



The Oaks Primary School
Bringing Learning to Life

Design and Technology Policy 2024

Intent

At The Oaks 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. At The Oaks, children acquire a broad range of subject knowledge and draw on skills from other subjects such as Mathematics, Science, 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.

Implementation

Design and Technology at The Oaks is taught through a combination of defined design and technology projects, the direct teaching of skills and through activities integrated within the learning of other National Curriculum subjects. The Oaks progression of knowledge overview outlines the key content that is taught in each year group. This is progressive across school. Alongside this, the DT Association planning documents 'Project on a Page' are used to break down the objectives in to small steps and provides clear teaching guidance.

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children design and create products that consider function, purpose, and which are relevant to a range of sectors (for example, the home, school, leisure, culture, enterprise, industry and the wider environment).

When designing and making, the children are taught 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 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, as well as chopping and slicing) accurately.
- select from and use a wider range of materials, ingredients and components, including construction materials, textiles and ingredients, according to their functional properties, aesthetic qualities and, where appropriate, taste.

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.
- understand and use electrical systems in their products.
- apply their understanding of computing to program, monitor and control their products
- Understand some of the ways that food can be processed and the effect of different cooking practices.

Cooking and Nutrition

- Children will cook a variety of mainly savoury dishes throughout their time at school, focusing on at least one cooking project per year in each year group.
- Children will learn about where food comes from and that food can be harvested and is seasonal in some cases.
- They will learn the skills needed to prepare and cook foods and over time will develop more precise skills for preparing food.
- Children will explore existing food products and evaluate them in order to support their decisions and recipes for their own dishes.
- Children will learn about healthy foods and how to eat well.
- Children will learn about different cooking processes and that food can be processed.

Key skills and key knowledge for Design and Technology have been mapped across the school to ensure progression between year groups. The context for the children's work in Design and Technology is also well considered and children learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study.

Impact

At The Oaks we ensure children:

- 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 and 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. Children will design and make a range of products. A good quality finish will be expected in all design and activities made appropriate to the age and ability of the child.

Children 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.

Assessment

Staff use the Sonar tracking system to assess pupils on an ongoing basis. All pupils from Years 1-6 are assessed against the year group end points set out in our 'Progression of Knowledge and Skills in DT' document, which is aligned to the National Curriculum objectives for each key stage. In EYFS, pupils are assessed under the prime area of learning 'Expressive Arts and Design'.

At the start of each academic year, children are given a designated Design Technology book. This is to assess the progress of the children's Design Technology skills over the academic year.

In addition, regular retrieval practice is carried out in all classes to allow for formative assessment. Tools such as knowledge organisers and low stakes mini quizzes help teachers to assess children's retention of key knowledge and regularly revisit learning from earlier year groups in order to establish a starting point for new learning.

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