St. Giles C.E. Primary School
Design Technology Policy

'You must love one another as I have loved you.' John 13 v 34.

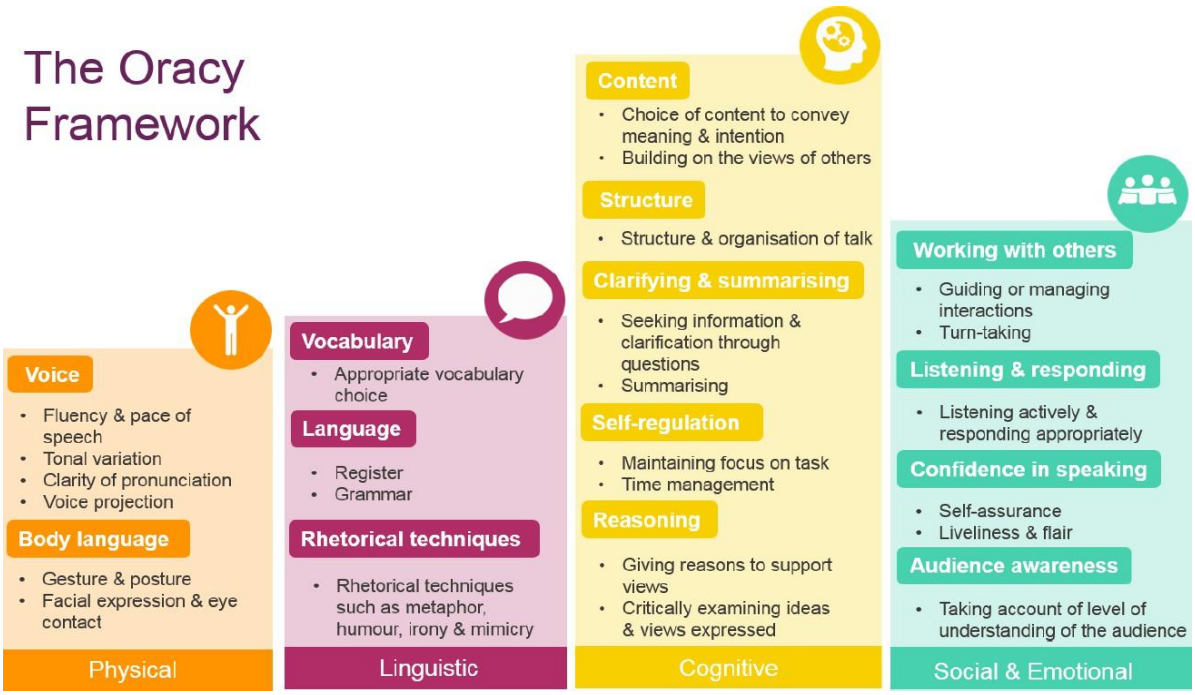
Working together with love we will provide a happy and nurturing environment where all will, ***'learn to love and love to learn'***, making outstanding progress through an enriched and creative curriculum. Through our strong Christian ethos we will celebrate and embrace the richness of our community.

Learn to Love - Love to Learn

'You must love one another as I have loved you.' John 13 v 34

Purpose

Design and technology inspires children, through the use of rigorous and practical tasks, to take part in the development of today's rapidly changing world. Creative thinking and the nurturing of imaginative ideas encourages our children to make positive and worthwhile products that have purpose and relevance in the world we live in. The subject encourages children to apply their skills in a wide range of contexts and learning environments, allowing them to solve problems, both as individuals and as part of a team. Through the study of design and technology, they combine a developing subject knowledge with practical skills that draws upon disciplines from all areas of the curriculum . This allows them to reflect on their knowledge and apply it in a risk free environment, developing resourcefulness and innovation. Through analysis and assessment of their own designs and those of others, pupils engage in a critical understanding of how products impact on our lives alongside contributing to recognising British values, incorporating moral, social and cultural aspects of the society that surrounds them. This is underpinned by our Oracy policy.



Reviewed 18 September 2025 To be reviewed 30 September 2027

Aims

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- To 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.
- To critique, evaluate and test their ideas and products, including the work of others.
- To learn where our food comes from while understanding and applying the principles of nutrition. To learn how to prepare or cook basic meals.
- To foster enjoyment, satisfaction and purpose in designing and making.

Pupil Entitlement

Pupils are taught through a variety of activities to include: building skills, design creativity and manufacturing products. An element of evaluation and improvement should be included across each process. Projects should be embedded into contexts that are relevant for the key stage.

