Brize Norton Primary School

DESIGN AND TECHNOLOGY POLICY

Philosophy

Design technology allows children to produce practical solutions to real problems. It teaches technical understanding, design methods and making skills. Children investigate their environment and the materials around them to help them prepare for living and working in a technological world.

Aims and objectives

Through the teaching of Design and Technology we expect our children to:

- Develop and maintain the confidence and ability to solve technological problems.
- Develop the social skills necessary to work as a team, as well as the ability to work independently when the situation demands.
- Make use of their natural curiosity, imagination and creativity to develop the ability to operate effectively in a technological world.

To enable our children to achieve these aims we plan to develop the following skills:

- Participation in focussed practical tasks.
- To investigate and evaluate existing products.
- To design, plan, make and modify.
- To be able to work in a range of appropriate contexts (home, school, community, recreation) using a wide variety of materials.
- To be able to use a wide variety of materials and tools confidently.

We aim to create a positive attitude by encouraging our children to:

- Develop an enthusiastic and enquiring approach to Design Technology thorough hands-on experience, where the real world can be investigated, changed and perhaps improved.
- Have confidence when discussing design and technology, and be able to put forward their comments and views.
- Work cooperatively and independently.

Planning

Teachers plan using the Brize Norton School's skills progression and the National Curriculum, to ensure continuity and progression across the key stages.
Planning is done at three levels:

- whole school (long term)
- class (medium term)
- individual teacher's weekly planning (short term)

Teachers plan specific learning intentions and success criteria for their lessons based on developing children's skills, knowledge and understanding in each subject.
Where possible teachers make links between subjects to provide experiences that enrich learning and to consolidate and apply the skills that the children have learnt in a variety of contexts.

Teaching and Learning

Design Technology is taught mainly through year group topics.

In the Foundation Stage Design and Technology concepts are taught in the context of the Early Learning Goals; class also has a permanent 'Creative Table' that the children are free to access.

At Key Stages 1 and 2 Design and Technology is taught mainly through year group topics. In the teaching of Design Technology we provide a skills developing approach which focuses on three

key elements, namely Materials, Mechanisms and Safety. These are taught through a combination of direct teaching to introduce new skills, and providing pupils with real explorative experiences through appropriate contexts. The key skills incorporate investigative, disassembly and evaluative activities, focussed practical tasks and design and make assignments.

Topics are taught following a two-year cycle.

Opportunities are made for children to develop an investigative/enquiry approach by studying primary and secondary evidence. Visits are encouraged by all classes and visitors are invited into the school to enrich learning. All visits must meet the requirements as set out in the Health and Safety policy and full risk assessments carried out prior to the visit.

Wherever possible links are made with other areas of the curriculum, particularly ICT and the Arts. The use of ICT is incorporated in the teaching of Design Technology as a tool for finding and communicating information.

Resources

A stock of resources to support the most commonly taught topics are stored centrally in boxes found in the corridor beside the hall. Individual teachers can request resources for specific Design and Technology projects.

Health and Safety

Food Hygiene

- Pupils and staff working with food must wear aprons designated for cooking.
- Painting equipment must not be washed up or used in the sink in the food technology area. This area is only to be used for preparation of food and washing up.
- All jewellery should be removed and hair tied back.

Glue Guns

- Glue guns should only be used by an adult/teacher in Key Stage 1.
- Key Stage 2 children should use glue guns under close supervision in a designated work area wearing safety goggles.

Craft Knives

- Craft knives, quick cutters and rotary cutters should only be used by an adult/ teacher in Key Stage 1
- Key Stage 2 children may use cutting equipment under supervision, using a cutting mat and wearing safety goggles.

Sawing

- Bench hooks and clamps must be used when sawing any material.
- Safety goggles must be worn and any loose items of clothing must be tucked in, hair must be tied back.

Assessment

Assessment of pupil work and progress is ongoing by the class teacher and informs future planning. Teachers record progress against key skills each term in all subjects (See Assessment Policy for further details).

Special Needs and Equal Opportunities

All children have access to the National Curriculum at a level that is appropriate to their individual needs. Teachers plan differentiated learning experiences in all curriculum subjects. Some children are withdrawn from the class individually or in small groups for additional support to be given within different subject areas. (See Special Needs and Equal Opportunities policies).

More Able, Gifted and Talented

Work in all lessons is differentiated to meet the needs within the class. Teachers plan using a 'top down' approach to ensure that the more able are challenged. Differentiation may be by outcome, support, resource or sometimes by the lesson input that is given to different groups by the teacher or a teaching assistant. All children also have individual or group targets that they are working towards. Children who have been identified as more able, gifted and talented are given opportunities to extend their learning through problem solving, investigation and open-ended activities. We create possibilities for them to work independently and with others to develop higher order thinking skills. In all subjects success criteria are set and questioning used to broaden children's knowledge and understanding whilst extending and challenging them, children are actively involved in this process. This ensures that each child is working to their full potential and being challenged at the right level. (See More Able, Gifted and Talented policy)

Homework

All classes receive homework each week mainly related to work in English or Maths. There are times that children are asked to complete research or other home-based activities related to other curriculum areas, particularly in upper Key Stage Two.

Roles and Responsibilities

The Role of the Headteacher:

The overall responsibility for each subject rests with the senior management of the school. The head, in consultation with the staff:

- determines a curriculum that is inclusive to all;
- decides the provision and allocation of resources;
- decides ways in which progress can be assessed, and records maintained;
- ensures that each subject is used in a way to achieve the aims and objectives of the school;
- ensures that there is a subject policy, and identifies a subject co-ordinator.

The Role of the Subject Co-ordinator:

- ensure the development of subject resources and the curriculum;
- supports the staff in planning for and teaching their subject;
- monitors the quality of teaching and learning through observations of lessons, reviews of teacher's plans and scrutiny of children's work;
- analyse data trends, reviewing standards and setting future priorities for development;
- promotes staff inset.

The Role of the Teacher:

Individual teachers are responsible for the implementation of each subject policy. It is their responsibility to plan appropriate experiences that teach key skills while developing children's knowledge and understanding. Teachers are responsible for assisting the co-ordinator in the monitoring and recording of pupil progress in each subject.

Review and Evaluation

This policy was drawn up by the Design Technology coordinator in consultation with the staff. March 2009.