Design and Technology

Intent, Implementation and Impact

The National Curriculum for Design and Technology aims to ensure that all pupils:

1. Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
2. 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
3. Critique, evaluate and test their ideas and products and the work of others
4. Understand and apply the principles of nutrition and learn how to cook

Intent

Our Design and Technology curriculum intends to develop children's academic and practical skills by inspiring them to solve problems based on initial exploration of designers and their products, leading to develop purposeful products based on real life contexts. We encourage creative and imaginative thinking through functional, resourceful and innovative experiences. Our children become independent risk-takers who can also work well within a team, sharing their thoughts and ideas fairly. We ensure a creative yet challenging curriculum with a clear development of skills and knowledge to design, make and evaluate products, where the children consider their own and others' needs, wants and values. The skills and techniques developed through Design and Technology are of great importance in our everchanging technological world to ensure that children are equipped for the next stages in their lives.

Implementation

Our bespoke Design and Technology curriculum is designed by identifying the key skills, knowledge and understanding required by the National Curriculum, which is then planned to ensure that the skills are taught sequentially across the key stages and that new skills build on and develop the skills taught in previous year groups. Design and Technology is taught as a block unit of work every term and can relate directly to other subjects such as History, Mathematics, Computing and Science. For each project, children follow the design-make and evaluate sequence, allowing children time to reflect upon their design and products and think of ways that they could be improved or adapted. We have recently implemented the Iterative Design Process where pupils' ideas are communicated and clarified through action. During an iterative process thought leads to action, resulting in further thought and action as pupils resolve design problems and address design opportunities. Teachers support and model increasingly progressive skills to the team leaders who report back to their group to enable children to create products of a high-quality throughout school. Children are given a design brief to put the need for the product in context. Where possible, teachers ensure that the brief is linked to another area of their learning or has relevance to the children to inspire their imagination and eagerness to create and problem solve.

Impact

Our Design and Technology curriculum enables and encourages our children to becomes critical thinkers. They look at existing designs to analyse and assess its effectiveness and then they consider ways of redesigning and reconstructing it to improve its overall success. Through DT our children learn to take risks, become resourceful, innovative and enterprising individuals. Children learn to be passionate and excited by the designing and making of products including working with, preparing and tasting food. Learning is assessed through the analysis of the pupil's ability to evaluate, design, make and improve their own work. The children are assessed based on their role within the group too.

If you were to walk into a Design and Technology lesson at St Winefride's, you would see:

- D&T vocabulary planned for and displayed.
- Clear skills being taught as the learning objective.
- Children using a variety of visual aids and existing products as inspiration.
- Books being used for designing and planning.
- A range of tools and equipment used throughout the year.
- Children confident to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.