Design Technology

Intent

In our Design and Technology curriculum, we aim to inspire, engage and challenge our pupils to use their creativity and imagination in this practical subject. Using their inventiveness and vision, the children at St Michael's will design, make and evaluate products that solve real and relevant problems. They will draw on their broad range of subject knowledge and on on-going evaluation to develop the resourceful and technical expertise needed to accomplish everyday tasks with confidence and to participate in a progressively technological world.

Implementation

To ensure high standards of teaching and learning in Design and Technology, we implement a curriculum based on The National Curriculum and Chris Quigley's Curriculum; the scheme provides staff with a comprehensive framework that outlines the knowledge and skills that need to be taught within each Key Stage. The scheme is progressive throughout the whole school and focuses on building upon three fundamental ideologies; mastering practical techniques, taking inspiration from design and designing, making, evaluating and improving. Planned repetition helps to ensure that children are able to build on previous learning in order to achieve greater depth as they move through the school. Our progression helps teachers to help their pupils form a Design and Technology schema by;

- Using concepts as the basis for the schema
- Strengthening the schema with knowledge
- Further deepening connections through tasks.

The main focus' covered throughout the school revolve around, deepening understanding within the developed Design and Technology schemas and we do this by using knowledge categories; technical knowledge, practical knowledge, design inspiration and design processes. These fundamentals weave into the main strands we focus on at St Michael's which include structures, mechanisms, electrical systems, artificial intelligence and app control and food and nutrition.

At St Michael's we aim to fulfil the requirements of the National Curriculum by ensuring 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.

Impact

Our Design and Technology curriculum is well thought out and is planned to demonstrate clear progression. At St Michael's, we focus on progression of both knowledge and skills whilst also having the opportunity to explore technical knowledge, practical knowledge, design inspiration and different design processes.

We measure the impact of Design and Technology curriculum through the following methods;

- A reflection on standards achieved against the progression map
- Pupil discussions about their learning; which includes discussion of their thoughts, ideas, processing and evaluations of work (pupil voice)
- Book/folder Scrutinies
- Annual reporting of standards across the curriculum.