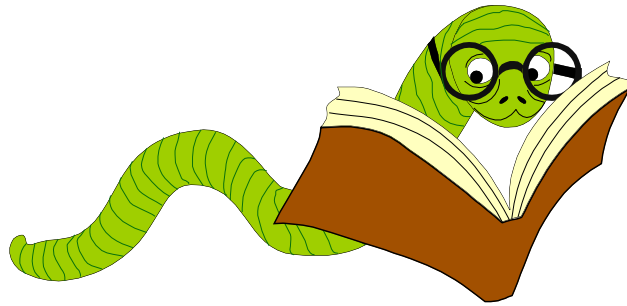


Broadbent Fold Primary School and Nursery



Design and Technology Policy

September 2023

In line with the Equalities Act (2010) we aim to ensure that any child, irrespective of protected characteristics (These are age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.) is treated fairly and with respect. The law states that the public sector equality duty includes a general duty to, "Foster good relations between people who share a protected characteristic and those who do not." This policy can be adapted to suit individual needs.

Our School Vision

At Broadbent Fold we enable each child to unlock their talents and celebrate their individual successes. We are preparing our children for the opportunities and challenges they will encounter in our community and the wider world.

We aim to achieve this by:

- Fostering **positive relationships** striving for empathetic, tolerant and respectful children.
- Equipping our children with essential, practical skills to enable them to flourish, develop and **succeed in the future**.
- Teaching through our creative curriculum encouraging children to take ownership of their learning in order to **develop enquiry, interest and confidence**.
- Encouraging our children to develop **independence**, so they become global thinkers and aspire for excellence.
- Nurturing their physical and emotional well-being to develop well-rounded, **happy, resilient** children.
- Working **collaboratively** with our families to ensure all children reach their full potential.

Introduction

Design and Technology prepares children to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of life. The subject calls for children 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 and technology, its uses and effects. Through design and technology, all children can become discriminating and informed users of products, and become innovators.

Statement of intent

Through design and technology, we aim to provide experiences relevant to the children with continuity, support and extension to lead them to develop skills and understanding for the rapidly changing modern world.

Specific aims that will be employed are:

- To provide all children with equal access and opportunity to design and technology, with particular awareness of gender and technology in other cultures.
- To encourage an understanding of technology in our everyday life and develop the technological capability of our children, with respect to the whole curriculum.
- To install good Health and Safety attitudes and habits.
- To ensure progression and differentiation within the process of Design and Technology and the context as outlined within the National Curriculum, considering all individual needs.
- To enable children to see Design and Technology as a whole process and not as unrelated tasks and activities.
- To encourage children's logical and creative thinking, problem solving skills and strategies, and building upon their practical skills.
- To provide opportunities for social skills development involving both group work and cooperation.
- To provide appropriate resources at all times.

Legal framework

This policy has due regard to all relevant legislation and statutory guidance including, but not limited to, the following:

- [Updated] DfE (2023) 'Keeping children safe in education 2023'
- DfE (2013) 'Design and technology programmes of study: key stages 1 and 2'
- The School Admissions (Infant Class Sizes) Regulations 2012

This policy operates in conjunction with the following school policies:

- Health and Safety Policy
- First Aid Policy
- Curriculum Policy
- Special Educational Needs and Disabilities (SEND) Policy
- Behaviour Policy

Teaching and Learning

Early Years and Key Stage 1

Children are encouraged to think imaginatively and to talk about what they like and dislike when designing and making. They plan what has to be done and identify what works well and what can be improved in their own and other people's designs. They build on their early childhood experiences of investigating objects around them. They explore how familiar things work and talk about, draw and model their ideas. They learn how to design and make safely and start to use ICT as part of their designing and making. Children may work in pairs and small groups for some activities.

By the end of KS1, children will be able 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 and mock-ups and, where appropriate, ICT.

Make

- Select from and use a range of tools and equipment to perform practical tasks, e.g. 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.

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, in their products.

Through a variety of creative and practical activities, children will be taught the knowledge, understanding and skills needed through a variety of creative and practical activities. They should work in a range of relevant contexts, e.g. the home, school, leisure, enterprise, industry and the wider environment.

Key Stage 2

During Key Stage 2, children work on their own and as part of a team on a range of designing and making activities. They think about what products are used for, and the needs of the people who use them. They plan what has to be done and identify what works well and what could be improved in their own and other people's designs. They draw on knowledge and understanding from other areas of the curriculum and use ICT in a range of ways.

