Design and Technology Policy

Brierley CE (VC) Primary School

Approved by:	Governing Body	**Date:**	Autumn 2023
Last reviewed on:	September 2023		
Next review due by:	September 2024		

Contents

1. Purpose of the policy

This policy reflects the aims and values of Brierley CE (VC) Primary School. It ensures all stakeholders, including staff, governors, parents and pupils, are working towards the same goals.

The purpose of this policy is to:

- Set out a framework for all teaching and non-teaching staff, giving guidance on planning, teaching and assessment for Design and Technology
- Demonstrate adherence to the National Curriculum objectives and guidelines
- Provide clear information to parents and carers about what their children will be taught in Design and Technology
- Allow the governing board to monitor the curriculum subject
- Provide Ofsted inspectors with evidence of curriculum planning and implementation of Design and Technology

This policy will be available on our school website https://www.brierleyschool.com/

2. Subject vison

Here at Brierley CE (VC) Primary School, we believe that a high-quality Design and Technology education will help to engage and inspire children to become resourceful and innovative individuals who use creativity, imagination and interaction skills to participate confidently, safely and successfully in design technology projects. Our children show endurance and resilience and are able to self-evaluate. In our school children feel a sense of achievement and are proud to share their DT work.

Our Design and Technology curriculum has active engagement through multi-sensory learning. It encourages demonstrating understanding of learning in a variety of ways and the consolidating of knowledge. Each lesson builds progressively on taught skills, as does each year group. All teaching of DT should follow the design, make and evaluate sequence.

3. Aims and outcomes

The Brierley Curriculum for Design and Technology aims to ensure that all pupils can:

- Foster an understanding and enjoyment of design.
- Prepare learners for life-long learning by providing opportunities to pursue their interests and talents.
- Offer opportunities to stimulate children's creativity and imagination by providing visual, tactile and sensory experiences and a unique way of understanding and responding to the world.

- Explore ideas, express themselves and produce creative work.

- Evaluate and analyse creative works using a rich language of design.
- Help them to learn about the function of art, craft and design in their own lives and in different times and cultures.

4. Teaching and learning

Our approach to Design and Technology curriculum is through creating lessons that engage, challenge and excite pupils, which is underpinned by KAPOW scheme of work. This structures teaching and learning through designing, making and evaluating.

The key concepts, principles and themes have been developed from the National Curriculum into a scheme of progressive knowledge and skills, where pupils are encouraged to grow, develop and enhance their skills in Design and Technology in 21st century Britain.

The curriculum is designed to meet the needs of all our pupils. It is rich, varied and creative, giving children the handle on their own designs and ideas. It is imaginative and ambitious whilst being easily adapted for pupils with additional needs. It is knowledge and skills based and allows for creative lessons that build sequentially. This enables us to move away from discrete lessons and into a more meaningful and purposeful sequence of learning.

Design and Technology is taught in all year groups by class teachers. Lesson plans are based around the subject's long-term plans from KAPOW and resources are available to adapt to meet the needs of all learners. Objectives are adapted to suit the stage of development for the pupils in each class. The teaching of Design and Technology might involve:

- Whole-class teaching
- Small group discussions
- Handling design model examples
- Looking at models already made for product research
- Individual projects/research
- Designing
- Making
- Analysing and evaluating end products

5. Curriculum overview

5.1 Early Years Foundation Stage (EYFS)

Expressive arts and designs (Exploring using media and materials)

Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture and function.

Expressive arts and design (Being imaginative)

Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings, through design and technology, art, music, dance, role play and stories.

5.2 Key Stage (KS) 1

In KS1, pupils will:

- 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
- 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
- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria
- 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.
- Cooking and Nutrition**:** Use basic principles of a healthy and varied diet to prepare dishes
- Cooking and Nutrition: Understand where food comes from

5.3 Key Stage (KS) 2

- 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 and exploded diagrams, prototypes, pattern pieces and computer-aided design
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, 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
- 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
- Understand how key events and individuals in design and technology have helped shape the world
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- Apply their understanding of computing to program, monitor and control their products
- Cooking and Nutrition: Understand and apply principles of a healthy and varied diet
- Cooking and Nutrition: Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- Cooking and Nutrition: Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

