



Design & technology

Design & technology Leader:
Miss M Taylor



Miss Taylor's passion for Design & technology

Design & technology was always something that I loved while at primary school however, unfortunately, we didn't do too much of it. During high school, I was overjoyed to partake in many more DT lessons which enabled me to create many fond memories and create products such as key chains that I still have today. While I was at university, I decided to study and specialise in DT as I wanted to be able to implement the subject into my teaching practise as much as possible and to be able to confidently pass on this passion. DT is a creative, problem-solving subject which enables us to gain valuable life skills. Now, when teaching DT, I love watching the children becoming more capable and resourceful throughout a topic. As DT develops throughout our school, it is inspiring to see pupils taking risks with their creativity and producing some incredible final products that are fit for a purpose – children often surprise themselves with the final pieces and are extremely proud of themselves – almost as proud as we are of them.

Design & technology Subject Vision

Design and technology at St Paul's is an inspiring, rigorous and practical subject. It uses creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. Pupils acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. Design and Technology also provides a firm basis for later learning in the subject and a platform for developing skills in literacy and numeracy.

Design & technology and St. Paul's Values & Ethos

The following St Paul's values are intertwined in our unique Design & Technology curriculum:

Friendship and Nurturing:

Each and everyone one of our DT projects involves teamwork. Whether it be, practising skills, creating prototypes, or sharing successful practice, every individual is able to bring their different skills to the table. At our school we find that working together, towards a common goal, strengthens bonds and encourages the children to communicate.

Throughout each topic, there are also many opportunities for the children to overcome obstacles by working together using trial and error to create their products. Sharing these experiences and celebrating successes together, no matter how big or small, creates lasting memories and helps to flourish friendships.

Respect and Tolerance:

Respect and transparent communication are promoted and encouraged throughout each lesson. A huge part of each topic also involves acknowledging and accommodating the various needs of possible users of the products we are creating. To be able to create our project titles, during our IEA's, we work together to research backgrounds and viewpoints enabling us to cater for individual differences. This promotes a great understanding and appreciation of different viewpoints amongst the children and staff in school.

Honesty and Integrity:

In some lessons, one example being mid topic - during our focus tasks, children are asked to reflect on what does and doesn't work. As staff, we encourage our young designers to assess their choices and make informed adjustments to their products. In design and technology, we see these adjustments as stepping stones to success, rather than failures. Children respond well to this positive mindset which helps them to continuously grow in their practice. At the end of each topic, children are often encouraged to evaluate their final product. Whether it's designing, measuring, cutting, or assembling, our children are becoming increasingly more reflective.

Thankfulness and Joy:

Each individual topic is designed to cover the 5 different strands of DT – mechanisms, textiles, structures, food and electrical systems. By covering these 5 areas, unique learning experiences are provided by accessing a range of resources beyond the traditional classroom. Using tools, technology and online platforms helps to create a sense of gratitude amongst the children while learning in a variety of engaging ways, being grateful for the resources and opportunities available to them.

Perseverance and Courage:

Another crucial element of every DT lesson is that children show attention to detail so that they can refine and improve their designs. When faced with and reflecting on technical challenges, children are provided with the opportunity to persevere by actively seeking solutions. In class, we are finding that due to having a safe and encouraging learning environment, our children know that having perseverance and courage will help them to achieve their goals. We have also found that perseverance is evident as children spend extra time researching and discussing their products in their own time, demonstrating their dedication to the task at hand.

National Curriculum aims for Design & technology

The national curriculum for design and technology aims to ensure 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.

SMSC Design & technology Statements**Spiritual**

D.T supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products. It instils a sense of awe, wonder and mystery when studying the natural world or human achievement. Encouraging creativity allows pupils to express innermost thoughts and feelings and to reflect and learn from reflection, for example, asking 'why?', 'how?' and 'where?'.

Moral

D.T supports moral development by raising awareness of the moral dilemmas by encouraging pupils to value the environment and its natural resources and to consider the environmental impact of everyday products. It educates pupils to become responsible consumers.

Social

D.T Supports social development by providing opportunities to work as a team, recognising others' strengths and sharing equipment. Design Technology promotes equality of opportunity and provides an awareness of areas that have gender issues e.g. encouraging girls to use equipment that has been traditionally male dominated.

Cultural

D.T supports cultural development by encouraging children to reflect on ingenious products and inventions, the diversity of materials and ways in which design technology can improve the quality of life. It investigates how different cultures have contributed to technology and reflects on products and inventions, the diversity of materials and ways in which design can improve the quality of our lives.