

# St Margaret's CE Primary School



## Design and Technology Policy 2021

<b>Written by:</b>	Catherine Reene		
<b>Review cycle:</b>	Every 3 years		
<b>Date of this policy:</b>	September 2021	<b>Review date:</b>	June 2024

## **Contents:**

### **1. INTENT**

- 1.1 Aims (statement regarding what we want for the children in terms of knowledge, learning skills and understanding)
- 1.2 Principles ( breadth, relevance, access for all etc)

### **2. IMPLEMENTATION**

- 2.1 Roles, Responsibilities and Resources
- 2.2 Organisation
- 2.3 Planning and content
- 2.4 Links with other subjects
- 2.5 Knowledge and skills
- 2.6 Wider opportunities (trips, event, visitors etc.)
- 2.7 Inclusion and Extension
- 2.8 Homework
- 2.9 Health and Safety

### **3. IMPACT**

- 3.1 Marking and assessment
- 3.2 Monitoring and evaluation
- 3.3 Reporting to parents and governors

## **Contents:**

### **1. INTENT**

#### Aims

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.

#### Principles

Regardless of gender, ethnic origin or ability, we specifically aim to ensure that all pupils:

- 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

### **2. IMPLEMENTATION**

#### Roles and responsibilities

Each year group is responsible for planning an appropriate Design and Technology lessons based on the agreed progression of skills document specific to their year group. Teachers follow school policy with regards to planning and assessing learning in Design Technology. The subject coordinator is responsible for monitoring and reviewing planning and teaching

and reporting to SLT and school governors upon request.

### Resources

A resource audit and purchase is carried out annually. Before new stock is ordered, teachers fill out request lists based on specific needs for their future DT lessons. There are both central and resources in the Art and DT cupboard and also some supplies are kept in individual classrooms.

### Planning and Content

Planning in EYFS - please refer to the EYFS policy for more detail on the curriculum. Teachers in Early Years use the Revised Statutory Framework for the Early Years Foundation Stage to plan a unique curriculum that covers all aspects of learning including opportunities to develop their skills in Expressive arts and design. The educational programmes in the framework set out the activities and experiences for children under this area. Teachers use the Development Matters non-statutory curriculum guidance to set out the pathways of children's development and provide checkpoints throughout the year to assess progress through these stages.

From years one to six, DT is taught in blocks throughout the year so that children are taught a variety of skills in their learning and how to these with different projects following the National Curriculum.

- Long Term Planning

Using the National Curriculum Programme of study, Design and Technology Scheme of work for Key Stage 1 and 2 and the curriculum guidance for the Foundation Stage as the basis of their long term planning document teachers refer to their year group planning which relates to the national curriculum level descriptors.

- Medium term Planning

Using the objectives from the National Curriculum, teachers identify the learning objectives for each unit of work, matching possible teaching activities with learning outcomes and ensuring essential key objectives are covered at least once throughout the year. UNCRRC, Mission Statement and Basic Skills and cross-curricular links to be made in planning where applicable.

- Short Term Planning

This is done on a weekly basis referring to medium term plans.

When planning, the following should be kept in mind:

- IDEAs, investigating, disassembly and evaluation activities (how familiar products work and what they are supposed to do)
- FPTs, Focused Practical Tasks (developing a range of techniques, skills, process and knowledge)
- DMAs, Design and Make Assignments using a range of materials
- KS1 – Including food textiles and items that can be put together
- KS2- Including electrical and mechanical components, food, mouldable materials, textiles and stiff and flexible sheet material

## Links with other subject

Design technology will be linked to the carefully chosen year group topics, where possible, to make learning relevant and in order to engage and inspire children's interests. Teachers will make links to any previous relevant learning so that children are able to:

- Apply scientific skills, e.g. predicting and fair testing
- Apply mathematical skills, e.g. measuring to an appropriate number of decimal places, drawing and interpreting tables, graphs and bar charts
- Apply computing skills, e.g. making things happen by the use of control, handling information through the use of a database or spreadsheet
- Apply art skills, e.g. investigating texture and colour or recording visual information

## Knowledge and skills

The intent part of the EYF policy details the skills and knowledge at three checkpoints in the year e.g. by the Autumn, Spring and Summer and this is what the children will be able to do in the area Expressive arts and design. By the end of the year, the children need to reach the Early Learning Goal for this area of learning.