5.4 Programmes of study

	Autumn term		Spring term		Summer term
EYFS	Junk Modelling	Seasonal Projects	**Textiles** – Book marks	**Food**- Soup	**Structures** – Boats
Year 1	**Mechanisms**- Wheels and Axels		**Food**- Fruit and Vegetables		**Structures**- Constructing a Windmill
Year 2	**Textiles**- Pouches		**Food**- A Balanced Diet		**Mechanisms**- Making a Moving Monster
Year 3	**Textiles**- Cushions		**Food**- Eating seasonally		**Structure**- Constructing a castle
Year 4	**Mechanisms**- Slingshot Cars		**Electrical Systems**- Torches		**Food**- Adapting a Recipe
Year 5	**Electrical System**- Electronic greetings cards		**Mechanical Systems**- Pop up books		**Food**- What could be healthier?
Year 6	**Textiles** – Waistcoats		**Structure**- Playgrounds		**Digital World**- Navigating the world

6. Assessment and recording

6.1 Assessment

Brierley CE (VC) Primary School uses assessment to enable staff to understand what pupils have learnt before, what they need to learn now and what they will learn next.

Formative assessment
Formative assessment is on-going throughout each lesson and each unit of work. It supports teachers with their planning and ensures they make flexible adaptions to support all pupils' needs. Throughout this, tasks are then matched to ability ensuring they are ambitious and set challenge for all. These are differentiated through level of support and key questioning.

Summative assessment
Insight Tracker is used as summative assessment. The knowledge and skills learning goals are highlighted to identify any gaps in learning that can then be addressed and inform teachers in the following year groups.

Summative assessment is completed termly, based on the DT skills that the medium-term plan requires as a key focus.

At the end of each school term, pupils will be assessed within 1 of the following bands:

- Pre-Key Stage (PKS)
- Working Towards the curriculum (EM)
- Working at Expected (EXP)
- Working at Greater depth (EXC)

Marking
Children receive regular feedback and marking follows the school's marking policy.

6.2 Recording

In Design and Technology, pupils will record their learning in the following ways:

- DT folders
- Reception-Individual Learning Journey

7. Resources

7.1 Textbooks and other equipment

KAPOW scheme of work is followed to teach and deliver the Design and Technology curriculum.

Equipment lists are created each half term to ensure the relevant resources are in school in order to deliver the lessons effectively.

8. Roles and responsibilities

8.1 Headteacher

The headteacher at our school will:

- Support the subject leader but also hold them to account for the effectiveness of the subject
- Support staff through the provision of training and resources
- Monitor the planning and delivery of the subject
- Ensure the requirements of the National Curriculum are met

- Ensure this policy is reviewed according to the timescales set out

8.2 Subject leader

The subject leaders at our school will:

- Prepare and review subject policy and curriculum plans
- Promote the study of the subject throughout the school
- Monitor the teaching and assessment of the subject
- Attend appropriate CPD
- Stay informed regarding developments in the study and teaching of the subject
- Evaluate resources
- Provide training and CPD to staff on the subject curriculum and its delivery, and keep them informed about subject developments nationally
- Assess the impact of the subject curriculum on pupils' learning and development
- Make presentations to governors on the subject and how it is being taught

8.3 Link governor

The link governor responsible for Design and Technology at our school will:

- Monitor the impact of the subject across the school and on pupils
- Monitor teacher workload and professional development
- Ensure subject action plans are suitable
- Keep track of pupil and parental engagement with the subject
- Keep up to date with the curriculum (what's taught, why it's taught, and how it's taught)

8.4 Classroom teacher

Classroom teachers at our school will:

- Teach and assess the subject according to the principles laid out in this policy
- Report to the subject leader
- Maintain subject knowledge and appropriate CPD

9. Inclusion

• All children will be supported through adaptation or adult support, to enable equal access to learning in Design and Technology.

• Topic vocabulary is explained to the children from the onset of the topic, with accompanying definitions and visual cues, to ensure that all children develop and are able to use a range of vocabulary according to the project.

• Key knowledge for all children is also provided on knowledge mats, which are available for all children to refer to throughout the study.

• Teachers set high expectations for all pupils in Design and Technology. They use appropriate assessment to set ambitious targets and plan challenging work for all groups of children.

10. Links to other policies

This subject policy links to the following policies and procedures:

- Curriculum policy
- Assessment policy
- Marking policy
- SEN policy

11. Monitoring and review

This policy will be reviewed by staff and governors each year.