St Joseph's Catholic Primary School, Bishop's Stortford, CM23 2NL

'Live, love and learn in a caring Christian Community'

<u>**Design and Technology Policy**</u>

The following policy must be read in conjunction with all other school policies.

1. 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.

2. Aims

The national curriculum for design and technology aims 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

3. Curriculum Organisation

Foundation Stage:
The Early Years Foundation Stage (EYFS) curriculum is followed. Design and technology is found under the heading of 'Expressive Arts and Design (EAD)'.
The children's early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing

making skills and handling appropriate tools and construction material safely and with increasing control.

Key Stage 1 & 2:
Design & Technology is planned to cover the requirements of The National Curriculum and follows the planning and guidance provided by 'Plan Bee' in each Key Stage. These are set out on their website where lesson plans, action plans and lesson activities are found.

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- 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

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products
- understand how key events and individuals in design and technology have helped shape the world

4. Cooking and Nutrition

As part of their work with food, pupils should be taught how to 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 well, now and in later life.

5. Links to other Curriculum subjects

English:

Design and technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. Through discussion children develop an understanding that people have different views about design and technology.

Maths:

Design and technology in our school contributes to the teaching of mathematics in a variety of ways. The children study space, scale, and measures. They also use diagrams, position, movement and graphs to explore, analyse and illustrate a variety of data.

ICT:

The school will provide a range of information resources, images and visual aids for research purposes. These will be through a collection of CD Rom, databases and Internet sources. Pupils shall be aided in the presentation of a completed project by word-processed text or digital photography. Computer technology will be used to enhance skills in designing and evaluating a product through the use of a range of appropriate software. Stand-alone Computing units will also be taught from the Rising Stars range of planning and teaching.

PSHE:

Design and technology contributes to the teaching of personal, social and health education and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health, healthy diets, personal hygiene and how to prevent disease from spreading when working with food.

SMSC:

The teaching of design and technology offers opportunities to support the social development of our pupils through the way we expect them to work with each other in lessons. Our

classrooms allow children to work together, giving them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work, the children develop respect for the abilities of other children and a better understanding of themselves.

6. Strategies for Teaching/Inclusion

Planning at all levels aims to deliver a broad and balanced curriculum to all children, irrespective of their ability or gender. Pupils are grouped in mixed ability and gender groups for all activities. Lessons are differentiated appropriately. Teaching assistants, when available, work as directed by the teacher. Gifted and Talented children are given opportunities and encouraged to work on more complex issues.

7. Assessment and Recording

Assessment in Design and Technology is ongoing, in accordance with the specific unit being taught at any given time. Pupils are directed to work towards set objectives. Teachers observe, monitor and question children during lessons as part of their daily practice. On completion of a particular unit, work is marked according to the school marking policy. At the end of a unit teacher assessment is used to record an attainment against three stages of development – working towards, at age related expectations and working at greater depth. These levels are recorded by individual teachers on the D&T assessment sheets.

The D&T subject leader monitors levels of attainment throughout each unit stage and keeps a portfolio of samples of pupil work. There is also opportunity for subject leaders to observe the teaching of D&T throughout the different key stages.

8. Resources

A variety of resources are available to teach the practical elements of Design and Technology. These are kept in a central store and are reviewed and updated by the subject leader.

9. Health and Safety/Safe Practice

The general teaching standards for Health and Safety apply across all areas of Design and Technology. This is in line with overall school policy. Children are made aware of the risks of certain equipment and activities and are actively encouraged to promote safe practice

across their work in this subject. We also teach children to follow proper procedures for food safety and hygiene.

10. Monitoring and Review

The Design and Technology subject leader is responsible for monitoring the standard of the pupil's work and the quality of lesson planning. The onus is also on the subject leader to keep informed about current and future developments in the subject. The subject leader provides the Governors with a biannual report which evaluates the strengths and weaknesses of the subject and indicates areas for further development. The subject leader has allocated time for monitoring children's work and observing teaching across the school.

Team members

PC, MB, ME and VK.