



Design and Technology Policy

Policy written – May 2020

To be reviewed – May 2023

The Acorn Federation 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 with 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 across the curriculum 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 long, medium and short term planning, 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 three or four year cycle of long term plans. Design and technology planning for the foundation stage comes under the area of Knowledge and Understanding of the World. Foundation subjects are taught in blocks.

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 Feedback and Marking policy. A record of class achievement for each topic is collated by the class teacher on the Knowledge Grids, this is used to help evaluate the children's progress and assist with future planning.

Where appropriate all teachers take photographic evidence to evidence the work the children have completed.

Resources

Our Federation has a range of resources to support the teaching of design and technology across the school. Staff feedback to the curriculum lead 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.

Differentiation

Differentiation in terms of learning objectives, tasks, teaching methods and resources are planned for pupils with special educational needs. All pupils have access to materials and opportunities that are suitable to their specific needs. Gifted pupils are challenged with open-ended tasks which provide opportunities to tackle more complex issues and use a wider range of resources.

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 across our Federation 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 Federation Health and Safety Policy

Role of Subject Leader

The role of the subject leader is to ensure that there is good monitoring of quality teaching of design and technology within the Federation making sure the standards of children's work is 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 provide a strategic lead and direction for the subject in the school.

The design and technology subject leader provides 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 also reports to Governors on an annual basis.

Monitoring

The monitoring of coverage and progress across the school will be done by the subject co-ordinator in consultation with teachers and the SLT.

Review

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