



Design and Technology Policy
2025-2026



Our vision statement

At Southglade Primary School we aim for our Design and Technology curriculum to be an inspiring, rigorous and practical experience for our pupils. Using creativity and imagination our pupils design, make and evaluate their products considering the needs of themselves and others. They think about the purpose of their design, considering the materials available and the target user. They acquire a broad range of practical and problem-solving skills whilst also consolidating skills taught in other subject areas such as Mathematics, Science, Computing and Art. Through our Design and Technology curriculum, pupils learn how to be innovative and enterprising citizens of the future.

Introduction

At Southglade Primary and Nursery School, we are committed to providing all children with learning opportunities to engage in Design and Technology. This policy sets out a framework within which teaching and non-teaching staff can work, and give guidance on planning, teaching and assessment.

As a school, we teach Design and Technology in three parts; design, make and evaluate. To enable the children to design their product, we recognise the importance of teaching knowledge and skills equally. Design and Technology projects will include resistant materials, electronics, textiles and cooking.

Southglade's bespoke D&T curriculum design:

Whilst meeting curriculum aims through other areas of D&T; resistant materials, electronics, and textiles, the subject will focus on meeting aims through food technology and cooking. Children will acquire the knowledge needed to plan and design their own product and the skills needed to apply their understanding to make and evaluate products and projects of their own. Cooking, as a D&T focus will allow children to make links to other areas of the curriculum, for example healthy eating (PSHE), logo and packaging design (ICT), eco and sustainability, by planting their own herbs or vegetables for cooking, and many others. By the end of year 6, we want each child to feel confident enough in their cooking skills to independently prepare a 3-course meal. Years 1, 2, 3, 4 and 5 will have a second D&T curriculum driver, where the other areas of D&T are the focus, whilst year 6 will touch on these other areas in mini projects after their SATS. Year groups 2,3,4,5 and 6 will also incorporate 3D printing into their projects, with the use of Computer Aided Design (CAD).

Knowledge

In order to carry out an exciting, yet effective, Design and Technology project, it is important to understand key design vocabulary and skills that will enable the children to create products that are fit for purpose and designed with a target audience or user in mind. At Southglade, we aim to teach children the skills that they need to design, make and evaluate products for a wide range of users. Learning about key inventors, manufacturers and chefs, as well as health and safety procedures, will enhance their understanding and skills-based learning, in order to produce high-quality projects. They will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. They will critique, evaluate and test their ideas and products and understand and apply the principles of nutrition and learn how to cook.

Skills

A key characteristic of a secure design and technology student is the ability to work confidently within a range of contexts and to describe the purpose of their products with a target market in mind. At Southglade, we aim to encourage children to design a well thought out product, which is created based on research, creativity and a carefully constructed specification. Their skills will be developed through resistant materials, electronics, textiles and cooking, allowing them to apply these skills to a relevant project. They are encouraged to experiment with materials to decide for themselves what they should use, and are guided to their end product which is unique.

Application

Following the teaching of design skills and knowledge, we understand the importance of children being able to apply these skills through an exciting, child-led D&T project. Throughout the application stage of the project, children are given the opportunity to apply and demonstrate the skills they have learnt over the previous weeks where teachers are then able to make an informed assessment of their understanding. Children are guided to evaluate their own and existing products based on their design specification, consumer awareness research and their suitability to perform a task or meet the needs of the intended user.

Aims

- To instil creativity within children's design process.
- To develop within our pupils an interest in understanding the design process including the planning, making and evaluation stages.
- To provide our children with a deep understanding of the importance of creating a product that is based on the needs of a specific user.
- To support our pupils in collating research which informs the planning of their project which will eventually fulfil a purpose.
- To enable our pupils to understand how to safely and confidently select appropriate materials and tools that will help them create their product.
- To support our pupils in creating their product in physical form and bring their plans to life.
- To help our pupils carefully evaluate their own work and existing products in a supportive manner which reviews how the product has met the needs of the target user.
- To support our pupils to independently demonstrate their knowledge and skills through a well-designed project.
- To inspire curiosity and passion for design and technology which will be beneficial in an ever changing technology led modern world.

