

**ST LUKE'S CE
PRIMARY
SCHOOL**



**Curriculum
Statement
for
Design
Technology**

Curriculum Statement for DT

To be read in conjunction with the Overall Curriculum Statement

Subject Lead: Mrs Kate Roberts

1 Aims

We believe that Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, our 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, which overlaps with other subjects, 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 begin to develop a critical understanding of its impact on daily life and the wider world.

2 What will pupils be taught?

See separate document for the overview of subject content in DT and the progression of skills and vocabulary.

2.1 This is guided by the National Curriculum and the Early Years Foundation Stage Statutory Framework: (The early learning goals from the statutory framework will be underpinned using the objectives from the Development Matters Framework.)

From EYFS through to Year 6:

- The curriculum is structured and sequenced, so that each unit builds upon the previous units and important vocabulary is frequently revisited, in order that children learn and remember it.
- Our ambitious DT curriculum ensures skill building and progression right through from EYFS until the end of Year 6. Each year the children are given the opportunity to broaden their skills in each area.

The subject planning includes designing and making and also cooking and nutrition.

2.2 Designing and Making

EYFS

When designing and making, our EYFS pupils are taught to

- create collaboratively, share ideas, resources and skills
- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Share their creations explaining the process they have used.
(Objectives taken from the **Expressive arts and design** area of learning of EYFS framework)

Key stage 1 (NC)

When designing and making, our KS1 pupils are 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, according to their characteristics

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 (NC)

When designing and making, our KS2 pupils are 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 accurately perform practical tasks for example, cutting, shaping, joining and finishing
- 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, circuits incorporating switches, bulbs, buzzers and motors
- apply their understanding of computing to program, monitor and control their products.

2.3 Cooking and nutrition

As part of their work with food, our pupils will be taught how to cook and apply the principles of nutrition and healthy eating. We want to instill a love of cooking in pupils. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

EYFS

- Know and talk about the different factors that support their overall health and well being, including healthy eating.
- Develop small motor skills so that they can use a range of tools competently, safely and confidently including knives, forks and spoons.

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.

3 How will pupils be taught?

- 3.1** Through a variety of creative and practical activities, pupils will be taught the knowledge, understanding and skills needed to engage in the process of designing and making. They will experience work in a variety of contexts, for example: home and school, gardens and playgrounds, the local community and the wider environment.
- 3.2** In EYFS, DT will follow objectives from the EYFS Statutory Framework. The early learning

goals will be underpinned using the objectives from the Development Matters Framework. This will ensure a solid foundation of early skills and knowledge needed for design and technology progression throughout KS1 and KS2.

- 3.3** From KS1, we have chosen to use the Kapow DT scheme of work. This is used to ensure full coverage of all national curriculum objectives and to ensure clear progression of skills from Y1 through to Year 6 for each of the following strands: Design, making, evaluating and cooking and nutrition. The scheme also provides excellent subject support for our non-specialist primary school teachers.
- 3.4** Pupils are usually taught DT by their class teacher. Often, we use expert volunteers, especially parents and grandparents with skills and expertise. On occasion, we use the facilities and/or staff from our high school.
- 3.5** DT may be on a weekly basis across the half term, but quite often it is “blocked” and taught every day over the course of a week or so.

4 Inclusion

4.1 In line with our ethos of inclusion, it is important that our ambitious DT curriculum can be accessed and enjoyed by **all** pupils. We have the same learning intentions for all pupils, with no lowering of expectations.

4.2 Pupils with Special Educational Needs and / or Disabilities (SEND)

Just as in all other areas of the curriculum, for the delivery of DT, teachers need to anticipate barriers to participation for pupils with particular SEND. Planning will minimise those barriers so that all pupils can fully take part and learn.

For all pupils to be able to achieve the same learning intentions, it will be necessary to ‘adapt teaching’ to ensure access through the use of strategies such as:

- Breaking down content into smaller chunks or steps
- Varying levels of support, including effective support from TAs as well as the teacher, e.g. directing a TA to scaffold the learning for a specific pupil or group of pupils while ensuring that the development of the pupil’s independence and their confidence in themselves as a learner is not compromised as a result
- Removing unnecessary expositions, i.e. keeping spoken language at an amount and at a level that will enable maximum access, with visual support
- Supporting different means of expression / methods of recording,
- Intervening appropriately, i.e. checking on the understanding after a whole class introduction, and providing access to key information to support the learning; observing when a pupil or group of pupils seems to be struggling with a new concept or idea, and creating opportunities to dig deeper into any misconceptions that may have arisen, before these have the chance to become entrenched
- Providing adapted equipment to support pupils with physical needs

Similarly, when assessing pupils with SEND, an altered or alternative method of assessment may be appropriate.

4.3 Mastery

DT is an area where pupils might excel when their achievement in more academic

subjects is not as strong. DT lends itself to the stretching of those pupils showing a particular strength or talent in the subject.

5 Assessment and Reporting

5.1 The purpose of assessment should be to:

- ensure and evidence progression against the programme of study
- track progression of cohorts and individual pupils
- celebrate successes

5.2 Progression in the learning of DT can be evidenced in two main ways:

- a) Teacher observation and pupil interaction during lessons
- b) DT books containing the pupil's individual planning and design, photographs of the finished piece and their evaluations

5.3 In line with the assessment policy, a verbal report may be given to parents in the autumn and spring parent-teacher meetings. A comment on DT may form part of the full written report in the summer term where it is noted to be a particular strength or area for improvement.

6 Impact

As a result of high-quality teaching in Design Technology, all pupils at St Luke's will:

- 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.

7 Subject monitoring

The school's DT lead has responsibility for the implementation of the schemes, the quality of teaching, and levels of pupil progress and achievement. Monitoring the quality of delivery and outcomes can comprise:

- lesson visits
- oversight of planning
- scrutiny of pupils' work
- discussion with teachers
- discussion with pupils

These activities also ensure the DT lead is well-placed to identify any CPD needs.