

'Good design is making something intelligible and memorable. Great design is making something memorable and meaningful.'

Introduction

Our ambition is to inspire our children to become future, enterprising innovators that will participate successfully in an increasingly technological world. During their time in our school, the children will have the opportunity to use their design & technology skills to create projects that link cohesively to the history or geography topic studied that term. Children will make products to solve some simple problems, applying their design and technology knowledge allowing them to make their designs a reality. As a result, they will grow to have the confidence to evaluate their work developing and building upon its successes and flaws, thereby building their resilience.

Aims

We aim to give the children high quality design technology teaching so that they become creative thinkers and problem solvers, through practical activities. Our curriculum is guided by the National Curriculum (2014) for Key Stage 1 and the statutory Early Years Foundation Stage and Development Matters framework (2022). It is carefully planned to build progressively from the EYFS through Years 1 and 2. Our intention is that our children will learn the knowledge and skills needed to engage in the design and creating process, carefully considering the function, purpose and aesthetic of each product.

Early Years Foundation Stage

'Expressive Arts and design' is vital aspect of Early Years Foundation Stage. We provide a rich learning environment that gives children the opportunity to express themselves creatively. At Common Road, we facilitate the exploration of modelling, construction and materials through continuous provision.

Pupils should be taught:

- to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;
- to share their creations, explaining the process they have used;
- to explore, use and refine a variety of artistic effects to express their ideas and feelings.
- to return to and build on their previous learning, refining ideas and developing their ability to represent them.
- to create collaboratively sharing ideas, resources and skills.
- to know and talk about the different factors that support their overall health and wellbeing.

Key Stage 1

Pupils should be taught:

Design

- to design purposeful, functional, appealing products for themselves and other users based on design criteria
- to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

Make

- to select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)
- to select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

Evaluate

- to explore and evaluate a range of existing products evaluate their ideas and products against design criteria
- to apply technical knowledge build structures, exploring how they can be made stronger, stiffer and more stable
- to explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Cooking and nutrition

- to use the basic principles of a healthy and varied diet to prepare dishes
- to understand where food comes from.

Pedagogical approaches

The design & technology curriculum is planned collaboratively by leaders and teachers and reviewed after each teaching sequence. In a series of lessons children will be taught both disciplinary and substantive knowledge in design & technology which has been carefully chosen and planned to be progressive from the EYFS. Vocabulary is carefully chosen and is explicitly taught in design & technology sessions. Design & technology teaching focuses on enabling children to think innovatively and creatively to design, make and evaluate products for a specific purpose. Teachers use pedagogical approaches to learning, considering vocabulary and language, cognitive load theory and retention. They build into lessons the opportunity to review taught content in a variety of ways to ensure that children retain the knowledge and skills they have been taught. Teachers understand the need to hook this knowledge onto previous learning and again use lesson review to activate prior learning.

Children's art and design project books start in Year 1 and follow the child through school to build a picture of their development in these subject areas.

Design & technology teaching and personal and social development

Design & technology contributes significantly to the teaching of personal and social development. Children develop self-confidence by having opportunities to express themselves creatively through a range of projects that link with different areas of the curriculum. It also builds children's resilience, as they develop the skills to problem solve, innovate and evaluate a range of existing products and their own creations.

Pupils with SEND

At Common Road Infant and Nursery School, teachers are responsible for ensuring that all pupils can successfully access design & technology education, regardless of gender, race, culture, background and ability. Barriers to learning are reduced through effective provision and support in order to ensure that all children can positively participate in the learning community. We provide learning opportunities matched to the needs of the children and we take into account the targets set for individual children in their One Page Profiles. The wider curriculum is planned to meet the needs of all children including children with SEND.

Assessment and recording

On-going assessment at Key Stage 1 is established through regular observations and monitoring of work in sketchbooks and displays. Sketchbooks are the children's portfolio of work; the children keep the same sketchbook as they move up through the school in order to show progression of skills and knowledge throughout Key Stage 1. At the end of the academic year, teachers will assess the children as working towards or working at age related expectations in design & technology. Teachers will use appropriate approaches to assessment that:

- allow for different learning styles and ensure that pupils are given the chance and encouragement to demonstrate their competence and attainment through appropriate means.
- provides clear feedback to pupils to aid further learning.

Resources/Health and safety

In order for children to remain safe when using the variety of tools needed in design & technology, children need to develop a knowledge and understanding of safety procedures and rules. This will include considering potential risks and hazards and the following of simple instructions to limit the risks to themselves and others. The children are shown how to use tools and other pieces of equipment safely as per the risk assessment for the teaching of design & technology.

Monitoring and review

The monitoring of design & technology across the school is the responsibility of the subject leader. Design & technology is reviewed through lesson observations, work scrutiny and the monitoring of planning. Pupil voice is a key aspect of the monitoring process and is taken into account through pupil discussions about subject knowledge and design & technology provision in general.

- Design & Technology Leader: Katie Mitchell - Date: October 2022