# Chorley St Mary's Catholic Primary School and Nursery

## Design Technolgy Intent, implementation and impact statement 2024

### Subject leader: Mrs L Ainscough

## Rationale –In our school we think…

At St. Mary's, we are all designers and technologists! We want our pupils to appreciate design and technology. We want them to have no limits to what their ambitions are and grow up wanting to be architects, graphic designers, chefs or carpenters!  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 curriculum has been carefully designed so that our pupils develop their design knowledge and skills. We want all our pupils to remember their Design and Technology learning in our school, to cherish these experiences and embrace the opportunities they are presented with.

## Intent – What is being delivered?

Design and technology is an inspiring, rigorous and practical subject. The curriculum is focused upon the development of practical, theoretical and disciplinary knowledge drawing on disciplines from other subjects such as science, maths, computing and art. The curriculum is progressively sequenced to ensure that pupils learn how to take risks, become resourceful, innovative, enterprising and capable citizens. Through practical work, the pupils learn the discipline of the subject and apply their knowledge and skills to think and work as a designer and technologist. The units studied supports the application of technical knowledge gained and encourages learners to design, make and evaluate the success of their product. At St Mary's, 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, considering their own and others' needs, wants and values.

### What will this look like in EYFS, KS1 and KS2?

In EYFS, Design Technology skills come from the Physical Development, Expressive Arts and Design and Understanding the World areas of Development Matters. In the Early Years Foundation Stage, children learn these skills through group work, whole class teaching and carefully planned continuous provision areas. Children have access to a variety of resources within their continuous provision that helps to both develop and consolidate skills, knowledge and understanding when designing and making in their own play. The key substantive concepts structures, textiles, food, and nutrition run throughout EYFS. They have access to a wide variety of construction kits where they can build, join, stack, balance, and adapt their own constructions. They have the opportunity to use a variety of tools and techniques and processes, select, and combine using a variety of materials. Children use tools and techniques used for design and technology such as scissors, punches, threading, sewing, hammering to develop those all-important fine motor skills. Outside the children have access to a wide variety of large scale resources such as crates, drain pipes, tubes and planks giving them the opportunity to design, make, adapt, problem solve, modify and put structures to the test.

Across KS1 and KS2 the Design Technology curriculum builds and expands on previous knowledge. There are six key focus areas from the National Curriculum:

- Cooking and Nutrition
- Mechanisms and Mechanical systems
- Structures
- Textiles
- Digital World (KS2 only)
- Electrical systems (KS2 only)

Each of the key areas follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum.

The areas of mechanisms, textiles and structures will be revisited within each key stage to ensure that knowledge and skills are retained and developed overtime. Electrical systems and Digital World will be taught twice during Key Stage Two. A focus will be placed on cooking and nutrition, learning to prepare predominantly healthy dishes. Children will be taught food provenance and seasonality. The long-term plan ensures that children build a repertoire of knowledge and techniques, such as building structures of increasing difficulty and progressing from simple mechanisms towards mechanical systems.

## Implementation:

To ensure our teachers provide the best opportunities for the delivery of the design technology curriculum, the content of the subject has been carefully sequenced building from EYFS to KS1 to KS2 and is underpinned by key substantive and disciplinary knowledge and concepts. This is clearly mapped out in our Overview of Design Technology Learning document.

At St Mary's we teach Design Technology through a variety of creative and practical approaches. In Reception, KS1 and KS2 we use KAPOW, an online subscription based resource to support our planning and delivery of high quality Design Technology teaching – this is enhanced and supplemented further when needed and so appropriate for our children and school context. All teaching of Design Technology follows the design, make and evaluate cycle and the stages are given equal weight. Each of the stages are rooted in technical knowledge and vocabulary.

Design Technology is timetabled and taught at least three times throughout the year explicitly, although Design Technology skills may also be developed on a cross-curricular basis alongside other work and wider curriculum opportunities. Teachers use spaced practice to space their Design Technology learning across the half term to ensure concepts are revisited and remembered. Design Technology is often used in an interleaved manner too, such as in our science and computing.

Teachers will make use of knowledge organisers to share key knowledge and vocabulary for every half term's unit, which will enable children to understand the exact knowledge/vocabulary that needs to be learnt by the end of the half term.

Teachers will start a new Design Technology unit with an 'Initial Retrieval Practice map' to ensure the pupils retrieve previous learning from the previous unit of work with the same Design Technology concept.

## Impact

Pupils record their learning via digital means such as ClassDojo. Evidence of the learning is dependent on the lesson outcome; year group and the knowledge and skills being developed. This can be in the form of: written outcomes, tables and charts, photographs of practical activities and speech bubble comments relating the learning.

The use of retrieval practice strategies built into the learning will help teachers identify how much knowledge has been learnt in a unit. Each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit. This information informs teacher assessments of children working towards, at and above the expected standard which will be identified at the end of each unit.

Subject leaders will conduct learning walks, book scrutiny and pupil voice interviews to measure the impact of our teaching, based on how much children can remember. Subject leaders will meet with their cluster schools networks on a regular basis and will moderate the planning, work and monitoring outcomes from their setting to ensure that standards are meeting or exceeding the expectations of the EYFS and National Curriculum.

Review: The subject leader will review the policy annually. Policy produced May 2024.