

**ST. MARY & ST. MARGARET'S
CE (AIDED) PRIMARY SCHOOL**



DESIGN & TECHNOLOGY POLICY

February 2025

Design and Technology Policy

School Values

Our School Values set the ethos in which this policy is grounded:

We believe that St Mary and St Margaret's CE Primary School exists to enable every child to realise his or her potential to the fullest possible extent, whatever his or her particular needs and abilities. We aim to help all children to be the best they can be by 'living life in all its fullness' (John 10:10).

To this end, we promote our agreed School Values:

- *Growing as a child of God*
- *Loving learning*
- *Caring*
- *Achieving*
- *Personal development*

Rationale

At St Mary and St Margaret's we believe that Design and Technology prepares children to take part in the development of our rapidly changing world. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing, designing, making and evaluating products and systems.

Aims

- To develop imaginative thinking in children and to enable them to talk about what they (and others) like and dislike when designing and making.
- To enable children to talk about how things work, and to draw and model their ideas.
- To encourage children to develop skills by selecting appropriate tools and techniques for making a product, whilst following safe procedures.
- To explore attitudes towards the made world and how we live and work within it.
- To develop an understanding of technological processes, products, and their manufacture, and their contribution to our society.
- To be resilient problem-solvers who are prepared to try different ideas after failure.

- To foster enjoyment, satisfaction and purpose in designing and making.

Implementation of Policy

At St Mary and St Margaret's, through the study of Design and Technology children combine practical skills with an understanding of aesthetic, social and environmental issues. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts.

Design and Technology helps all children to become discriminating and informed consumers and potential innovators.

At St Mary and St Margaret's children learn to produce practical solutions to real problems. Children develop technical understanding and making skills, learn about design methods and investigate their environment and the materials around them.

At St Mary and St Margaret's we use 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, and teachers encourage children to use their knowledge and understanding when developing ideas, planning and making products and evaluating them.

At St Mary and St Margaret's we use a balance of whole-class teaching and individual/group activities, giving children the opportunity to both work on their own and to collaborate with others.

At St Mary and St Margaret's children are encouraged to listen to the ideas of others, and treat them with respect, to critically evaluate existing products, both their own work and those of others. They have the opportunity to use a wide range of materials and resources, including ICT.

Knowledge and Understanding

At St Mary and St Margaret's all children are encouraged to:

- Generate ideas through discussion and experimentation.
- Extend knowledge and understanding of a wide range of materials, including construction kits, textiles, food, wood, plastic, metals and reclaimed/junk materials.
- Work within groups and as individuals.

- Make use of drawings and models to communicate their ideas.
- Evaluate their work and identify strengths and weaknesses in a positive way.
- Experiment with simple components, mechanisms and structures.
- Learn about health and safety aspects when working with a variety of materials and tools.
- Consider risk to themselves and to others and build up a knowledge and understanding of the dangers inherent in certain products and tools.

Planning

At St Mary and St Margaret's planning is the responsibility of the class teacher. The scheme of work contains suggested activities and skills to ensure progression and continuity throughout the school.

In planning, the delivery of the curriculum will be differentiated to allow for children of all abilities.

The scheme of work is set out in three main sections:

1. Investigate, disassemble and evaluation activities.
2. Focused practical tasks.
3. Design and make projects.

Foundation Stage

At St Mary & St Margaret's we follow the EYFS framework (2020). Within this framework there are four guiding principles which shape our practice.

These are:

Every child is a unique child, who is constantly learning and can be resilient, capable, confident, and self-assured.

Children learn to be strong and independent through positive relationships.

Children learn and develop well in enabling environments with teaching and support from adults, who respond to their individual interests and needs and help them to build their learning over time. Children benefit from a strong partnership between practitioners and parents and/or carers.

Children develop and learn at different rates. The framework covers the education and care of all children in early years provision, including children with special educational needs and disabilities (SEND).

As part of our practice we:

Provide a balanced curriculum, based on the EYFS, across the seven curriculum areas, using play as the vehicle for learning;

Promote equality of opportunity and anti-discriminatory practice.

We provide early intervention for those children who require additional support;

Work in partnership with parents and carers;

Plan challenging learning experiences, based on the individual child, informed by observation and assessment and by the children's own ideas and interests;

Provide opportunities for children to engage in activities that are adult-initiated, child-initiated and adult-supported;

Provide a secure and safe learning environment indoors and outdoors.

In Design and Technology, the children learn how to think imaginatively and talk about what they like and dislike when designing and making. Through play, they can investigate the objects around them. They explore how familiar things work and talk about and draw their ideas. Through play-based activities they begin to use a greater variety of tools and have opportunities to decide on the best tool or material for a particular role.

