

Barlby Bridge Primary School Design and Technology Policy



Date – May 2021

Review Date – October 2023

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 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 to developing ideas, and eventually making products and systems. Design and Technology helps all children to become discriminating and informed consumers and potential innovators.

Mission Statement

As a school we value the teaching of design technology. We are committed to providing an arts and design rich and creative curriculum for our children. We see design technology as a means to supporting learning in a range of ways. The skills that are developed in these subjects can be transferred across the curriculum and thus aid learning.

Through the teaching of design technology we focus on:

- Observing detail
- Problem solving and reasoning
- Sensitive, analytical and critical responses
- Striving for high standards
- Raising self esteem
- Imagination and creative expression
- Investigative techniques
- The opportunity to compare, contrast and appreciate different cultures
- Evaluation skills

Aims

The national curriculum for design and technology aims to ensure that all pupils:

1. Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
2. Build and apply knowledge, understanding and skills
3. Critique, evaluate and test their idea and products and the work of others
4. Understand and apply the principles of nutrition and learn how to cook

Programmes of study

Through teaching design technology the following are taught through a variety of creative and practical activities. Pupils should be taught the knowledge, understanding and skills needed to engage in an interactive process of designing and making. They should work in a range of relevant contexts for example in the home, school, garden, playground and wider community.

Pupils should be taught:

Design

1. Design purposeful, functional, appealing products for themselves and other users based on a design criteria
2. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock ups and where appropriate information and communication technology

Make

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

Evaluate

1. Investigate and analyse a range of existing products.
2. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
3. Understand how key events and individuals in design and technology have helped shape the world.

Technological Knowledge

1. Apply their understanding of how strength, stiffen and reinforce more complex structures.
2. Understand and use mechanical systems in their products for example pulleys, gears, cams and levers.
3. Understand and use electrical systems in their products for example series circuit incorporating switches, bulbs, buzzes and motors.
4. Apply their knowledge of computing to program, monitor and control their products.

Cooking and Nutrition

As part of their work with food pupil should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is crucial life skill that enables pupils to feed themselves and others affordably and well now and in later life.

Pupils should be taught to:

Key Stage 1

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

Key Stage 2

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

Equal Opportunities/Special Educational Needs/Differentiation

Children with SEND have equal access to resources and materials. Activities are differentiated to ensure the needs of pupils are best met. Work produced by all pupils is valued and celebrated through display, assemblies and class activities. Children who show particular aptitude are identified, encouraged and given opportunities to flourish. All children are encouraged to perform and performances are valued and high standards are expected.

Assessment and Recording

Class teachers are responsible for assessing the development of individual pupil's skill in relation to the Progression Document. This is reported to parents annually.

The Role of the Design Technology Subject Leader

1. Support class teachers with the provision for teaching design technology.
2. Monitor progress of the subject across the school.
3. Monitor and keep stock of the schools resources for design technology.
4. Ensure that DT displays are updated.
5. Build links with other schools.
6. Build a portfolio of outstanding DT work in order to meet the requirements of Ofsted subject inspections.
7. Informal drop in lessons when teaching DT to recognise good practice.

Health and Safety – Food Technology

When working with food:

- An adult will be required to supervise activities including cooking and food handling.
- When undertaking food activities the appropriate health and safety procedures must be adhered to.
- When working with food all children should follow personal hygiene guidance.
- Any perishable food should be stored in the fridge.
- Only the equipment which is for food use only should be used.
- Glass and wooden items should never be used.
- Ensure that the plastic work sheets cover the desk area and are wiped over with a steriliser.
- Set aside an area for children to wash their hands.
- Teachers taking part in food activities should dress appropriately and follow the same procedures as the children with regards to any rules regarding personal hygiene.
- Ensure that all equipment is cleaned and put away.
- Ensure that all children use their own equipment when tasting food.

Health and Safety – Design Technology

Adults should ensure that:

- DT equipment is not left out and unsupervised. Floors and work surfaces are kept clean and tidy and all tools used must be of good quality and stored safely.
- Direct safety instructions should be given to children each time they undertake a DT activity.
- Children should be given suitable instruction on the operation of equipment before being allowed to work with it.
- Children should be strictly supervised in their use of equipment at all times. Adult to child ratio must be appropriate to the activity.
- Children should be taught to recognise and consider hazards and risks and to take action to control these risks.