



St. Mary's RC Primary School

Design and Technology Policy

Date policy last reviewed: March 2025

Mission Statement

We aim to provide a safe, caring, Catholic community where each member is valued and respected and enabled to achieve their potential through a broad and balanced curriculum. This is summed up neatly in our school motto: To learn and grow together in Christ.

INTENT

At St Mary's RC Primary School, we value Design and Technology. It is an inspiring, rigorous and practical subject which encourages children to learn to think and intervene creatively to solve problems. We encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts. We aim to, wherever possible, link work to other disciplines such as mathematics, science, engineering, computing and art. Children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers. High-quality Design and Technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. At our school, we are passionate about Design Technology.
WE ARE DESIGNERS and TECHNOLOGISTS!

1. Aims and Objectives

The aims at St. Mary's are to teach our children knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children work in a range of relevant contexts (for example home, school, leisure, culture, enterprise, industry and the wider environment). As a school we have adapted the Kapow curriculum to meet the needs of our learners. This allows us to ensure that a quality iterative process is being modelled and taught to the children across the different strands of DT.

IMPLEMENTATION

2. Statutory Requirements

2.1 This policy reflects the requirements of the *National Curriculum Programmes of Study*, which all maintained schools in England must teach.

2.2 It also reflects requirements for inclusion and equality as set out in the *Special Educational Needs and Disability Code of Practice 2014* and *Equality Act 2010*, and refers to curriculum-related expectations of governing boards set out in the Department for Education's *Governance Handbook*.

2.3 In addition, this policy acknowledges the requirements for promoting the learning and development of children set out in the *Early Years Foundation Stage (EYFS) statutory framework*.

3. Subject Organisation

3.1 Planning

Children 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.

When designing and making, the children are taught to:

Plan and 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 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
- understand and use electrical systems in their products
- apply their understanding of computing to program, monitor and control their products

Our objectives in the teaching of art and design are:

- developing 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 to design and make high-quality prototypes and products for a wide range of users and 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. Children will design and make a range of products. A good quality finish will be expected in all design and activities made appropriate to the age and ability of the child.

3.2 Cross-curricular links

Wherever possible, the DT curriculum will provide opportunities to establish links with other curriculum areas.

English

Pupils are encouraged to describe what they have done and to discuss how they might improve.

Mathematics

DT activities requiring the application of mathematical skills like measurement, calculation, and spatial reasoning.

PSHE

Design and Technology (DT) can be effectively linked, with PSHE providing the context for DT projects, such as exploring the impact of design choices on health, safety, and the environment, or using DT to create solutions for real-world problems related to PSHE themes.

4. Equal Opportunities

4.1 Protected Characteristics and Inclusion

4.1.1 All children in school have regular access to DT appropriate to their stage of development. Challenge for all is integral to our teaching and we aim to encourage all pupils to reach their full potential through the provision of varied opportunities. We recognise that our DT planning must allow pupils to gain a progressively deeper understanding and competency as they move through our school.

4.1.2 Teachers set high expectations for all pupils. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

- More able pupils
- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with SEN
- Pupils with English as an additional language (EAL)

Teachers will plan lessons so that pupils with SEN and/or disabilities can study every National Curriculum subject, wherever possible, and ensure that there are no barriers to every pupil achieving.

Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in all subjects.

Further information can be found in our statement of equality information and objectives, and in our SEN policy and information report.

4.1.3 The governing body have wider responsibilities under the Equalities Act 2010 and will ensure that our school strives to do the best for all the pupils, irrespective of disability, educational needs, race, nationality, ethnic or national origin, pregnancy, maternity, sex, gender identity, religion or sexual orientation or whether they are looked-after children.

5. Spiritual, Moral, Social and Cultural Development

- Pupils learn to solve problems and become resilient learners.
- Team and group activities develop pupils' social skills and help them to cooperate with other people outside of their friendship group.
- Pupils are encouraged to respect other pupils' levels of ability.

