**St Mary’s Church of England Primary School & Nursery**

***Be the best you can be.***

**Design and Technology Policy**

**Rationale**

All school policies form a corporate, public and accountable statement of intent - it is very important to create an agreed whole school approach of which staff, children, parents, governors and other agencies have a clear understanding. This policy is the formal statement of intent, implementation and impact for Design and Technology within St Mary’s C of E Primary School. It reflects the essential part that Design and Technology plays in the education of our pupils.

**Introduction**

Design and technology is an inspiring, rigorous and practical subject. 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. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils 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.

(*The Design and Technology National Curriculum, 2014*)

At St Mary’s C of E primary School we firmly believe that Design and Technology is essential to a child’s learning journey as it teaches them about the ‘made’ world and is a practical curriculum area that allows pupils to design and make and evaluate products. At the root of good primary practice is the development of important skills, concepts and attitudes through experience. The DT process involves analysis, problem-solving, making and evaluation – all important skills for children to learn in the modern world. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. We believe that High-quality Design and Technology education makes an essential contribution to the creativity, culture, wealth and well-being of all children.

**Aims**

Following the introduction of the revised National Curriculum in 2014 the emphasis for our pupils has been to ensure that all children:

* develop 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 in order to design and make high-quality prototypes and products for a wide range of users
* 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.

At St Mary’s school our intention is to provide the children with a Design and Technology curriculum that reflects the purposes and aims taken from the national curriculum, inspiring our pupils to develop their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others’ needs, wants and values. They will acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Through the evaluation of past and present design and technology, they will develop a critical understanding of its impact on daily life and the wider world.

Through engaging and stimulating lessons, our children should develop:

* An ability to solve problems, to reason, to think logically and to work systematically and accurately
* A broad range of DT vocabulary in order to explain their design and reason their design choices clearly using the correct terminology
* Innovative and creative project ideas based on a design brief, working independently and collaboratively to solve problems
* A wide range of practical skills that they can apply to situations in the real world.
* The skills to communicate effectively with their peers and other adults as they solve problems and present their projects to others.
* Resilience to try multiple different methods to solve problems, ask questions and learn from mistakes.
* An understanding of health and safety to protect themselves and others when using a range of equipment

The National Curriculum recognises that cooking is a key element to children’s learning and development. Cooking is important to us as a school, as it ensures children are able to achieve the best learning outcomes possible by providing them with curriculum breadth. We aim to expose pupils to a range of food and customs from British and other cultures from around the world and appreciate how food is central to many British and world festivals and events. We aim to improve children’s awareness of Fundamental British Values (FBV) and deepen their spiritual, moral, social and culture development through their diverse understanding of food and the vital role it plays in cultures. Therefore, when children are exposed to these aspects of the whole curriculum, it will motivate and encourage them, enabling them to improve their cultural capital and to become respectful and knowledgeable citizens.

**Teaching and Learning**

Teaching methods to achieve the aims and objectives of this document will vary according to the classroom situation and the work planned by individual teachers. Time allocated may vary from week to week and term to term. Teachers may prefer to structure their coverage in blocked or modular termly units of work, rather than in an allocated weekly timetabled ‘slot’. This will allow for more time at once for children to sit and problem solve solutions to their design brief.

At St Mary’s C of E Primary school we provide opportunities for children to work individually, in pairs and in groups to discuss plans and to evaluate their own and their peers’ work in a constructive way. Group sizes should be determined by teachers according to the nature of the activity. A project may be broken down into a series of activities that may require different group sizes at different stages. Whole class teaching could be used to introduce new topics / projects. The teacher must be able to manage the learning and activities must be safe. We also assist pupils to develop skills and knowledge of tools and materials, to appreciate the need for safety for themselves and others, and to develop their creative thinking, designing and making, and evaluative skills.