Key Stage 1

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 the use of computing.

Make

- Select from and use a range of tools and equipment to perform practical tasks such as 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 stronger, stiffer and more stable.
- Evaluate their ideas and products against design criteria

Cooking and Nutrition

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

Context

- Familiar places such as home and school, gardens and playgrounds, local community and the wider world
- To enhance seasonal events or other areas of the curriculum. E.g. Harvest, Easter, Mother's day or science concepts and geographical places that are being taught.

Key Stage 2

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 accurately, such as 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, such as gears, pulleys, cams, levers and linkages.
- Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors.
- Apply their understanding of computing to program, monitor and control their products.

Cooking and Nutrition

- 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.

Context

- Places such as the home, school, leisure, culture, enterprise, industry and the wider environment.

The Foundation Stage

During the Early Years Foundation Stage, the essential building blocks of children's design and technology capability are established. There are many opportunities for carrying out D&T-related activities in all areas of learning in the EYFS. It is identified specifically in 'Expressive Arts and Design' this is one of the four specific areas of learning. By the end of the EYFS, most children should be able to:

- Use simple tools and techniques competently and appropriately.
- Selects appropriate resources and adapts work where necessary.
- Selects tools and techniques needed to shape, assemble and join materials they are using.

At St Giles we consider that effective Design and Technology in EYFS has the following characteristics:

- Designing does not necessarily entail drawing
- Designing can mean using hand gestures, arranging and re-arranging materials and components, talking and listening
- Designing is usually intuitive
- The designing and making process is fluid

• Sometimes practical skills are taught directly
• Children have frequent opportunities to develop practical skills with a range of materials, explore construction kits and existing products
• Activities are appropriate to children's prior experience
• Context is sometimes set by teacher, sometimes by the children

Children's work and assessment in Expressive Arts and Design contributes to their ongoing paper and virtual learning journey building up a picture of the unique child.

Teaching and learning style

The school uses a variety of teaching and learning styles in design and technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole class teaching and individual/group activities. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including those that are computer based.

Inclusion

In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies.

- Setting common tasks that are open-ended and can have a variety of results.
- Setting tasks of increasing difficulty where not all children complete all tasks.
- Grouping children by ability and setting different tasks for each group.
- Providing a range of challenges through the provision of different resources.
- Using additional adults to support the work of individual children or small groups.
- Adapting materials and tools to suit the individual needs of the child.

Curriculum Planning

Design technology is a foundation subject in the National Curriculum. Our school uses the Kapow Primary scheme as the basis for its curriculum planning in design and technology. This have been produced in line with the National Curriculum and allows varied opportunities to adapt the national scheme to the local circumstances of our school so that we can use the local environment, events or curriculum themes as the starting point for aspects of our work.

We carry out the curriculum planning in design and technology in three phases: long-term overview, medium-term plans for each unit and short-term lesson plans on weekly planners. The long-term plan maps out the units covered across the whole school in each term for each phase. These are all set out as part of the Kapow scheme. Links are made to other curriculum projects and events where suitable, (e.g. design a light up Christmas card) but only where this does not detract or overshadow the learning to be made in this subject.

Our medium-term plans give details of each unit of work for each term. These are taken from the Kapow Scheme, choosing the area of learning directed from the overview for the year group and term. They identify learning objectives and outcomes for each unit and ensure an appropriate balance and distribution of work is carried out across each year.

Class teachers are able to access medium term plans from the scheme of each design and technology unit. Lesson plans should list specific learning objectives for each lesson and detail how the lessons are to be taught, including differentiation of tasks. Differentiation is included in the Kapow scheme to help teachers with the individual needs of the children. Teachers also enable the children to use subject specific vocabulary, which is again built

into the Kapow scheme. The class teacher is able to use the Kapow lessons plans which are then annotated. Each Unit on the Kapow scheme includes videos and tutorials which teacher use as part of their continued professional development.

The Kapow scheme enables the children to complete activities in design and technology so that they build upon their prior learning. We give children of all abilities the opportunity to develop their skills, knowledge and understanding. Progression is a fundamental part of the Kapow scheme, which enables the children's design and technology skills to be increasingly challenged as they move through the school.

Curriculum Enhancement

Core Subjects

Pupils apply their knowledge across a range of core subjects to their work in Design and Technology and vice versa. Knowledge about the properties of materials helps in the science curriculum, alongside reinforcing skills with creating clear, labelled diagrams. In maths, practice in measuring accurately and understanding units of measure leads to applying designing and making skills in a practical and purposeful manner. Literacy helps pupils to communicate ideas through their work on explanation and instruction texts and discussing products requires children to articulate their ideas and to compare and contrast their views throughout developed speaking and listening activities.

