

Design & Technology Policy

Overview

This policy for D&T teaching and learning is underpinned by the school's generic curriculum policy for foundation subjects that sets out guidelines, practise etc. that should be adhered to in all foundation subjects. The areas covered in the generic curriculum policy are as follows:

- Curriculum coverage
- Teaching and learning guidelines
- Roles and responsibilities
- Inclusion
- Assessment, recording monitoring and reporting
- Key competencies

1) Aims and Opportunities

1.1 Aims

At Bridstow School we believe that we live in an increasingly technologically complex world in which creative and innovative designs and solutions are required to tackle the global issues facing both present and future generations. Preparing our pupils for further study of Design and Technology at high school and for life and work thereafter is a central aim of our D&T curriculum as well as providing them with a fascination and love of the design and creative processes involved. Our planning and practice is based upon the 2014 National Curriculum for Design and Technology.

1.2 Opportunities

Design and Technology offers opportunities for children to

- develop their capability to create high quality products through combining their designing and making skills with knowledge and understanding
- develop a sense of enjoyment and pride in their ability to make
- nurture creativity and innovation through designing and making
- develop an interest and understanding of the ways in which people from the past and present have used design to meet their needs

2) Organisation and Planning

2.1 Time allocation

Design and technology will be taught for 8-12 hours each term, depending on the project being undertaken. Design and Technology projects may be taught for 2 afternoons a week in 2 or 3 week blocks to give greater coherence to children's learning – this will be at the discretion of individual class teachers.

2.2 Planning

The D&T Association's Projects on a Page scheme of work provides the framework for learning and teaching in design and technology. Because of Bridstow's combined year group model, long term planning is based upon a 2-year rolling programme to ensure complete coverage and progression for all pupils (See long-term plan in appendix). One project is planned and undertaken each term. Teachers should use the project planners in the scheme imaginatively, whilst ensuring the learning objectives remain the same in order to ensure progression.

In the EYFS, regular design and technology activities are planned; some initiated by children and some led by adults.

Children in their designing and making will apply knowledge and skills of: textiles, food, mechanisms, mechanical systems and structures. Electrical systems are taught in KS2.

All design, make and evaluate assignments provide learning opportunities for developing creativity through designing skills such as generating, exploring, modifying ideas through drawing, and modelling with materials.

2.3 Computing

Programming and control is used in electrical systems projects in Y4 and Y6 to operate children's products. This builds on work developed in computing.

Paint software is used for finishing techniques and simple paper pattern making in textiles projects.

Computer Aided Design (CAD) software is used when children are designing the net for packaging.

2.4 Extending the curriculum

Children should develop an understanding of the design and made world through first-hand experience. Wherever possible children will be given opportunities to visit local museums, shops and restaurants and meet with designers, engineers, chefs, architects and students from college or secondary schools.

2.5 The learning environment

We aim to provide a learning environment where children feel secure and where creative risk-taking and problem-solving is encouraged and children's design ideas and suggestions ideas are valued.

2.6 Management and organisation of resources

The design and technology subject leader will order consumable resources at the end of each term for specific planned projects. A request for alternative or additional resources can be made at this time.

The consumable resources are stored in project-based boxes and must be used for the planned projects only. These are based in the central store (Oak teaching room) and can be taken to the classroom for the duration of the project.

Also included in the boxes are supporting materials: help sheets, worksheets and products for investigation, posters and photographs. Teachers are asked to check that supporting materials are complete prior to returning the project box to the central store.

Tools and equipment such as wire strippers, hacksaws, bench hooks, snips are kept centrally. Food will be bought and used on the day it is needed.

Utensils and equipment for food will be stored in the labelled box in the central store.

2.7 Health and safety

Risk assessments will be carried out prior to design and technology projects. Teachers will always teach the safe use of tools and equipment and insist on good practice. Children will be taught how to take steps to control risks. Low melting temperature glue guns will be used by children under supervision when there is no other appropriate joining technique.

2.8 Food – hygiene and safety

Any staff working with food will be appropriately trained and certificated (Level 2 Food safety and hygiene). He or she will ensure all equipment is clean and in working order. Plastic aprons will be worn by adults and children when working with food.

Prior to food activities, children who are not permitted to taste or handle food products or ingredients will be identified.

3) Links with other subjects and key competencies

Design and technology provides a natural opportunity for children to practice and improve basic skills such as spoken language, English and mathematics.

In our design, make and evaluate assignments we aim to provide learning opportunities for developing key competencies such as problem-solving, teamwork, negotiation, consumer awareness and organisation.

One project each year will focus on team or group work in Key Stage 2.

Through evaluating the process and their final products children will be encouraged to improve their own learning and performance.

Children develop and apply knowledge and skills from art and design, science, computing and English in design and technology. Teachers will make links wherever possible to help raise standards in both subjects and enhance children's learning.

The school curriculum map indicates how relevant subjects are grouped together with design and technology; specific links are made with science.