The Design and Technology Curriculum

Early Years

In Early Years, Design and Technology is taught through daily conversations, adult-led activities and child-led activities. The children are encouraged to utilise materials that are readily available within the classroom to design and create pieces of work that is either based on previous mini-teaching sessions or their own imagination. In the Foundation Stage, Design and Technology makes a significant contribution to developing a child's understanding of the world through activities such as design, imagination, creativity and fine-motor skills.

Key Stage One

The National Curriculum Programme of Study of Key Stage 1 focuses on developing the key skills and building on from the Early Learning Goals. Children will be taught the knowledge and skills needed to engage in an interactive process of designing and making; applying what they have learnt to create an end project with a specific purpose and user in mind. Creative and practical activities will be planned and delivered through a range of relevant contexts, in order to support such application of knowledge and skill. Children will begin to create a simple design criteria, communicating their ideas through discussion and drawing.

Pupils should be taught:

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 to perform practical tools, 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 explaining how they can be made stronger, stiffer and more stable.
- Explore and use mechanisms in their products, for example; levers and pulleys.
- Use the basic principles of a healthy and varied diet to safely prepare dishes.

- Understand where a range of food comes from.
- Design using CAD and use a 3D printer to incorporate Computer Aided Manufacture (CAM)

Key stage 2

The National Curriculum Programme of Study at Key Stage 2 aims to continue building on the Design and Technology skills and knowledge that has been acquired throughout Key Stage 1. Similarly to KS1, children will develop their knowledge and skills through relevant contexts. Children will design, make and evaluate projects based on consumer awareness; creating design specifications based on research of needs and requirements of a particular individual or group. Children will be encouraged to generate, develop and communicate their ideas through more sophisticated ways of planning such as; discussion, annotated sketches, prototypes and computer-aided design. Evaluation of their own and existing products will have a bigger focus, as they use this to inform subsequent projects and learn about the impact of key designers, manufactures and chefs, on the modern world.

Pupils should be taught:

Design

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

Make

- To select and use a wide range of tools and equipment to perform practical tasks accurately.
- To select from and use a wide range of materials and components, including construction materials, textiles and ingredients according to their functional properties and aesthetics.

Evaluate

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

Technical knowledge

- To apply their understanding of how to stiffen, strengthen and reinforce more complex structures.
- To understand and use mechanical systems in their products, for example; levers and linkages.
- To understand and use electrical systems in their products, for example; circuits incorporating switches and buzzers.
- To apply their understanding of computing to program, monitor and control their products.
- To understand and apply the principles of a healthy and varied diet.
- How to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- To understand seasonality and know when where and how a range of products are grown, reared, caught and processed.
- To use CAD to design a realistic model that can then be 3D printed.

Teaching and Learning

At Southglade Primary and Nursery School, we believe in an education for all. The Design and Technology curriculum is taught through a range of teaching and learning styles to enable all pupils to become engaged and inspired in D&T.

We believe our pupils learn best when:

- They have access to, and are able to carry out their own research.
- They go on visits to places of interest which inspire their designs.
- They have access to secondary sources such as books and photographs.
- They research and understand the work of another designer, manufacturer or chef.
- They undertake fieldwork by interviewing family, friends and teachers about their interests to create a product based on consumer needs.
- They are shown, or use independently, resources from the internet.
- They are provided with opportunities to work independently or collaboratively on a child-led project.
- Parents are invited to join in with their learning and attend project showcases.

Pupils are taught within the whole class, regardless of ability or SEND. Teachers use the skills ladders to plan appropriate activities for children on alternative curriculums and by matching the challenge of the task to the ability of the child.

Design and Technology Planning

D&T is taught through curriculum drivers and is woven throughout other lessons. Teachers plan using the curriculum driver progression ladders to plan lessons through the structure of 'design, make, evaluate'. Staff are expected to plan their curriculum driver in advance to ensure pupils build on knowledge and skills and produce a project, one of which must be showcased to parents.

