

Our Lady of the Wayside's Design and Technology Curriculum

General information	
Curriculum Champion	Mrs Forysth
Link Governor	TBC
SLT Oversight	Mrs Ashcroft

Our aspirations and aims for Design and Technology at Our Lady of the Wayside Catholic School Our curriculum intent, implementation and impact

Intent

Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. At William Patten, 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. We aim to, wherever possible, link work to other disciplines such as mathematics, science, engineering, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

Implementation

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children design and create products that consider function and purpose and which are relevant to a range of sectors (for example, the home, school, leisure, culture, enterprise, industry and the wider environment).

When designing and making, the children are taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

Our Lady of the Wayside Catholic Primary School
Learning and growing together, rooted in Christ

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer-aided design.

Make

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing, as well as chopping and slicing) accurately.
- select from and use a wider range of materials, ingredients and components, including construction materials, textiles and ingredients, according to their functional properties, aesthetic qualities and, where appropriate, taste.

Evaluate

- investigate and analyse a range of existing products.
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- understand how key events and individuals in design and technology have helped shape the world.

Develop, Use and Apply Technical Knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- understand and use mechanical systems in their products.
- understand and use electrical systems in their products.
- apply their understanding of computing to program, monitor and control their products
- Understand some of the ways that food can be processed and the effect of different cooking practices (including baking and grilling).

The curriculum has a spiral approach. This ensures that: Pupils return to the key areas again and again during their time in primary school; Each time a key area is revisited it is covered with greater complexity and upon returning to each key area, prior knowledge is utilised so pupils can build upon previous foundations, rather than starting again. This helps children to retrieve what they have learnt in the earlier sequence of the programme of study, and ensures that new knowledge is taught in the context of previous learning to promote a shift in long term memory.

Impact

We expect the primary design and technology curriculum to have a significant impact on students' knowledge, skills, and attitudes towards design and technology. Through this curriculum, students will develop the ability to identify and solve real-world problems, and create innovative solutions that meet user needs. They will develop creativity and confidence in their ability to design and make products that are fit for purpose, aesthetically pleasing, and sustainable. We also anticipate that the curriculum will promote collaboration and communication skills, as students work in teams to solve complex problems. We expect students to be responsible and reflective designers who can use their skills to contribute to society in a positive and meaningful way.