Key Stage 1

At St Mary and St Margaret's during Key Stage 1 the children learn how to think imaginatively and talk about what they like and dislike when designing and making. They build on their early childhood experiences of investigating objects around them. They explore how familiar things work and talk about, draw and model their ideas. They learn how to design and make safely and could start to use ICT as part of their designing and making.

Key Stage 2

At St Mary and St Margaret's during Key Stage 2 children work on their own and as part of a team on a range of designing and making activities. They think about what products are used for and the needs of the people who use them. They plan what has to be done and identify what works well and what could be improved in their own and other people's

designs. They draw on knowledge and understanding from other areas of the curriculum and use computers in a range of ways.

In Foundation, Key Stage 1 and Key Stage 2 children will:

- Develop knowledge, skills and understanding.
- Use developing, planning and communicating ideas.
- Gain a knowledge and understanding of materials and components.
- Carry out focused practical tasks that develop a range of techniques, skills, processes and knowledge.
- Design and make assignments using a range of materials, including electrical and mechanical components, food, mouldable materials, stiff and flexible sheet materials, and textiles.
- Investigate and evaluate a range of familiar products, thinking about how they work, how they are used and the views of the people who use them.
- Allow constructive conversation and language interaction between.

Skills

At St Mary and St Margaret's children learn how to draw on a developing repertoire of skills and knowledge, which will include:

- Learning how to work independently and collaboratively.
- Developing, planning and communicating ideas.
- Working with tools, equipment, materials and components to make quality products.
- Evaluating processes and products.
- Developing knowledge and understanding of materials and components.
- Learning the importance of health and safety.

The Design and Technology Leader will:

- Monitor Design and Technology within the school e.g. through curriculum walks.
- Keep up to date with new developments and inform staff.
- Encourage other members of staff in their Design and Technology teaching and give support where appropriate.

- Ensure that Design and Technology resources are available and appropriate to the needs of the staff.
- Ensure that Design and Technology keeps an appropriate profile within the school.
- Keep a portfolio for Design and Technology that will include photographs of children at work, curriculum walk reports, examples of planning and examples of children's work.
- Audit resources regularly and take overall responsibility for equipment and resources.

Health and Safety

At St Mary and St Margaret's children will be given suitable instruction on the operation of all equipment before being allowed to work with it.

Children should be strictly supervised in their use of potentially dangerous equipment at all times.

Children should be taught to respect the equipment they are using and to keep it stored safely while not in use.

Children should be taught to recognise and consider hazards and risks and to take action to control these risks, having followed simple instructions.

Food Hygiene

Children and staff will take care to undertake appropriate hand washing and other hygiene related activities prior to preparing food.

Children and staff working with food must wear aprons designated for cooking.

All jewellery should be removed and hair tied back.

Glue Guns

At St Mary and St Margaret's low temperature glue guns should only be used by an adult in Key Stage One and The Foundation Stage unless there is one-to-one supervision for a child.

Key Stage Two children should use low temperature glue guns under supervision in a designated work area, wearing safety goggles.

Craft Knives

At St Mary and St Margaret's craft knives, quick cutters and rotary cutters should only be used by an adult/teacher in Key Stage One and the Foundation Stage.

Key Stage Two children may use cutting equipment under supervision, using a cutting mat.

Sawing

At St Mary and St Margaret's bench hooks and clamps must be used when sawing any material. Safety goggles must be worn and any loose items of clothing/hair must be tucked in.

More Able Learners

More able learners will be identified as part of our formative and summative assessment procedures. We will provide for their needs through a framework of quality first teaching which focuses on ensuring the children are challenged appropriately. In addition, we will focus on developing their learning behaviours, including greater reflection, problem solving and enquiry, making connections, higher order thinking skills and independent learning. The progress of more able learners will be tracked to ensure more able children reach their full potential.

Equal Opportunities

At St Mary and St Margaret's all children, regardless of gender, race or learning needs will be given equal access to the Design and Technology curriculum.

The Design and Technology curriculum will be differentiated according to the needs of the children. If a child needs specialist hardware/peripherals in order to access the curriculum the school will source the appropriate equipment.

If a child is statemented and not able to access the curriculum at the same level as his/her peers then provision will be made for the child to access the curriculum at their own level. If a child is identified as having a gift or talent in this curriculum area, they will be challenged in their learning.

Monitoring and review:

At St Mary and St Margaret's 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 Design and Technology subject leader provides the SLT with information through reviewing planning and topic coverage and reviewing the progress towards the targets in the school improvement plan. Samples of work are photographed or collected to build a portfolio of work in Design and Technology.

Disability Equality Impact Assessment

This policy has been written with reference to and in consideration of the school's Disability Equality Scheme. Assessment will include consideration of issues identified by the involvement of disabled children, staff and parents and any information the school holds on disabled children, staff and parents.

Any questions or concerns regarding this policy should be made to Sophie Miles.