6. Assessment and Reporting

The Subject Leader will monitor lessons and teaching and talk to pupils. When appropriate it is also possible that the DT Subject Leader will seek the support of a specialist to evaluate areas of the curriculum.

- Pupils will be assessed through observations made during lessons.
- Teachers will record the progress of pupils against the learning objectives for the lesson.
- Throughout the year, teachers will plan on-going assessment opportunities to gauge whether pupils have achieved the key learning objectives.
- Individuals' assessment information will be recorded to help pupils' future teachers plan appropriate work for them and assist in the assessment of pupils' progress each year.
- Annual assessments of each pupil will be used to inform parents of their child's progress and attainment.

7. Role of the Subject Leader

The DT Subject Leader is responsible for:

- The overall implementation of this policy.
- Liaising with staff members to develop an effective DT timetable.
- Producing a flexible and appropriate scheme of work.
- Supporting staff members in all aspects of the curriculum.
- Creating an action plan at the start of each school year, identifying any areas of improvement within the subject which need to be addressed,
- Maintaining and replacing resources. these resources in a central store. We use examples of successful products to ensure that we can explore what makes a good quality product, fit for purpose as well as access to the internet to support the children's individual research.
- Ensuring the areas of the premises used for DT lessons are safe and clear of obstructions or other hazards.
- Monitoring the teaching of DT at the school, ensuring that high standards are consistently maintained.
- Undertaking the necessary risk assessments when teaching DT in the school.
- Ensure staff model using tools correctly BEFORE allowing children to use them in their designing.
- Ensure tools are kept in a safe place where only staff can access.
- Maintaining records relating to the teaching of DT.
- Attending any necessary training, to help inform future developments of the subject at the school.
- Keeping up-to-date with any changes in the subject area.
- Ensuring that the school provides extra-curricular opportunities to pupils, further developing the skills learnt during their DT lessons.
- Providing the headteacher with an annual summary report regarding the teaching of DT at the school.

7.1 Monitoring and Review

- This policy will be reviewed on an annual basis by the headteacher and DT Subject Lead, with any changes made to the policy being communicated to all teaching staff and the governing board.
- The curriculum plan will be monitored and evaluated by the DT Subject Lead, including the planning, assessment and reporting arrangements in place.

7.2 Resources

Resources are kept in a central store which is accessible to staff only, Only staff members must be responsible for getting resources needed and putting them away safely from the central resource area, The DT Subject Lead will regularly check resources and replenish where necessary.

8. Role of the Governing Body

8.1 The governing body will monitor the effectiveness of this policy and hold the headteacher to account for its implementation.

8.2 The governing body will also ensure that:

- A robust framework is in place for setting curriculum priorities and aspirational targets
- Enough teaching time is provided for pupils to cover the National Curriculum and other statutory requirements
- Proper provision is made for pupils with different abilities and needs, including children with special educational needs (SEN)
- The school implements the relevant statutory assessment arrangements
- It participates actively in decision-making about the breadth and balance of the curriculum
- It fulfils its role in processes to disapply pupils from all or part of the National Curriculum, where appropriate, and in any subsequent appeals

9. Additional Subject Information and Teaching and Learning Style

At St. Mary's we believe the act of investigating and making something includes exploring and developing ideas and evaluating and developing work. We do this best through a mixture of quality first whole-class teaching. Teachers draw attention to good examples of individual performance as models for the other children, allowing the children to constantly be evaluating their own work and making decisions to develop their own learning as we encourage children to evaluate their own ideas and methods, and the work of others, and to say what they think and feel about them.

We ensure that children:

- explore and research designs, engineering and inventions.
- use IT for their research.
- develop their design, making and evaluating skills through a wide range of DT projects. experience and develop a wide range of skills, covering all areas of the DT.

It a very exciting subject where children get to become designers, inventors and engineers!

Policy Review

This policy will be reviewed annually - March 2026