Design and Technology is taught through three different capabilities:

- Focused practical tasks
- Investigate, disassemble and evaluate
- Design and make assignments

The majority of primary work will be focused tasks, but there must be a balance of the three ways of working.

By the end of KS2, children will be able 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 and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make

- Select from and use a wider range of tools and equipment to perform practical tasks accurately, e.g. cutting, shaping, joining and finishing.
- 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.
- Understand how key events and individuals in D&T have helped shape the world.

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, and 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, children will be taught how to cook and apply the principles of nutrition and healthy eating. Learning how to cook is a crucial life skill that enables children to feed themselves and others affordably and well, now and in later life.

By the end of KS1, children will be able to:

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

By the end of KS2, children will be able to:

- 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 techniques.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Cross-curricular links

Where possible Design Technology will be taught as part of each unit's cross-curricular learning themes, Standalone units of work may be taught in order to ensure appropriate coverage of a range of skills, techniques and media (This coverage may be during D&T weeks or through curriculum blocking which happens as our whole school approach to cross curricular teaching).

Continuity and Progression

Continuity is achieved through whole school long-term planning and year group Key Knowledge strands that are fed into our medium and short-term planning. This ensures that previously learnt skills are built on and a common and consistent language is used.

Inclusion and Equal opportunities

All children will have equal access to the Design and Technology Curriculum. Gender, learning ability, physical ability, ethnicity, linguistic ability and/or cultural circumstances will not impede a child from accessing English lessons.

If English is an Additional Language (EAL), a Teaching Assistant will be allocated to the child to provide extra help where needed. Additionally, support from outside agencies may be put in place. Where it is inappropriate for a child to participate in a lesson due to reasons related to any of the factors outlined above, the lesson will be adapted to meet the child's needs and alternative arrangements involving extra support will be provided where necessary.

Cultural and gender differences are positively reflected in lessons and teaching materials used. The school will remain an inclusive school that ensures all children are provided with equal learning opportunities, regardless of their characteristics or backgrounds and that reasonable adjustments are made where necessary to enable all children to participate in the D&T curriculum.

In order to ensure children with SEND achieve to the best of their ability, teachers will adapt targets and the delivery of the curriculum for these children. The D&T curriculum will be delivered in liaison with the SENCO to ensure that the specific needs of children with SEND are met, and reasonable adjustments are made as required.

The planning and organising of teaching strategies for each subject will be consistently reviewed to ensure that no pupil is at a disadvantage.

Assessment, Record Keeping and Reporting

Assessment and record keeping will be kept by individual class teachers and be based on evidence gathered through discussion and observation of the pupil during the lesson and by the child's recording of the activities, e.g. **researching, planning, designing, making and**

evaluating and photographing practical activities. All levels are based upon teacher assessment. Progress over the past school year, along with effort and motivation, will be reported in the end of year pupil report.

Monitoring & Evaluation

The subject leader will monitor Design and Technology through a variety of mechanisms including:

- Implementing this policy across the school.
- Maintaining resources and advising staff on the use of materials.
- Assisting the headteacher in deciding on the allocation of resources.
- Supporting teaching staff, advising and offering to share their expertise and experience.
- Leading staff training on new initiatives.
- Helping staff to plan future lessons and assessments and advising teachers on teaching methods they may wish to explore.
- Encouraging staff and children to be creative.
- Assisting the headteacher in reviewing this policy.

Monitoring the progression of teaching and learning through work/book scrutiny, lesson observations, pupil interviews; assessment data; to ensure curriculum coverage and standards of teaching and learning. The subject leader will also support colleagues in the teaching of design and technology and keep evidence of the children's work throughout the school in a portfolio.

Classroom teachers will:

- Plan and deliver interesting and engaging lessons that adhere to the national curriculum.
- Provide equality of opportunity through their teaching approaches and methods.
- Keep up-to-date assessment records.
- Ensure children's development of skills and knowledge progresses through their learning and understanding of D&T.
- Set children suitable targets based on prior attainment.
- Maintain an enthusiastic approach to D&T.

Health and Safety in Design and Technology

Children need to be taught the importance of using tools safely during the introduction of a D&T project. For example: holding tools appropriately, using them in the correct manner and for the purpose they are intended to be used for. It is the teachers' responsibility to ensure all children are aware of these health and safety issues prior to allowing children to use equipment.

