



# **Subject Key Summary Points**

Subject	Design Technology					
Overall Curriculum	What is Design and Technology (DT)?  Design and Technology is the process of designing, making and evaluating products fit for a purpose or improving, refining and extending the use of existing products. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on other subject areas such as mathematics, science, computing and art.					
Pedagogy	Aims Our Aims in teaching DT are that all children will:					
	<ul> <li>develop the creative, technical and practical expertise needed to perform everyday tasks confidently and participate successfully in an increasingly technological world.</li> </ul>					
	<ul> <li>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.</li> </ul>					
	<ul> <li>critique, evaluate and test their ideas and products and the work of others.</li> <li>understand and apply the principles of nutrition and learn how to cook.</li> </ul>					
	Design and Technology is important because:					
	<ul> <li>the designing and making of products is a pleasurable activity which can provide fulfilment throughout life.</li> <li>technological capability is essential to living and working in a technological society</li> <li>learning how to cook healthily and affordably is an important life skill.</li> </ul>					
	Design and Technology is a foundation subject in the National Curriculum. The fundamental skills knowledge and concepts of the subject are set out in the Design and Technology section in the National Curriculum document, where the programme of study for each key stage is based around 4 areas:					
	<ul> <li>Design</li> <li>Make</li> <li>Evaluate</li> <li>Technical knowledge</li> </ul>					

#### **Cooking and Nutrition**

As a part of their work with food, pupils will be taught how to cook, applying their understanding of nutrition and healthy eating, to enable pupils to learn a crucial life skill.

For the purpose of assessment and reporting, the attainment target sets out the knowledge, skills and understanding that pupils are expected to have by the end of each Key Stage.

## Strategies for the teaching of Design and Technology

The DT Curriculum is based on the National Curriculum (2014) document. The DT curriculum is designed to promote skills progression from EYFS through KS1 and KS2.

Design Technology in the Early Years Foundation Stage is undertaken as part of the area of learning, 'Expressive Arts and Design'. Design and Technology in EYFS is taught through continuous provision as well as adult-led activities. DT in KS1 and KS2 is generally taught in larger blocks of time.

Pupils develop their capability through focused practical tasks in which they develop and practice skills and knowledge. Capability is also developed through a specific assignment in which pupils design, make and evaluate a product using a range of materials and components.

Pupils engage in activities to investigate, disassemble and evaluate simple products.

Basic principles of health and varied diet, as well as opportunities to prepare and cook using a range oftechniques, are offered through cookery activities available to EYFS, KS1 and KS2 children.

#### Assessment

**Feedback to pupils** about their own progress in Design and Technology is achieved through discussion and the evaluation of learning.

Effective marking and verbal feedback:-

- aims to help children learn, not to find fault, and to be positive and constructive.
- is done while a task is being carried out through discussion between child and teacher.
- of written work and design drawings may be carried out in the absence of pupils but is followed up by discussion between child and teacher.

**Formative Assessment** is used to guide the progress of individual pupils in Design and Technology. It involves identifying each child's progress in each aspect of the subject, determining what each child has learned and what therefore should be the next stage in his/ her learning. Formative assessment is mostly carried out informally by teachers in the course of their teaching.

Suitable tasks for assessment include:-

- small group discussions perhaps in the context of a practical task.
- specific assignments for individual pupils.
- individual discussions and self-assessment sheets in which children are encouraged to appraise their own work and progress.
- peer assessment in which pupils are encouraged to make constructive comments about the work of other pupils.

### **Recording Progress:**

- a record of progress for each child within the expected age-related standard in the National Curriculum for KS1 and KS2 through the use of floorbooks.
- a record of progress for each child in the Early Years Foundation Stage, in the Understanding the World section of the Early Years Foundation Stage Profile. Floorbooks and learning journey observations also form part of recording pupil progress in EYFS.
- a school portfolio, containing photos of D.T. work and annotated samples of work, designs andevaluations, to show progress and achievement across the Year Groups.

Reporting to Parents is done through parent consultations when required and annually through a written report and meeting with the Teacher.

Reporting in Design and Technology will focus on each child's:

- designing and making skills
- knowledge and understanding
- Reporting to Parents of Early Years Foundation Stage children is part of the Early Years Profile at the end of the year.

Formal Summative Assessment is carried out at the end of each National Curriculum Year through the use of teacher assessment. Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class. This is mainly achieved through mini-plenaries, questioning, marking, TA feedback and pupil self-assessment. Pupils are more formally assessed at the end of each unit and the end of each term.

