St Oswald's Catholic Primary School

Design and Technology Policy 2025-2028

Approved by:	Approval date	Renewal date
Full Governors	4th December 2025	Autumn 2028

This Design and Technology Policy is set within the context of the whole school aims and mission statement:

Together with Jesus,
We will Learn and Grow in Faith

Design and Technology vision for the curriculum.

At St Oswald's, we encourage children to enjoy school, their learning opportunities and to strive to reach their full potential. Design and Technology is an inspiring and practical subject that is concerned with developing the children's ability to investigate, analyse, design, make and evaluate as part of a whole process. It utilises a range of materials, providing children with many new learning experiences and goals. Children are encouraged to use creativity and imagination to design and make products that solve real and relevant problems, considering their own and other's needs, wants and values.

Children will develop a wide range of skills throughout their learning of Design and Technology and they will continue to develop and expand such skills as they go through school. There are three aspects of Design and Technology; Design, Make and Evaluate that need to be incorporated through all areas of DT including; construction, textiles, food technology, computer programming and computer aided design (CAD). Our school aims to provide opportunities for children to develop skills in all areas. We recognise that children are living in a highly developed technological world therefore planned sessions of Design and Technology will provide the children with the opportunity to develop and use a range of skills that will prepare them for a constantly changing society, increasingly dependent on technology.

Design and Technology activities will enable the children to use their creativity, imagination and social interaction skills to design and make their own products, understanding the processes from planning to making, evaluating and refinement. During the teaching of design and technology, a wide range of new skills will be acquired and the knowledge of other subjects, such as Mathematics, science, engineering, ICT and art, will be drawn upon and applied. Children will also develop the life skills and knowledge associated with healthy living, food nutrition and cookery

Our work reflects the National Curriculum requirements for Design and Technology:
"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."

EYFS

Through expressive arts and design, children know about similarities and differences in relation to places, objects, materials and living things. Pupils talk about the features of their own immediate environment and how environments might vary from one another. Pupils make observations of animals and plants and explain why some things occur, and talk about changes. Children will be provided with opportunities to meet the DT objectives holistically through continuous provision as well as teacher led activities.

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 interactive process of researching, designing, making and evaluating. Pupils 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:

Research

- 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

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
- 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 and vocabulary

- Build structures, exploring how they can be made stronger, stiffer and more stable
- Explore and use mechanisms in their products
- Children to be pre-taught relevant key vocabulary through all topics

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 interactive process of designing and making. Children should be challenged to develop their knowledge, skills and understanding when

working with a range of relevant DT topics. Pupils should be provided opportunities to work in a variety of different contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to:

Research

- Use prior knowledge and research appropriately using a variety of research tools including market research, trial and error, skill development and observations from the wider world.
- 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
- Understand how key events and individuals in design and technology have helped shape the world

Design

- Design purposeful, functional, appealing products for themselves and other users based on a given design criteria
- Generate, develop, model and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- Gain confidence when using computer aided design (CAD) and computer programming software to create designs, models and projects

Make

- Select and use a wide range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], safely and accurately
- Select and use a wide 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
- Compare their designs to others, highlighting strengths, areas of development and ways forward
- Evaluate against market research and design criteria

Technical knowledge and key vocabulary

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- Understand and use mechanical systems in their products
- Understand and use electrical systems in their products
- Apply their understanding of computing to program, monitor and control their products
- Children to use and apply relevant key vocabulary through all topics

Cooking and Nutrition

As part of their work with food technology, pupils should be taught how to handle food products and tools safely, cook and apply 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 nutritionally, now and in later life. Cooking and nutrition is linked to the wider curriculum and celebrations within the school calendar.

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.
- Recognise how to stay safe and demonstrate hygiene when cooking.

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.

Aims and Objectives of Design Technology

- To fulfil the requirements of the EYFS and the National Curriculum.
- To stimulate and sustain pupils' interest and enjoyment of DT.
- To contribute to and expand pupils' knowledge of the world around them.
- To encourage in all children competence and confidence when: identifying, examining and solving practical problems and when using a variety of approaches, materials and methods to make quality products.
- To encourage all children to evaluate their work and that of others by considering objectively the aesthetic, economic, social and technological aspects.
- To develop each pupil's awareness of the potential and limitations of technology.
- To build on each pupil's previous learning and experiences to solve design and technology problems.
- To develop each pupil's ability to communicate effectively, verbally, visually and numerically through practical activities.
- To provide an environment in which the children can work safely and where they will be taught to use skills and tools in a safe and effective manner.

