

Hallcroft Infant & Nursery School



Design and Technology Policy January 2020

Introduction

Design and Technology is an inspiring, rigorous and practical subject which encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. It enables children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. Through Design and Technology, children can link their work to other disciplines such as mathematics, science, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

Aims

We aim to give our pupils the opportunity to:

- Develop imaginative thinking and to enable them to talk about what they like and dislike when designing and making
- Talk about how things work, and to draw and model their ideas;
- Select appropriate tools and techniques for making a product, whilst following safe procedures.
- Build and apply knowledge, understanding and skills in order to design and make high quality products for a wide range of users.
- Explore food and cooking techniques and develop an understanding of healthy eating and food production.
- Become creative problem solvers as individuals and members of a team.
- Develop an ability to evaluate their own products.

Intent

To fulfil our aims we will:

- Provide opportunities for the children to learn, apply and strengthen essential skills required in the designing, making and evaluating of an effective product for a given purpose.
- Ensure that the children are well-equipped with useful technical knowledge to support them in the design and making of their product.
- Begin to develop the children's use and understanding of technical knowledge and the vocabulary associated with this subject so that the children can articulate the skills that they have applied, the equipment that they have used and describe the material/s and features of the product that they have made.

Implementation

Foundation Stage

DT is taught in Nursery and Reception through the EYFS Development Matters Curriculum in a cross curricular approach. Relevant areas include:

Physical Development: Moving and handling.

Personal, Social and Emotional Development: Self-confidence and self-awareness,

Understanding the World: People and Communities and The World

Expressive Arts and Design: Exploring and using media and materials

Being imaginative:

Communication and Language: Understanding, Speaking and Listening

Characteristics of Effective Learning: Playing and Exploring, Active Learning, Creating and Thinking

Critically support children's learning across all areas.

Key Stage 1

DT is taught according to the requirements of the National Curriculum programmes of study.

Subject content KS1

Design

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

Make

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

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

The DT curriculum is delivered throughout the school through discrete lessons but cross-curricular links are established to the half-termly topic where possible.

We use key texts and experiences to enhance learning where possible. DT techniques are revisited at various points through the year to enable pupils to make connections and embed learning. Specific DT vocabulary will be taught to support pupils to talk about the subject.

Specific details of what is taught and when are outlined in the Subject Knowledge Plans, with detailed expectations of content written in the Knowledge Organisers for each half term. The Knowledge Organisers also identify key vocabulary and related texts.

Resources

Resources to support learning in DT are being developed and stored in subject boxes and electronically on the school server. The DT resources are stored centrally in the art cupboard in the reception area and some resources (paper, card, paint, glue) are stored in the creative areas in each classroom. Each classroom also has a selection of books to support the current aspects of DT teaching. Visits and visitors to school are used to enhance and develop the children's understanding and learning in DT where appropriate.

Equal Opportunities

All children regardless of gender, age, creed, ethnicity, (or any other protected characteristic) aptitude or ability have equal access to the range of activities and experiences offered in DT.

Special Needs

All children will have access to all areas of the DT Curriculum. Children with SEND will be given differentiated tasks, according to their individual needs and abilities.

How to help at home

- Your child can practise design skills by, for example, cutting out pictures from old magazines or cards, and folding and manipulating the paper to make moving pictures. Or they could use dough or plasticine to model their ideas.
- Create a 'design box'. Recycle things like empty egg boxes, pipe cleaners, lollipop sticks, elastic bands, cotton reels, bits of card and plastic. Include masking tape, a hole punch and scissors. Your child can use these to create anything - miniature playground frames and swings, houses, furniture, or even alien beings!
- Ask your child to look for examples of levers and sliders at home. Investigate how doors hang, flaps swing, drawers slide, buttons press and locks click. Encourage your child to be more aware of how things have been designed around the home for specific purposes and people.
- Ask your child how he or she might go about creating a fruit or vegetable salad or smoothie that is designed to look and taste great. Talk about the type of 'treatment' different fruit and vegetables require before they can be eaten, such as washing, cooking and peeling.

Assessment and Recording

- Each term every child in EYFS is assessed using the EYFS Development Matters document and given an attainment level in months based on their knowledge of Expressive Arts and Design: Exploring and using media and materials, Being imaginative
- By the end of KS1 children are expected to know, apply and understand the skills and knowledge outlined in the relevant program of study for DT as detailed in our DT End Points.

Responsibilities and Review

- All teaching staff have responsibility for implementing all aspects of this policy.
- The DT subject leader has the role of monitoring DT through lesson drop ins, book scrutiny, planning scrutiny, discussions with pupils and teachers and environment walks.
- The DT subject leader will review this policy and the curriculum as required.