Computing

Computing plays an important part in design and technology. The children produce their designs for products both paper based and electronically using 'paint' software, moving on to use computer aided design (CAD) to support more sophisticated designs in Key Stage Two. Programming and control are used to operate electrical circuits and mechanical systems.

Spiritual, moral, social and cultural development

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work collaboratively, giving them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness throughout the careful planning of activities and develop an understanding of the importance of designers and inventors by investigating their contribution to the world today. Links with the community are made where possible, such as visits to Libraries, museums and galleries and the use of link schools. Careful choices guided in the planning stages of projects help children recognise the needs of different groups of people and support finding practical, effective ways of supporting and addressing those needs.

Assessment and recording

Teachers assess children's work in design and technology by making assessments of understanding, skills and processes during lessons. Formative and summative assessment is built into the Kapow scheme to assist teachers with assessment. They record the progress that children make by assessing the children's work against the learning objectives for their lessons. At the end of a unit of work, children self and peer assess the work they have produced. Teachers then mark off the skills and attributes of children on a skills matrix and this contributes as part of the annual report to parents.

The design and technology subject leader keeps a sample of evidence from across the school. This demonstrates what the expected level of achievement is in design and technology in each Key stage. Monitoring and feedback takes place during staff meetings, where good practise is shared.

Resources

Our school has a wide range of resources to support the teaching of design and technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in designated areas across the school (currently the computer suite). This equipment is accessible to children only under adult supervision. Resources are replenished on a yearly basis where components and tools are requested by all staff to match the needs of their projects and this is then ordered and overseen by the coordinator. Perishable and sundry items are bought as required, with cash receipts handed in to the finance manager.

Health and Safety

Pupils are directed in the correct and safe way to handle sharp tools in a ratio of 1:10 during specific directed tasks. Tools are stored safely and out of reach of pupils. We teach children how to follow proper procedures for food safety and hygiene.

Monitoring and review

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader. The work of the subject leader 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. The design and technology subject leader gives the Head Teacher feedback on request, based upon the strengths of the subject and indicates areas for development or further improvement. The design and technology subject leader has time allocated each term to review evidence of the teaching and learning taking place across the school.

Art and Design and Technology Overview 2025-26

New Overview for 2024 based on Kapow Primary Art and Design & Technology schemes.

	Autumn Term		**Spring Term**		**Summer Term**	
	Art	**DT**	**Art**	**DT**	**Art**	**DT**
EYFS	Drawing – Marvellous Marks	Structure – Junk Modelling	Painting – Paint my World	Textiles – Bookmark	Sculptures – Creating Station	Structures – Boats
	Autumn Term		**Spring Term**		**Summer Term**	
	Art	**DT**	**Art**	**DT**	**Art**	**DT**
Year 1	Drawing – Make your Mark	Structures – Constructing a windmill	Painting – Colour splash	Textiles – Puppets	Sculptures – Paper Play	Cooking and Nutrition – Smoothies
Year 2	Painting – Life in colour	Mechanisms – Fairground Wheel	Sculptures – Clay houses	Mechanisms – Moving a monster	Craft and Design – Map it out	Structures – Baby bears chair
Year 3	Drawing – Growing Artist	Textiles Cross stitch cushion	Sculptures – Abstract space and shape	Cooking and Nutrition – Eating seasonally	Craft and Design – Fabric and Nature	Digital World – Wearable technology
Year 4	Drawing – Power Prints	Electrical systems – Torches	Craft and Design – Ancient Egyptian Scrolls	Structures – Pavilions	Painting – Light and Dark	Mechanisms – Slingshot car
Year 5	Drawing – I need space	Electrical systems – Doodlers	Sculpture – Interactive installation	Mechanical systems – Making a pop-up book	Painting – Portraits	Textiles – Stuffed toys
Year 6	Drawing – Make my voice heard	Digital world – Navigating the world	Craft and design – Photo Opportunity	Cooking and Nutrition – Come Dine with me	Sculptures – Making memories	Structures – Playground

All planning for each topic is available on the Kapow Website
https://www.kapowprimary.com

RIGHTS RESPECTING SCHOOLS
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SILVER – RIGHTS AWARE

Article 28 (right to education) Every child has the right to an education. Primary education must be free and different forms of secondary education must be available to every child. Discipline in schools must respect children's dignity and their rights. Richer countries must help poorer countries achieve this.