Design Technology

Farington Primary School





Design Technology policy

What is our vision?

We are committed to providing children with a progressive and relevant Design Technology education, to prepare them for life in the wider world. We believe that high quality DT lessons will inspire children to think independently, innovatively and develop creative procedural and technical understanding. The skills that are developed in this subject can be transferred across the curriculum. Children will build up and acquire a range of knowledge and techniques through working with mechanisms, structures, food, textiles and electrical systems. A focus will be given to the area of food technology. Children will be taught how to cook and apply the principles of nutrition and healthy eating, allowing them to maintain a healthy lifestyle and equip them with the crucial life skill of how to feed themselves and others affordably and well, in later life.

By the time our pupils leave, they will be able to select resources, take risks and solve problems, to become capable citizens.

Curriculum Aims and Impact:

The national curriculum for design and technology aims to ensure that all pupils:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
- Critique, evaluate and test their ideas and products and the work of others
- Understand and apply the principles of nutrition and learn how to cook.
- Children will gain experience of researching, designing, making and evaluating quality products from an initial design brief.

Children will be able to demonstrate an understanding of purpose and user, in relation to the designs and products that they produce. They will be confident when researching, designing, making and evaluating quality products, based on an initial design criteria. They will be able to select the appropriate skills, tools and techniques, working safely to solve a problem. Children will critique their own *and others'** designs *(*UKS2)*, assessing their final products against the initial design criteria, making suggestions for further adaptations and improvements.

Children will confidently be able to suggest a range of healthy ingredients to enable them to cook a nutritious, healthy and affordable meal, with an awareness of seasonality and food provenance.

How do we achieve this?

Across school, we are using Kapow's schemes of work and these will be employed to ensure a consistent approach and progression of skills within all key strands of the DT curriculum. The areas of mechanisms, textiles and structures will be revisited within each key stage to ensure that knowledge and skills are retained and developed overtime. Electrical systems will be taught twice during Key Stage Two. A focus will be placed on cooking and nutrition, which will be taught within each year group, learning to prepare predominantly healthy savoury dishes. Children will be taught food provenance and seasonality. The long-term plan ensures that children build a repertoire of

knowledge and techniques, such as building structures of increasing difficulty and progressing from simple mechanisms towards mechanical systems. These are based on constructions in our locality and reflect the importance of key events and individuals that have influenced some designs that have helped to shape the world around them. Our pupils gain the practical skills in textiles to be able to perform everyday tasks.

Scheme of Work:

Teachers will use the objectives from the planning and assessment document to plan and deliver successful design and technology lessons. Teachers can access and use planning from Kapow, enhanced by the incorporation of their own ideas, if the objectives are matched to those in the school's documents and those in the Natonal Curriculum.

Each area of design technology will be covered at least twice in the children's time at Farington Primary School. This will enable the children to build on their skills and evidence their progression as they move up through school.

Published schemes of work are available on the Kapow website.

Resources:

All classes are given a joint between key stage box of basic resources. More specialised resources and equipment are all kept within the store cupboard. Design technology supplies will be restocked for the beginning of each academic year. Any specific supplies that are required for individual class projects should be requested ahead of time. Supplies will be audited reagularly by the subject co-ordinator to ensure that general supplies don't run low. As resources are used up, the subject co-ordinator should be advised that those materials need replacing.

Assessment – How do we assess skills and understanding?

Formative assessment will predominate within the subject of design technology.

At two points during the year, knowledge review weeks will spend time focusing on the skills that they have accumulated throughout that academic year. Teachers will make judgements about their children's skill and knowledge in design technology, based on the following areas:

- Child's work recorded through photographs, models, designs and written work
- Each child from Y1-Y6 has a topic specific DT booklet to cover all skills and areas
- Discussions with pupils
- Listening to the children's ideas during group discussions
- Observation of the children's skills during design technology sessions
- Assessment of the children's work against the learning objectives

Teachers will use the following gradings to categorise the children against the year groups curriculum objectives:

Working towards – the child has not met/ retained the year group curriculum objectives.
Expected – The child has met/ retained the year group curriculum objectives.
Greater depth – The child has met the objectives with a large degree of independence. They also show a design skill talent.

Teacher judgements in design technology will be entered into the tracking document, this will be available to future teachers as a means of transition. These judgements will also be reported to parents at the end of each year through the means of the end of year report.

Health and Safety

The responsibility for the safety of the children during design technology sessions lies predominantly with the class teacher. The children are made aware of the safe use and correct procedure involved when using tools and equipment in a learning environment and how to follow proper procedures for food safety and hygiene. Children are to be made aware of the need to take care and understand that their actions can affect others. The children build up a range of skills when using equipment to reduce unnecessary risk. Protective clothing is to be available when required.

All staff, including helpers, are made aware of food safety procedures when working with food to minimise any risks.

Inclusion and Safeguarding Considerations

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

Any children working above year group expectations are challenged with open-ended tasks that provide opportunities to tackle more complex issues and use a wider range of resources.

Other Points/Considerations:

With the need for many consumables in design and technology, staff will need to ensure that resources that are required for furture DT projects are checked well in advance. Any resources/ materials that are required should be reported to the subject lead in adequate time. If a certain resource is used up during a session, this should be reported to the subject co-ordinator who can then advise and assist on the replenishment of the resource.

Teachers are to be mindful that electrical cooking equipment will need to be booked ahead of time to ensure that the equipment is not being used by others and is in full working order with correct health and safety measures in place.

Any members of staff who have requests for training or resources should discuss this with the subject co-ordinator and put in an order request as required.

Monitoring and Review:

The subject co-ordinator will monitor the learning taking place in design and technology through an annual subject audit. In order to conduct this the following evidence will be gathered and used:

- Work completed will be viewed against the years groups objectives and how closely they match.
- The amount of work and whether it reflects the time allocated to design technology.
- Reviewing evidence of children's work through the design, production and evaluation processes.
- Pupil interviews regarding their experience of design technology and their inclusion/ understanding of subject-specific vocabulary.
- Monitoring the amount of DT lessons missed due to interventions.

The audits will help to evaluate the strengths and weaknesses in the subject and highlight areas for further improvement.

The work of the subject co-ordinator also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.