Planning

Planning within year groups is a vital part of the whole school working towards consistent and high standards and equality of provision for all classes in all year groups. The curriculum for each year is planned to give consistency and match skill progression, within and across year groups, with related expectations. Children are provided equal opportunities to access all aspects of DT. Throughout all key stages, EYFS and KS1 & KS2, children will cover topics that

incorporate; textiles, construction, food technology, computer programming and computer aided design (CAD). In the EYFS, DT objectives are planned for in line with children's interests each term to meet the relevant criteria contained within the EYFS curriculum. Opportunities to explore the relevant DT objectives are provided throughout continuous provision.

Plans are developed by teachers and are placed on the shared drive after completion in order to be adapted and evaluated. The class teacher is responsible for the implementation of the plans and the delivery of the activities. Medium term planning should include a big question, which the children need to answer both before and after the topic has been taught, key vocabulary and relevant safe messages. Design Technology is taught during DT week, three times a year.

The Design and Technology subject team are responsible for working with the whole staff to develop a cohesive design technology experience throughout the whole school. The DT team will also:

- Support colleagues in their development and understanding of detailed work plans and implementation of schemes of work and in assessment.
- Take responsibility of the purchase and organisation of resources.
- Keep up to date with development in DT.
- Monitor delivery throughout the school
- Provide CPD for staff whether that be in-house training or external with companies such as MGL who deliver training and lessons in DT and Computing
- Continue to make DT a high-profile foundation subject.

Cross-curricular links

Design Technology is taught in both key stages as an integral part of the curriculum and wherever possible will incorporate cross-curricular links including computing, science, maths, art, English and RSHE. Focused practical tasks are planned by the class teacher to develop and practise particular skills and acquire knowledge.

Computing is an essential aspect of Design Technology and enables pupils to develop skills, knowledge and understanding in computing. Pupils have opportunities to access a range of activities including those where they;

- Use, draw and paint programs to model ideas;
- Use database and other information sources for research;
- Develop their understanding of sequencing and control systems;
- Use research to find out about other times and cultures;
- Develop their awareness of how computing is used in the wider world.

STEM weeks are used to celebrate and raise the profile of Design Technology across the whole school and demonstrate how DT links to maths, science and a range of other subjects. STEM week also seeks to place DT in to a real-life context with outdoor learning, trips and external workshops used to enhance this aspect of pupils' education.

Equal Opportunities and Inclusion

Teachers ensure that children have access to the range of design and technology activities and use opportunities within design technology to challenge stereotypes. The full range of activities in DT will be made available to all children, irrespective of race, gender, or physical disabilities.

SEND

As in all other areas of the curriculum the mastery approach is used to allow all children equal opportunities to access learning, without limitations. Support is available if needed. Teachers are responsible for highlighting any SEND needs and ensuring that lesson activities are adapted suitably for their pupils.

Assessment

All class teachers will use their assessment of the children in their class to plan for appropriate work and skill development. Assessment is both formative and summative to inform teaching, planning and next steps. Big questions are used at the beginning and end of each topic to highlight prior knowledge and progress made.

The Role of the Design and Technology Team

- Provide a strategic lead and direction for the subject;
- Complete regular professional development and feedback to staff;
- Have a full secure knowledge of the Curriculum Overview and Skill Progression;
- Understand the age-related expectations for each year group and key stage;
- Support and offer advice to colleagues on issues related to the subject;
- Conduct learning walks and book monitoring
- To liaise with staff regarding training requirements
- Relevant resources ordered when required
- Update staff of developments or changes in the Design and Technology curriculum
- To review and update policy, intent, implementation and impact

Review and Evaluation

This policy is an active document and is monitored, reviewed and evaluated continually allowing for new legislation, initiatives and in-service feedback.

Date: November 2025