



HARLINGTON LOWER AND SUNDON LOWER SCHOOLS **DESIGN AND TECHNOLOGY POLICY**

Approved by Board of Governors: November 2025
Next review: November 2028

The curriculum policy statement and equal opportunities policy should be read as a preface to this policy.

PHILOSOPHY

“Design and technology is an inspiring, rigorous and practical subject. 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 disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.”

National Curriculum 2014

AIMS

The core 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 make a range of healthy foods.

TEACHING OBJECTIVES

National Curriculum subject content:

Key stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients.

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Cooking and nutrition

As part of their work with food, pupils should be taught how to cook simple healthy foods, applying the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well.

Pupils should be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Key stage 2

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

IMPLEMENTATION AND PLANNING

Teaching and learning

There is a programme of study for Design and Technology in place from Year 1 to Year 4.

Skills in the Foundation Stage are planned through the objectives EYFS.

Units will be planned according to the curriculum. In Sundon Lower School this will be on a rolling Year 1 and Year 2 programme and in Harlington this will be single year group planning.

Teachers will plan before the start of each new term and at this point highlight the skills that will be covered.

RESOURCES

Funding for Design and Technology will be within the school budget plan for each financial year.

The subject leader will be responsible for ordering equipment and materials required to teach each unit effectively.

It is the responsibility of each class teacher to identify additional resource needs in relation to their project and inform the Design and Technology subject leader.

All resources will be stored and organised in the central store.

Any shortages, breakages or losses should be reported immediately to the Design and Technology subject leader.

ASSESSMENT RECORDING AND REPORTING

As in all other areas of the curriculum, assessment is an integral part of the teaching process. Class teachers should keep records of the work carried out by pupils and the levels of achievement of the work. Photographs are a useful tool to keep as a reminder of pupils' achievements.

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 curriculum, determining what each child has learned and what should be the next step in their learning. Formative assessment is mostly carried out informally by the teachers in the course of their teaching and should be based on the identified assessment opportunities.

Children's progress in Design and Technology is reported to parents through the pupils' annual report.

MONITORING AND EVALUATION

The Design and Technology subject leader will monitor planning and samples of work in all year groups on a termly basis. This monitoring should highlight strengths, weaknesses and INSET requirements.



We support children in becoming well rounded individuals where they naturally demonstrate the values of the school in all aspects of their lives.