Flakefleet Primary School

Design Technology Policy

Policy Aims

Design Technology prepares children to take part in the development of our rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems.

The objectives of Design Technology are:

to develop imaginative, creative thinking in children and to enable them to communicate preferences when designing and making;

to enable children to explain how things work and to draw and model their ideas;

to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;

to explore attitudes towards the made world and how we live and work within it;

to develop an understanding of technological processes, products and their manufacture, and their contribution to our society;

to foster enjoyment, satisfaction and purpose in designing and making.

Teaching and Learning

The school uses a variety of teaching and learning styles to provide high quality Design Technology learning opportunities. Lessons are planned to develop the children's knowledge, skills and understanding. We ensure that the act of investigating and making something includes exploring and developing ideas, and critically evaluating and testing our work. We do this best through a mixture of whole-class teaching and individual/group enrichment activities. Small focussed groups work towards specific objectives from the skills progression document. Teachers draw attention to good examples of individual performance as models for their peers. Lessons are planned to allow children opportunities to evaluate their own ideas and methods, and the work of others.

Children have the opportunity to learn independently, and collaborate with others, on projects in two and three dimensions and on varying scales. Children also have the opportunity to use a wide range of materials and resources, including ICT.

The four key areas of learning are:
Design
Make
Evaluate
Technical Knowledge

Curriculum Planning

Design Technology is planned within the school's creative curriculum. The Design Technology element of each plan may be indicated. All key skills are covered within each Phase (Y1-2, Y3-4, Y5-6). Phase staff also ensure that there is complete coverage of National Curriculum programmes of study over a two year period.

Use of ICT

We use ICT in Design Technology teaching where appropriate and we meet the statutory requirement for children to use ICT as part of their work in art at both Key Stages. Children use digital media as a way to record and evaluate design and models. There are specific DT skills which involve the use of ICT equipment such as Control and Design programs. Teachers use a range of digital equipment including features on iPads, visualisers and webcams to enhance the teaching of key skills.

Foundation Stage

We teach Design Technology in Foundation Stage as an integral part of the topic work covered during the year. We relate the Design Technology element of the children's work to the objectives set out in the Early Year's Foundation Stage curriculum (EYFS) which underpin the curriculum planning for children aged three to five. Design Technology makes significant contributions to the EYFS objectives.

Cross Curricular

English

Design Technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. Discussion, drama and role-play are important methods employed for the children to develop an understanding of the fact that people have different views about design and technology. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

Mathematics

In Design Technology there are many opportunities for children to apply their mathematical skills through choosing and using appropriate ways of calculating measurements and distances. They learn how to check the results of calculations and learn how to use an appropriate degree of accuracy within different contexts. Children learn to measure and use equipment correctly. They apply their knowledge of fractions and percentages to describe quantities and calculate proportions. The children will carry out investigations and, in doing so, they will learn to read and interpret scales, collect and present data, and draw their own conclusions. They will learn about size and shape and make practical use of their mathematical knowledge in order to be creative and practical in their designs and modelling.

Personal, Social and Health Education (PSHE) and Citizenship

Design Technology contributes to the teaching of Personal, Social and Health Education and Citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets through extensive opportunities in cooking and nutrition. Their work encourages them to be responsible and to set targets to meet deadlines and they also learn, through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

SEND

We enable pupils to have access to the full range of activities involved in learning Design Technology. If progress falls significantly outside the expected range the child may have special educational needs. Our assessment process examines a range of factors – classroom organisation, teaching materials, teaching style, differentiation – so that we can take some additional or different action to enable the child to learn more effectively. Work is matched to individual children's needs by using the skills progression document.

Assessment

We assess children's work in Design Technology by making informal judgements as we observe them during each Design Technology session. On completion of a piece of work the teacher marks the work and provide an appropriate form of feedback. At the end of a unit of work the teacher makes a summary judgement about the work of each pupil – whether they have yet to obtain, have met or have exceeded their objectives. We use this as a basis for assessing the progress of the child at the end of the year. During the unit of work pupils are actively encouraged to use peer and self assessment.

Resources

A basic range of materials will be available in each classroom and resources will be supplemented, where needed, from central stock. All other resources are held centrally, for the use of individual staff, and are managed by the subject leadership team. Stock is regularly monitored.

Subject Development, Monitoring and Review

Subject leaders currently gain an overview of standards, as appropriate, by monitoring pupils' work across the age ranges.

Staff Development

A number of external courses are available to staff. The subject leadership group will determine the developmental needs of the school in Design Technology and will subsequently organise internal training sessions.

Related documentation:

Learning and Teaching Policy
Assessment Policy
Special Educational Needs Policy
Planning Documentation
Monitoring and Evaluation Timetable