



## **DESIGN AND TECHNOLOGY POLICY**

### **RATIONALE**

Design and Technology prepares children to take part in the development of tomorrow's rapidly changing world. Through this subject children are given the opportunity to expand and experiment their own creative ideas, whilst learning new skills and reflecting on technology in today's society.

### **AIMS AND OBJECTIVES**

- To develop knowledge and understanding of: materials and components; mechanisms and control systems; structures; existing products, and health and safety.
- To develop the skills of designing, planning, making, adapting and evaluating products for a particular purpose.
- To look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems.
- To develop an understanding of technological processes, products and their manufacture, and their contribution to our society.
- To nurture creativity, design and innovation and become creative and autonomous problem solvers, as individuals and as part of a team.
- To develop ICT skills to allow children to program and control products, to nurture their understanding of mechanical and electrical systems.
- To reflect on and evaluate present and past design and technology, its uses and effects.
- To promote pupils spiritual, moral, social and cultural development.

### **TEACHING AND LEARNING APPROACHES**

A variety of teaching techniques are used for design and technology to appeal to a range of learning styles. The principal aim of the new National Curriculum is to develop children's knowledge, skills and understanding in the subject, whilst providing enjoyable, creative and inspiring design and technology lessons. During design and technology lessons children are encouraged to apply their knowledge and understanding when developing ideas, planning, making and evaluating products. Cross curricular approaches with Maths, English and Science is encouraged to support children's understanding of conceptual and procedural knowledge and ensure it is applied. Children are provided with a mixture of whole class teaching, individual and group activities, as well as homework opportunities, encouraging both independence and collaborative working.

### **PLANNING**

Design and technology is planned in accordance with the schools foundation subject planning framework. Planning is highlighted on both a medium term and weekly plan, which includes reference to the National Curriculum objectives. The planning of design and technology ensures that all the National Curriculum targets are met throughout the year, making sure the two strands ('cooking and nutrition' and 'designing and making') are linked and covered in equal measure. Design and technology planning for the foundation stage comes under the area of Knowledge and Understanding of the World and planning is led by the children's interests.

Planning will ensure that, in addition to the requirements of the National Curriculum, there are frequent and regular opportunities to enhance learning through cross-curricular teaching, extra curricular activities, homework, planned enrichment (Enterprise) and extension work.

## **ASSESSMENT AND RECORDING**

Pupils' progress is assessed and monitored during the year through normal teacher marking, planning and observation. Pupils' Design and Technology work is marked by the teacher in line with the School's Marking policy. A record of class achievement for each topic is collated by the teacher on the schools foundation assessment documents, this is used to help evaluate the children's progress and assist with future planning. Furthermore, parents are informed of their child's progress at termly parents' evenings and via the annual reports which are sent home in the summer term. All teachers take photographic evidence to support the progress the children have made and are used as part of their ongoing assessments.

## **RESOURCES**

Our school has a wide range of resources to support the teaching of design and technology across the school. The resources are stored in a central design and technology store of which all staff has access to. The resources are reviewed and restocked to ensure that enough resources are available and staff are encouraged to feedback when additional resources are required that may benefit their teaching of design and technology.

## **EQUAL OPPORTUNITIES AND INCLUSION**

All children will be provided with equal access to the design and technology curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background and according to their individual abilities.

## **SPECIAL EDUCATIONAL NEEDS/GIFTED, ABLE AND TALENTED**

Differentiation in terms of learning objectives, tasks, teaching methods and resources are planned for pupils with SEN. All pupils have access to materials and opportunities that are suitable to their specific needs. GAT pupils are challenged with open-ended tasks which provide opportunities to tackle more complex issues and use a wider range of resources. Please see the SEN or GAT coordinators if advice is required. These needs are to be expressed through the assessments of the children which follow them through to their next teacher.

## **COMPUTING**

Opportunities to use ICT to support teaching and learning in design and technology will be planned for and used as appropriate. In Key Stage 2 the new computing curriculum (New National Curriculum) will be used to program and control the children's design products, helping them to understand the concept of mechanical and electrical systems.

## **CROSS-CURRICULAR LINKS**

Design and technology contributes significantly to the teaching of other curriculum areas in our school by actively promoting skills such as:-

- Teamwork and co-operation.
- Problem solving.
- Speaking and Listening.
- Planning and evaluating.

- Keyboard skills

With an aim of actively improving:-

- Writing
- Mathematical knowledge and confidence.

## **HEALTH AND SAFETY**

The general teaching requirement for health and safety applies in this subject. We encourage the children to consider their own safety and the safety of others at all times. Teachers refer to the School's Health and Safety Policy and the safety procedures recommended in the DfE 'Health and Safety of Pupils on Educational Visits' guidelines for the educational visits aspects of this subject.

## **ROLE OF SUBJECT LEADER/MONITORING**

The role of the subject leader is to ensure that there is good monitoring of quality teaching of design and technology within the school making sure the standards of children's work remains of a high standard. The work of the subject leader also involves supporting colleagues in the teaching of the subject, so all children have the opportunity to be innovative and creative. In addition the subject leader must inform colleagues about any current developments in the subject, and providing a strategic lead and direction for the subject in the school. The design and technology subject leader gives the Head Teacher an annual summary report in which they evaluate the strengths and weaknesses in the subject and indicates areas for further improvement. The design and technology subject leader will have regular management time in order to review evidence of the children's work and undertake lesson observations of design and technology teaching across the school.

## **ROLE OF GOVERNORS AND PARENTS**

Our governors determine, support, monitor and review the school policies on design and technology. In particular they:

- support the use of appropriate teaching strategies by helping to allocate resources effectively
- ensure that the school buildings and premises promote successful teaching and learning
- ensure that high quality staff are appointed
- monitor how effective teaching and learning strategies are in terms of raising pupil attainment through link visits to the school and in consultation with subject leaders
- ensure that staff development and performance management policies promote good quality teaching and learning
- monitor the effectiveness of the school's teaching and learning policies through the school self-review processes. These include reports from subject leaders and the termly Head Teacher's report to governors as well as a review of the in-service training sessions attended by our staff.

## **OUTCOMES**

Design and technology will be used to promote excellence and enjoyment. It will allow children to access and create a variety of products in a range of media ensuring by the end of KS2 all children have had the opportunity to cover both strands of design technology in the New National Curriculum. To achieve this, the school will include an enterprise week for all pupils and teachers, which will involve the design, manufacture and sale of a product using the children's own ideas

and inspiration. Parents and carers will be encouraged to participate in the teaching and learning of design and technology through homework projects. These will encourage the children to work creatively with support from their parent's to design and create an item, that is authentic with functionality, therefore providing purpose for their discussion and evaluation of their finished piece. Overall design and technology will be an enjoyable and creative subject accessible to all.

## **REVIEW**

This policy will be reviewed at least every three years by the Curriculum Committee of the Governing Body.