SMSC in Design Technology

Students' Social Moral Spiritual & Cultural is developed in Design Technology in a number of ways. We believe in educating our students to think about the impact of their designing and making on the environment and people. Sustainability and the clear understanding of how this is applied to designing new products are paramount if we are to protect the world's natural resources.

Mutual respect is engendered through the process of peer evaluation of each other's work and standards. We empower students to offer their perspective in a constructive way, to take critical feedback positively and to articulate their views in a respectful and sensitive way. We support this through the celebration of human fallibility as a motivator to learn and succeed.

We support students search for meaning and purpose through encouraging creativity in projects and challenge them with the fundamental question, 'How will my designing benefit humanity?'

Spiritual Development in Design Technology

Spiritual development is important in Design Technology. The process of creative thinking and innovation inspires students to bring out undiscovered talents, which in turn breeds a self-confidence and belief in their abilities. It also challenges and appeals to the creative instincts that have driven humanity to discover, adapt and overcome. Within our schemes of work we seek to develop these.

Moral Development in Design Technology

In Design Technology we seek to develop a sense of 'moral conscience' in our students, through focusing upon the moral dilemmas raised in designing and making new products. We teach students to understand the wider impacts on the environment when designing and making new products and expect them to consider carefully the materials and components they will use when designing and making. We encourage sustainable thinking through the active application of the 6 Rs (Reduce; Rethink; Refuse; Recycle; Reuse and Repair) and highlighting the impact on environmentally sensitive areas of the world.

Social Development in Design Technology

Social development is a key feature of all Design Technology lessons. We teach the concept of self-regulation to ensure that students accept responsibility for their

behaviour and the safety of others. We encourage students to give each other reminders when standards fall short of the collective expectation. This establishes and maintains a safe, secure, learning environment. We place an emphasis on developing the ability to work with others and to accept each other's unique personality. We encourage effective conversations about the work we do through self and peer evaluation, and to give and accept constructive feedback as a vehicle to improve students' learning outcomes.

Cultural Development in Design Technology

We develop wider cultural awareness in Design Technology through projects that have a connection with our past heritage and how our industrial routes have shaped our nation. We seek to expand students' knowledge of other cultures' influences on design and manufacture including an increasing awareness of the influences digital manufacturing developments from other countries is having on the designing and making of products that we use.

Examples of SMSC in Design Technology include:

- Students are taught about the moral choices facing designers and manufacturers when deciding on materials. Students use the six 'Rs' of sustainability to understand and apply ways of conserving the earth's resources.
- Focus on recycling in food and how to manage portion sizes to minimise waste helps students to connect with the dilemmas of those who do not have an abundance of food.
- Students are given opportunities to work in small teams and pairs to solve design problems. By peer assessing work they learn from each other and are taught to articulate their ideas.
- Students are taught the social skills around behaviour self-regulation to ensure collective responsibility for a safe and efficient working environment. They are taught to challenge each other's behaviour or practices if they fall short of the collective expectations of the group.
- Students study iconic bridges and connect with the work and influence of Isambard Kingdom Brunel.
- Students look at cultural influences on the food we cook and the diversity of ingredients available for us to cook with. They also learn about staple foods of other countries.

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- Investigate and use shape form and images from other cultures to influence their designing. And learn a range of techniques to create pattern & texture for example tie dying.
- Students consider the use of CAD/CAM in designing and making products and the benefits and impact of CAD/CAM on skills and traditional craftsmen can they co-exist?
- In the lighting project students debate and justify the selection of light sources chosen and the ecological benefits of using low energy solutions.
- Students work in a socially dynamic learning environment with finite resources and equipment. They learn and demonstrate the importance of negotiating an order of usage for machines and equipment and to take into account each other's priorities to establish a workable 'pecking order' to access tools & equipment.
- Students look at the role of digital manufacturing and its influence on society. This leads them to understand countries who are at the forefront of digital manufacturing and the influence they are having on products bought across the world.
- Students consider sustainable and inclusive design. This challenges the students to understand that when designers design products they must take into account all potential users including disabled users.
- Students are taught to understand how products have developed over time with the influence of technological advances. They 'timeline' the developments of a product such as the mobile phone, motor car or ipod and look at the key advances in manufacturing, materials and/or electronic technologies that have developed the product over time. They are also taught to look at the influence these products over time on users' lives and how they have transformed some cultures.