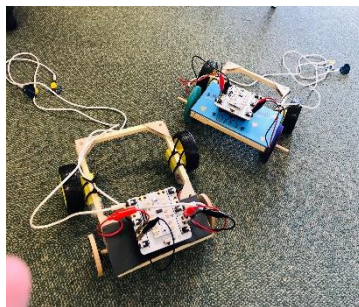


Brockwell Junior School

Design and Technology Policy



Introduction

In partnership with parents, the whole school will deliver excellence in Design and Technology at all levels with a clear mission to be Safe, Smile & Succeed. Design and Technology is an inspiring, rigorous and practical subject. At Brockwell, we encourage children to think and intervene creatively to solve problems both as individuals and as members of a team. Children are encouraged 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. At Brockwell we encourage children to develop their STEM skills and promote the use of mathematics, science, engineering, computing and art skills. The children are also given opportunities to reflect upon and evaluate past and present design technology. Children are encouraged to take risks and are challenged to think about how they might change the world.

Through real, relevant problems, within a variety of contexts and projects, all children have the opportunity to explore systems and gain an understanding of how they can use technology to **change the world**.

At Brockwell, we follow the KAPOW scheme of work. The curriculum is organised around six key areas (Structures; Mechanisms; Textiles; Electrical systems; Digital world; and Cooking and nutrition) and four key strands (Design, Make, Evaluate, and Technical Knowledge). Each series of Design and Technology lessons are broken down into the core principles: **Design, Make, and Evaluate**.

Teachers are encouraged to set one Design and Technology unit as a home learning challenge each term. Key areas are identified on the progression map to ensure successful skills progression, with additional units available to supplement this.

Design and Technology is an exciting practical subject, which allows pupils to make sense of appliances and processes in their environment. Children can develop:

- creative skills through planning, designing and making things;
- teamworking skills through joint project work with other pupils;
- technical / craft skills by carefully working with a range of tools and materials.
- Make links with computing skills

Our Aims

At Brockwell Junior School we aim to give pupils:

- a knowledge and understanding of materials, components, controls and structures;
- practical tasks to develop skills using tools and handling materials;
- the opportunity to investigate, disassemble and evaluate a range of simple products;
- the opportunity to design and make real world objects;
- the skills to evaluate and modify existing systems to improve their functionality;
- to understand how food is prepared safely ;
- to enjoy food and begin to work creatively with different ingredients;
- a safe working environment (in accordance with the guidance given in “Make it Safe”);
- We aim to develop children’s ability and confidence in formulating ideas in the designing, making and evaluating process.

Teaching Methods

Pupils will be given the opportunity to work within groups and on an individual basis. Work will be mainly practical. Whenever possible, outside D&T experts will be brought into school to work with pupils (eg, K’nex Challenge) and the school will seek opportunities for extra – curricula D&T work (eg, Chesterfield Urban Studies Centre ‘Tower Building’ day and SETPOINT ‘Build it’ Challenge at Kelham Island in Sheffield).

Team teaching is also used (when a lesson is taught not by one, but by two teachers) as a way of combining expertise and providing an additional resource for pupils. Design and Technology coordinator to support in practical lessons, if necessary.

Implementation

Teachers follow the KAPOW scheme of work. Wherever possible, we will link D&T assignments with the topics being covered in each year group. We believe that the KAPOW scheme, which allows scope for investigation, design and original project work, whilst using increasingly challenging technical settings, is ideal for our school pupils’ needs. Alongside this, teachers are encouraged to link to computing topics where possible. For example Buggy making and coding in Year 6.

The scheme of work is matched to pupil’s abilities and ensures progression and continuity throughout the school.

Design and Technology is usually taught by the class teacher and the Scheme of Work enables teachers to plan effectively ensuring a balanced coverage. Each teacher has a resources folder containing the scheme of work, relevant units from KAPOW and extra skills/information sheets for pupils/teachers. The scheme of work shows what resources are required and makes useful links with computing and STEM.

Assessment

Ongoing teacher assessment is an integral part of good practice. Teachers will match the tasks set to the abilities and needs of the pupils as they progress. Evidence of children's work, (such as planning sheets) photographs, designs, evaluations may be kept by the teacher or photos and evaluations can be uploaded to a child's Seesaw portfolio

Organisation of Resources

A range of materials and tools are kept in the resources room. This enables safe storage and ease of access for the class teacher. Resources will be replaced annually.

Health and Safety

Teachers are to ensure the safe use of tools and equipment. Pupils should have safe, controlled access to tools and equipment and be clear as to their intended use. Design and technology equipment is tested annually for safety.

Equal opportunities

All children regardless of ability, gender, race or cultural background will be given equal opportunity to be involved in designing and making tangible products which are of good quality.

The role of the Design and Technology Co-ordinator

The design and Technology Co-ordinator is responsible for the development and monitoring of the Design and Technology curriculum. They will:

- update the school's policy and Scheme of Work when appropriate.
- maintain and replace technology equipment when required.
- give support to other teachers as and when required.
- attend courses and inform staff of any developments in Design and Technology.
- Make links to computing and begin to adapt a STEM curriculum.

POLICY REVIEW

This policy will be reviewed at least every two years.

Dan Power

Design and Technology coordinator

October 2023

To be reviewed by September 2025