St Michael's CE (VC) First School

Through God we love, laugh and learn

'This is the day the Lord has made, let us rejoice and be glad in it.' Psalm 118:24

Design and Technology

Curriculum Intent

The curriculum for Design and Technology at St Michael's is designed to be inspiring and relevant, preparing children for the ever-developing world in which they live. The subject encourages the children to become creative problem solvers, both as individuals and as part of a team. Planning enables children to have the opportunity to solve real and relevant problems within a variety of contexts. Wherever possible these tasks are linked with current areas of learning in other subject areas such as maths, computing and history. Opportunities are sought for children to evaluate current designs and use these to inform their choices and next steps in their own designs.

Cooking and nutritional awareness is built within the curriculum, allowing children to develop their understanding of healthy lifestyles and balanced diets. Cooking is seen as a fundamental life skill and the children have a wide range of opportunities to develop their independence in this aspect.

Implementation

At St Michael's our planning ensures that Design and Technology is taught in every year group, at least once a term (depending upon project length). Projects are often linked to other subject areas to build on the children's knowledge and understanding. Our whole school curriculum map identifies when each topic is taught. Each year group undertakes a cooking and nutrition unit at least once a year.

Planning ensures that children follow the design processes of:

Evaluate

- By investigating an analysing a range of existing products/ designs and using research

Design

- developing design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at the intended audience.
- Generate, develop, model and communicate ideas through discussion, annotated sketches, cross sectional diagrams, prototypes and computer aided design.

Make

- Selecting from and using a wide range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing) accurately.
- Selecting from and using a wide range of materials and components including construction materials, textiles, electrical equipment and ingredients based on their functional properties and their aesthetic qualities.

Test

- Trialling the product to evaluate if it meets its intended purpose

Evaluate

- Evaluating their ideas and products against their own design criteria and considering the views of others to improve their work.
- Understand how key events and individuals in design and technology have helped shape the world in which we live

Early Years Foundation Stage

Through Expressive Arts children:

- develop a curiosity and interest in the designed and made world through investigating, talking and asking questions about familiar products

- recognise how objects around them work and how they help us live our lives

- are encouraged to construct and create with purpose, selecting the appropriate materials from a wide range of choices

- develop confidence and enthusiasm through frequent exploration of construction kits to build and construct objects, and activities for exploring joining, assembling and shaping materials to make products

- extend their vocabulary through talking and explaining about their designing and making activities

Impact

At St Michael's, we believe that teaching pupils how to design, make and evaluate products in a creative and practical way, will allow them to develop skills and attributes they can use beyond school life. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. The skills they learn within the subject are designed to help them in their future life. By developing an ongoing awareness of healthy eating and balanced diet, the children are equipped with the tools to help them make healthy choices impacting on their future life-style choices.