Cooking and nutrition

Children need to understand the importance of food hygiene and the risks associated with

poor hygiene when embarking on a food technology project. It is the teachers' responsibility to ensure all children are made aware of hand washing, making sure surfaces and equipment are clean and are in correct working order before any activities involving food take place.

In order to maximise their learning experience, children will be allowed full access to a wide range of materials in D&T lessons; however, health and safety concerns are inherent with D&T, including storing materials and tools, and the use of equipment

Classroom teacher will:

- Assess the risk of each task before lessons.
- All tools and equipment, such as glue guns, will be visually inspected before use by the class teacher and are subject to regular testing by the D&T subject leader. It is also the duty of staff to recognise and assess the hazards and risks associated when working with food and other materials.
- Children will be supervised at all times during D&T lessons.
- Children will be taught how to use all equipment properly by the classroom teacher before the lesson; similarly, children will also be fully briefed on the importance of how to correctly use equipment and tools. Children will be managed in accordance with the school Behaviour Policy.
- Children will only be allowed to use a lower temperature glue gun under one-to-one supervision – an adult must use the glue gun at all other times. Glue guns will be considered alongside all viable alternatives such as adhesive tapes, blue tack and other fasteners, to ensure the most suitable materials are used for each project.

Food preparation – See Appendix 1

Resources and equipment

The school has a selection of centrally stored materials, tools and equipment to ensure that all children have access to the necessary resources. The D&T budget will cover the cost of materials and replacement tools. The subject leader and teaching staff will be required to maintain the tools and equipment.

Children may occasionally be asked to bring materials from home if they can; or start projects off at home however, to allow all children the same opportunities, children that are unable to do this will be provided for.

Food technology resources will be kept in a locked cupboard in Key Stage One and in the staff room(s) or school canteen.

At the start of each school year, the D&T subject leader will assess the school's D&T tools and materials to ensure there is sufficient equipment for children, allowing funds to be allocated where necessary.

Staff Development

Training is available to all staff through various providers, to support their personal professional development and/or school development priorities.

Policy Review

This policy will be reviewed in line with the Curriculum policies review timetable.

Appendix 1

Guidelines for Food Tasting and Preparation at Broadbent Fold Primary School and Nursery

General guidance for staff

Staff should ensure that a risk assessment is carried out before undertaking any activities associated with food particularly with regard to safety using equipment and allergies to food.

All ingredients that are to be used must be checked for 'use before dates' and stored in an appropriate place. All non-tinned/fresh food must be stored in the refrigerator. No unpasteurised milk products or uncooked meat products should be used in school. Fresh fruit and vegetables should be washed before use. All working surfaces should be cleaned and wiped with anti-bacterial spray prior to baking, cooking or food tasting for hygiene purposes.

A copy of the following will be discussed with children:

When preparing, cooking and tasting food:

1. Remove all rings, watches and bracelets that may trap germs and bacteria.
2. Wash hands with antibacterial soap.
3. Wear an apron.
4. Roll up sleeves.
5. Tie back long hair.
6. Make sure all cuts are covered with a plaster.
7. Wash hands thoroughly with antibacterial soap after:
 - a. Visiting the toilet
 - b. Blowing your nose
 - c. Coughing or sneezing
 - d. Touching hair, or other parts of the body, or anybody else
8. When tasting do not pick up a piece of food and then replace it– once handled, a
9. piece of food should be placed on your own plate.
10. Do not place a spoon or 'dipper' or cocktail stick back in the food after tasting.
11. Ensure food is covered if left lying out or put it into the fridge.

Perishable food will be stored sensibly and refrigerated if necessary. Care must be taken by teachers and teaching assistants to ensure food is not used after the given sell by date.

A fire safety blanket will be kept **next to the cooker** at all times.

If any cooking or food preparation is taking place in the classroom, all surfaces will be cleaned before and after use.

Volunteers will be supervised when working with groups of children.

- Teachers and Teaching Assistants will oversee that all cupboards, table tops and cookers are clean and in working order.
- All teaching staff will be aware of any allergies before cooking lessons.

Clearing up

1. When you have finished, scrape any waste solids on to a paper towel and place in the bin.
2. All dishes/utensils should be washed up in the appropriate sink or dishwasher.
3. Wash plate thoroughly in hot soapy water.
4. Use a clean kitchen towel to dry dishes.
5. Save only food which comes in re-sealable containers, store according to manufacturers' instructions and use by 'sell by' date.
6. Make sure all work surfaces are thoroughly wiped with anti-bacterial spray.