

Broom Barns Primary School Design & Technology Policy

July 2022

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Our work now follows the Design and Technology Progression Framework from the new 2014 National Curriculum.

Design Technology prepares pupils to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of life. The subject calls for pupils to become autonomous and creative problem solvers, as individuals and members of a team. They must look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems. They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so, they reflect on and evaluate present and past design technology, its uses and effects. Through design technology, all pupils can become discriminating and informed users of products, and become innovators.

Pupils should be taught to develop their design and technology capability through combining their designing and making skills with knowledge and understanding, in order to design and make products.

AIMS

The national curriculum for design and technology 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 and make 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.

TEACHING AND LEARNING

To maximise learning in Design Technology children need to be given opportunities to handle and manipulate products and tools, in order to develop a deeper understanding of what they are learning. Children should be given opportunities to learn through whole class teaching, individual and group work. Their learning should include investigative, disassembly and evaluative activities,

focused practical tasks, design and make assignments, and evaluations of what they feel they have achieved.

Early Years

Early Years Expressive Arts and Design is one of the 4 key areas of the EYFS framework. It involves supporting children to explore and play with a wide range of media and materials, as well as providing opportunities and encouragement for sharing their thoughts, ideas, and feelings through a variety of activities in art, music, movement, dance, role-play, and design and technology. Children in Early Years work on a range of creative themes and tasks, and their work in Expressive Arts and Design links closely to other areas, especially Physically Development.

PLANNING

Planning is based on the Design and Technology Progression Framework from the new 2014 National Curriculum with units being adapted to complement topic themes and a creative curriculum in each year group- see attached long-term planning overview. Both Key Stage 1 (KS1) and Key Stage 2 (KS2) carry out work on a yearly cycle with each year group working on three specific Design Technology projects each year. Each project is planned for in medium term planning grids and in topic planning.

Teachers should refer to the Progression Framework when planning and can supplement this with resources from the Design and Technology Association (DATA), such as the "Projects on a Page" documents. Teachers should not see the ideas and suggestions from the Framework as being prescriptive and are encouraged to develop their own ideas, within the aims and objectives of each unit, as appropriate to the age range and what is being taught in other areas of the curriculum, to develop cross curricular links.

Planning should take into consideration different learning styles and provide opportunities for the children to maximise their learning opportunities. Planning should show differentiation of activities to match the differing abilities of children and should ensure progression of skills, concepts and techniques.

EQUAL OPPORTUNITIES

It is the policy of Broom Barns Primary School to ensure that every child receives an equal opportunity within Design Technology activities, regardless of race, gender, ability or Special Educational Needs.

SPECIAL NEEDS

Any children who are identified as having 'special needs' are given the help that they require to enable them to access the design technology curriculum. Where children have a degree of physical, sensory or behavioural difficulties in the making of products, they should be encouraged to participate in Design Technology activities with help from others.

GIFTED AND TALENTED

Staff must ensure that there are adequate opportunities for Gifted and Talented children and these should be noted within planning where appropriate. The DT and Gifted and Talented

coordinators should be informed. Pupils who are Gifted and Talented within DT are offered the same curriculum as all other children however they may work on activities at an extended level.

ASSESSMENT, RECORDING AND REPORTING

There is no statutory requirement for formal assessment of each strand of Design Technology to take place, however teacher assessment is used to inform future planning and to review children's progress. Design Technology assignments are used throughout the school to assist teachers in making formative and summative assessments.

Children are encouraged to make oral or written evaluation of their work in Design Technology, where appropriate children will use design sheets or booklets to plan, record, assess and evaluate their work. Teachers are expected to record observations of children's progress and where possible evidence will be kept in the form of children's written work, finished products or photographs.

Parents receive written information about children's learning and progress in Design Technology as part of their child's end of year report.

IMPACT

Design and Technology feedback is given verbally by teachers, teaching assistants and sometimes by peers. Every class will have a Design and Technology book with evidence, where teachers will follow the school's marking policy. They will have written feedback in the form of next steps to challenge and progress learning where appropriate. Assessment judgements are based on whether a child has met the learning objectives or not. Assessments will be made by class teachers after each term and these will be used to support an end of year assessment judgement for effort and attainment. The subject leader will check Design and Technology books every half term.

RESOURCES

The school has a range of resources for use in Design Technology, which are developed and added to in line with developments within the curriculum area. The outdoor areas will contain opportunities for working on Design and Technology projects, including construction kits, sand and water. Resources will be made whenever possible linked to projects which are self-generated by the children within the Early Years. As well as practical resources and tools there are teacher and children's reference books. There is a central store of materials and equipment in the pit, which for health and safety reasons only staff may access. It is the responsibility of all staff to keep the central store tidy and organised.

HEALTH AND SAFETY

At all times children and adults must work within the Health and Safety guidelines. This is particularly the case when completing Food Technology tasks using equipment such as microwaves, ovens, blenders and toasters. All staff are asked to refer to / complete if necessary a Risk Assessment before completing such activities. Staff are also asked to consider the age of the children and the level of adult supervision felt necessary during activities involving DT hand tools e.g. saws, drills, glue guns, knives. Staff can also access guidelines relating to health and safety issues pertinent to Design and Technology within the school's Risk Assessment folder.