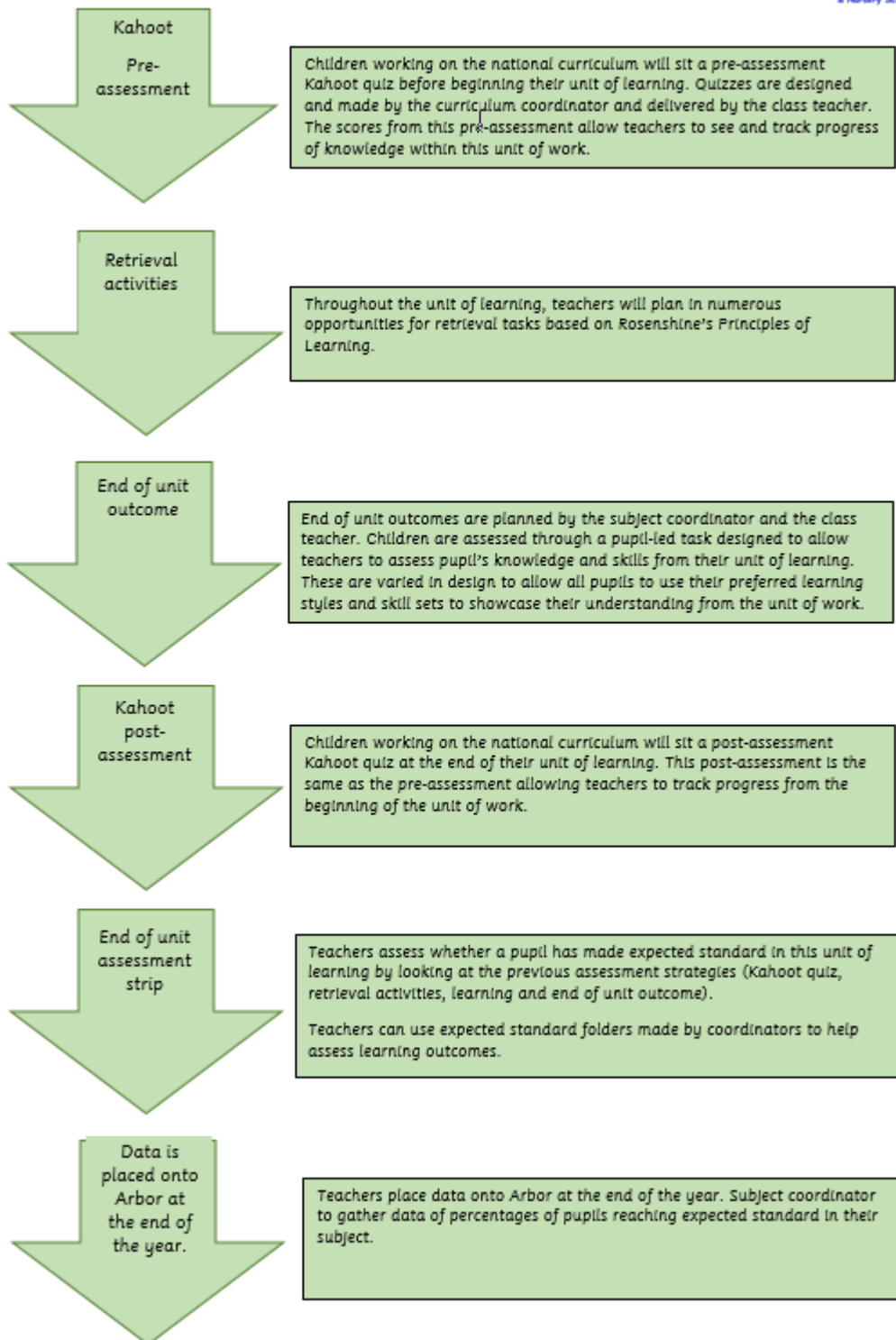
Progression

A D&T skills ladder is used from Year 1 - Year 6. Teachers use this ladder to ensure activities build on pupil's prior learning. Skills ladders ensure that pupil's skills are constantly challenged as they move up through school.

D & T CPD pages have been written to support class teachers with planning and sequencing their Smart Notebooks.



Assessment of the foundation subjects at Southglade



Monitoring

Monitoring is the responsibility of the Design and Technology Lead. Monitoring of D&T includes; learning walks, book looks, environment looks, teacher planning, pupil voice and staff voice. Pre and post Kahoot quizzes are also used to monitor pupils' ability to retain key knowledge and skills taught within the curriculum driver.