Learning opportunities are provided, which allow children to:

* Design
* Make
* Evaluate
* Develop and apply technical knowledge
* Understand and use the principles of nutrition and the skills required for cooking.

**Health and Safety**

Whilst Health and Safety considerations & risk assessment remain the primary responsibility of the teacher in charge, the children should be taught to;

* Reduce risks through responsible behaviour and use good practice to avoid hazardous situations developing.
* Abide by simple safety rules when using tools or equipment.
* Consider and recognise hazards in their proposed ways of working, and take action to minimise them.
* Assess the risk of hurt or damage posed by evaluating their own and other designer’s products and suggest remedial action.
* Store tools and materials with due regard, and organise their working environment / practices in a safe way.

Sharp tools and glue guns should not be readily available – their use must be requested. Glue guns should only be used at Key Stage 2 under direct supervision of the teacher.

**Inclusion**

All children at St Mary’s C of E Primary School are entitled to a quality of provision that will enable them to achieve their potential. We believe in positive intervention, removing barriers to learning, raising expectations and levels of achievement, in order to close the gap. High quality teaching that is differentiated and personalised will meet the individual needs of the majority of our children. We establish and maintain a culture of high expectations that expects children with SEND and those who are disadvantaged to be included in all the opportunities available to other children so they can achieve well. We ensure that children with any additional needs are supported through regular assessment and feedback, differentiated planning, scaffolding, target setting, the support of Teaching assistance and regular reviews of progress.

**Marking & Feedback**

Effective marking and feedback of children’s work is just as essential in foundation subjects as it is in core subjects to enable them to develop and consolidate their understanding, while allowing teachers to assess each child’s progress and plan for their next steps. Work is marked against the success criteria for each lesson and in line with the school marking policy. Feedback is often provided to children verbally in Design and Technology but written marking, and the inclusion of next steps is used where appropriate and at the teachers discretion as to which fits best during each lesson.

**Resources & Displays**

All Design and Technology resources are located in the resources area. All staff should ensure that all resources needed for a topic are ordered in sufficient time, prior to the commencement of the topic. There must be an awareness of using resources economically and children should be taught how to get the most out of the resources they are using. It is the responsibility of all staff to ensure that resources are returned to the designated resources area when no longer needed.

**Assessment**

At St Mary’s C of E Primary School, we use assessment effectively to inform next steps and adapt planning to ensure all children are making progress. All class teachers are committed to raising standards of attainment through assessment and are responsible for the assessment of all children in their class.

Assessment takes place in a variety of ways:

* Talking to the children
* Effective questioning
* Observing and marking work
* Self and peer assessment
* Teacher assessment against targets and National Curriculum expectations

Information about the children’s progress is tracked and monitored using the Insight Pupil Tracking System. Teachers are required to regularly engage with Insight to track formative assessment data and at the end of every long term for summative assessment. These ongoing assessments inform future planning and teaching.

**Monitoring Teaching and Learning**

Monitoring within the school is undertaken by the Subject Leader, the Senior Leadership Team and Governors. This is recorded on the whole school monitoring schedule. Areas to be monitored will be decided upon in accordance with priorities indicated within the foundation subjects’ action plan and the whole school development plan.

Evidence in monitoring will be gathered, evaluated and reviewed through:

* learning walks
* formal lesson observations
* planning scrutiny
* children’s work scrutiny
* pupil conferencing

Results of any monitoring will be fed back to staff quickly and to SLT at their meetings so that any action required can be carried out effectively. Areas for staff training and CPD will be identified and delivered, as appropriate to the needs of the staff and school.

External monitoring, conducted by the School Improvement Partner and OfSTED, ensures that the school is supported in raising standards in the teaching of Design and Technology.

**Parental Involvement**

We encourage parents to be involved by:

* Inviting them into the school twice yearly to discuss the progress of their child
* Providing a full annual report in the summer term
* Take part in market research by completing questionnaires produced by the children
* Inviting them to review and evaluate products made by the children