#### **Culture**

# Modes of working in DT:

Co-operative group work, individual or paired work and class teaching are used where appropriate.

#### Within this structure:

groups are usually of mixed ability

- children are encouraged to develop inter-personal skills through discussion, enquiry and negotiation and working as part of a team.
- all pupils have equal access to the curriculum, regardless of gender, race, ability or background.

There is no specialist teaching in DT. It is taught by class teachers supported by the subject leader.

#### Teaching Assistants are used in DT to assist:-

- in the classroom by supporting pupils with S.E.N.D
- in the classroom by preparing materials and supervising group activities
- on outings and visits to museums and to commerce and industry.
- in providing other help, such as the demonstration of specialist skills.
- Depending on how they have been deployed, HLTAs may be required to plan and deliver DT lessons in accordance with the curriculum for the year group.

**Pupils with Special Needs** receive support from the class teacher or teaching assistant to undertake exercises or projects geared to their level of ability and to take an effective and valuable role in mixed ability co-operative group work.

## SEND pupils include:-

- pupils with learning difficulties who may need support with reading and writing but who may have well-developed practical skills in designing and making.
- pupils who have difficulties with practical tasks who may need more support and extra opportunities for practice.
- pupils with particular ability and flair for Design and Technology who are extended through the use of additional, or more demanding assignments.

The Emphasis in our Teaching of DT is on providing opportunities for pupils to combine their designing and making skills with knowledge and understanding in order to design and make products. The focus is on the assignments in which we encourage children increasingly to take control of their own learning.

#### Thus:-

- work in DT draws on knowledge from all other subjects of the curriculum especially science, mathematics and art; and there are valuable links with Literacy and I.C.T.
- work in DT aims to build the skills, knowledge and understanding necessary to complete an assignment.

#### Excellence in DT is celebrated in display and presentation including:-

• suitably mounted displays in classrooms and throughout the school.

- presentation and display of work in assemblies and other public occasions.
- the collection of work samples and photos for an online Design Technology portfolio and or the sharing of such learning on Class Dojo.

## **Strategies for Ensuring Progress and Continuity**

**Planning in DT** is a process in which all teachers are involved, wherein:

- the foundation for curricular planning is the Whole School Development Plan, developed through a process of collaboration between staff, and approved by Governors.
- topic plans are drawn up by staff and are carefully balanced to ensure full coverage of the National Curriculum and the Early Years Foundation Stage Development Matters and long-term plan.
- Staff meetings are held when required to discuss the Design and Technology curriculum and ensure consistency of approach and of standards.
- termly and half termly plans are drawn up by individual teachers and monitored by the head of school and subject leader.
- the use of the overview of units of work in D.T. ensures that skills build upon previous work.

## The Role of the DT Subject Leader is to:-

- take the lead in policy development and the production of schemes of work designed to ensure progression and continuity in Design and Technology throughout the school.
- support colleagues in their development of detailed work plans and implementation of the schemes of work and in assessment and record keeping activities.
- monitor progress in Design and Technology through lesson observations and work sampling and advise colleagues on action needed.
- take responsibility for the purchase and organisation of central resources for Design and Technology.
- keep up to date with developments in Design and Technology education and disseminate information to colleagues as appropriate.

## **Systems**

The school follows the National Curriculum (2014) and teachers use the school's own overview and scheme of learning as the basis for their planning.

The National Curriculum (2014) document informs the whole school overview for DT which, in turn, informs individual S-Plans for each DT investigation.

Through this approach, children will develop the skills of:

- Designing
- Making

	<ul> <li>Evaluating</li> <li>Technical knowledge</li> <li>Our systems ensure pupils experience a detailed and carefully sequenced curriculum and within that regular, planned rehearsal and practice of skills in order to ensure that they securely grasp the concepts taught and develop skills in DT. The aim is for our pupils to develop greater independence in Design Technology and to develop their ability to problem solve.</li> <li>Pupils will use creativity and imagination as they design, make and evaluate products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. Pupils will understand and apply the principles of nutrition and learn how to cook. They will acquire a broad range of subject knowledge and draw on other subject areas such as mathematics, science, computing and art.</li> </ul>
Policy	The Policy for DT aims to ensure that all pupils become <b>fluent</b> in the fundamentals of DT, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to solve problems with increasing independence.
Perceptions	The monitoring of the standards of children's work and the quality of learning and teaching in DT is the shared responsibility of the S.L.T and the subject leader. The work of the subject leader also involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. A named member of the school governing body is briefed to overview the teaching of DT in the school. Monitoring shows the following of systems is improving with teachers trying to ensure that they complete all DT investigations with their class.