource Management

The subject leaders for Design and Technology, in partnership with the senior leadership team, are responsible for ensuring that the school is well-resourced to enable effective teaching and learning of Design and Technology in each year group. This is done through regular auditing and through speaking with staff members.

Health and Safety

It is the responsibility of teachers to ensure the health and safety of themselves and their pupils, both in the classroom environment and when on trips off school premises. They will assess the risks within Design and Technology activities both inside and outside school and ensure that preventative strategies are put into place to minimise any potential hazards. Children must be made aware of potential risks and preventative strategies. Staff are responsible for reading tools' risk assessments prior to delivery of Design and Technology sessions and adhering to them during lessons.

Review:

This policy was written in October 2017 and will be reviewed in October 2019.

This policy was reviewed in October 2019 and will next be reviewed in October 2021

This policy was reviewed in September 2021 and will next be reviewed in September 2023

This policy was reviewed in September 2023 and will next be reviewed in September 2025