Stepping Stones (Short Stay) School

Design & Technology Policy

Purpose of Design & Technology Study

Design and Technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages our children to become autonomous and creative problem solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of D&T, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as of functions and industrial practices. This allows them to reflect on and evaluate present and past D&T, its uses, and its impacts. D&T helps all children to become discriminating and informed consumers and potential innovators.

Mission Statement

At Stepping Stones we value and are dedicated to the teaching of D&T. We are committed to providing an Arts rich curriculum. The skills which are learnt within D&T can be transferred across the curriculum thus aiding learning.

Through the teaching of D&T, we focus on:

- Observing detail
- Problem solving and reasoning
- Sensitive, analytical and critical responses
- Increasing confidence
- Striving for very high standards.
- Raising self esteem
- Developing imagination and creative expression
- Investigative Techniques
- Opportunities to compare, contrast and appreciate different cultures.
- Evaluation skills.

Aims Our curriculum for D&T aims to ensure that all pupils:

- 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 high quality prototypes and products for a wide range of users.
- 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.

Planning and allocation of time

- Design & Technology is managed effectively and creatively, allowing pupils sustained time for some work, and is taught by each class times three a year, as each class has three DT projects throughout the year. They are mapped out on the subject long-term plans and focus on different skills.

Intent:

Programmes of Study Through the teaching of Design & Technology, the following skills are taught:

Key Stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills necessary to engage in an interactive process of design and making. They should work in a range of relevant contexts (for e.g., home and school, playground, the local community, industry, and the wider environment).

When designing and making, pupils should be taught to:

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 (e.g., cutting, shaping, joining, and finishing)

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 (e.g., levers, sliders, wheels, and axles).

Key Stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills necessary to engage in an interactive process of design and making. They should work in a range of relevant contexts (for e.g., home and school, playground, the local community, industry, and the wider environment).

When designing and making, pupils should be 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 (e.g., cutting, shaping, joining, and finishing) accurately.
- Select from and use a wider range of materials and components, including construction materials, textiles, and ingredients, according to their functional properties and aesthetic qualities.

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.

Technical Knowledge

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- Understand and use mechanical systems in their products (e.g., gears, pulleys, cams, levers, linkages).
- Understand and use electrical systems in their products (e.g., series circuits incorporating switches, bulbs, buzzers, and motors).
- Apply their understanding of computing to program, monitor and control their products.

Cooking and Nutrition

As part of their work with food, pupils are taught how to cook and apply the principles of nutrition and healthy eating. We instil a love of cooking in our pupils. Learning how to cook is a crucial life skill that enables our pupils to feed themselves and others affordably now and in later life.

Pupils are taught to:

Key Stage 1

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

Key Stage 2

- Understand and apply the principles of a healthy and varied diet.
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking.
- Understand seasonality and know where and how a variety of ingredients are grown, reared, caught, and processed.

Implementation:

At Stepping Stones, we are currently using a Design and Technology scheme to deliver our DT curriculum. The scheme was introduced to support staff with upskilling their understanding of the DT curriculum and to try and give a wider range of ideas and activities that can be used to engage our pupils. The aim of the scheme is to ensure that the unique nature of D&T is maintained and valued throughout our delivery of the subject and we strive to engage our pupils in a creative and inspiring way.

Impact:

Equal Opportunities and Differentiation

All our children have equal access to resources and materials. Activities are differentiated to ensure the needs of pupils are met. Work produced by all pupils is valued and celebrated through daily meetings and display. Pupils who show particular aptitude are identified, encouraged and given opportunities to flourish. The highest standards from all pupils are expected.

Assessment and Recording

Class teachers are responsible for assessing the development of our pupils. Every pupil will have a learning log that details what they have been taught and then it will be assessed ‘emerging, developing, or secure’ against the learning objectives, this will indicate what the pupils’ understanding is. Each pupil will have their own Design and Technology book, which is where their learning will be stored.

The Role of the Design & Technology Subject Leader

- Support class teachers with the provision for teaching D & T.
- Ensure that the Skills list is being used, updated, and referred to, informing planning and differentiation.
- Monitor and order resources.
- Ensure D & T work is displayed.
- Build a portfolio of outstanding D & T work.
- Monitor each class lessons to recognise good practice and offer support.

Health And Safety – Design & Technology

Adults should ensure that:

- DT equipment is not left out and unsupervised.
- Tools used must be of good quality, in good condition and stored safely.
- Direct safety instructions should be given to pupils each time they undertake a D & T activity.
- Pupils should be given suitable instruction on the operation of all equipment before being allowed to work with it.
- Pupils should be strictly supervised in their use of equipment at all times.
- Pupils should be taught to recognise and consider hazards and risks and to take action to control these risks.

Date of Approval	July 2024
Signed: MC Chair	
Signed: Headteacher	
Review date	June 2025
Review date:	June 2027

Associated Policies:

Healthy Eating