In design and technology across year one to year six, children acquire and apply knowledge and understanding of:

- Materials and components
- Mechanisms and control systems
- Structures
- Food and horticulture
- Existing products
- Quality
- Health and safety

In our school, children will:

- Develop designing skills, including generating and developing ideas, clarifying a task, creating design proposals, communicating ideas, planning and evaluating
- Acquire and refine the practical skills associated with making, including working with materials and components, tools and processes, e.g. planning, measuring and marking out, cutting and shaping, joining and combining, finishing and evaluating
- Apply scientific skills, e.g. predicting and fair testing
- Apply mathematical skills, e.g. measuring to an appropriate number of decimal places, drawing and interpreting tables, graphs and bar charts
- Apply computing skills, e.g. making things happen by the use of control, handling information through the use of a database or spreadsheet
- Apply art skills, e.g. investigating texture and colour or recording visual information

Children will have opportunities in Design Technology to:

- Work both independently and with others, listening to others' ideas and treating these with respect
- Can be creative, flexible and show perseverance
- Critically evaluate existing products, their own work and that of others
- Develop a respect for the environment and for their own health and safety and that of others

- Recognise the strengths and limitations of a range of technologies and appreciate which are appropriate for particular situations
- Develop their cultural awareness and understanding and appreciate the value of differences and similarities
- Develop an understanding that all people are equal regardless of age, race, gender or ability and that there needs to be alternative solutions to meet the needs of individuals and groups of people
- Find enjoyment, satisfaction and purpose through designing and making
- Apply value judgements of an aesthetic, economic, environmental, moral, scientific and technical nature

Specific skills are organised and differentiated across the year groups to ensure smooth progression. The progression of skills documents for each year group identify and ensure coverage of all the key skills.

### Wider opportunities

Where possible teachers organise trips, event, visitors to further inspire children's thinking and promote design Technology knowledge and skills. For example

- In year 5 the children visit to the Brighton Toy and Model museum, and view samples of sewing on display to inspire the Victorian sewing project.
- In year 5 they also visit to London as a class to visit the Houses of Parliament, go on the London Eye and cruise on the river Thames so that the children can see the buildings first hand to inspire their Building construction project in the summer term.
- In year 6 Adults from the community come in to support cooking linked to WW2 recipes and used for Tea Dance and making of a class book made of pop-up pages
- Year 6 children are also inspired by a special Maya immersion week – where a range of design and technology activities are available for children to work through supported by Mr Wesley (Premises Manager)/parents.

### Inclusion and Extension

Teachers ensure SEND provision and opportunities for extending able pupils through careful planning which is differentiated to suit the needs of their class. Teachers provide accessible resources and materials for all the children in their classes and make use of LSA's and SNA's in supporting children's learning.

### Homework

Homework is not regularly set for Design Technology at St Margaret's school.

### Health and Safety

The general teaching requirement for health and safety applies in this subject. Teachers will inform children of the health and safety implications involved in lessons. Teachers will carry out a risk assessment before each activity, considering their tools, materials and equipment being used. Before undertaking practical tasks, children should be taught to use tools correctly in order to ensure safety.

### **3. IMPACT**

#### Marking and assessment

The learning outcomes in each unit show how children might demonstrate what they have learnt. Pupils should be involving in actively evaluating their work and thinking about possible improvements. The actual work children produce will serve as a record of the achievement, therefore it is not necessary to make detailed records of each child in relation to the outcomes. However, teachers may wish to make notes about individual children's development, focussing on those who have yet to reach or have exceeded the required standard.

In years 1 to 6, class teachers informally assess the children's attainment in DT each half term/term as appropriate, looking at the objectives for the unit of work and noting those children who have exceeded with these or have not met them. This is recorded on a spreadsheet that can be used by teaching staff, subject leaders and SLT.

#### Monitoring and evaluation

The Design and Technology Co-ordinator is responsible for monitoring the standards of children's work and the quality and breadth of teaching. The co-ordinator supports colleagues in the teaching of Design and Technology by informing them of current developments in the subject and by providing a strategic lead and direction for the subject in school.

The co-ordinator is also responsible for evaluating strengths and weaknesses in the subject and identifying areas for improvement and development. Subject Leader release time will enable the coordinator to fulfil the role, reviewing medium term plans, monitoring children's work and observing teaching in the subject.

#### Reporting to parents and governors

Teachers discuss the children's progress in Design Technology with parents as part of the consultation evenings (twice a year) and through an annual report which outlines the children's effort and attainment.

Governors are kept informed with open access to the Design and technology policy and the progression of skills document. In addition yearly opportunities are also available to discuss and feedback on the curriculum with governors.