

Design and Technology Department Curriculum Statement

Vision

The core experience in Design and Technology is essentially about providing opportunities for all students to develop their capability, through combining their designing and making skills with knowledge and understanding to create a quality outcome. We are committed to delivering a curriculum accessible to all and those that need to be challenged and stretched, which provides the broadest possible range of opportunities for students. It is our desire to allow students to become self-motivated and confident learners, who can work independently and as part of a team. Our curriculum ensures students develop technical and practical competencies as well as the wider skills valued by employers. Our students become skilled communicators in a variety of media and are keen problem solvers and develop strong resilience. It is our intent that our students will go on to make a positive contribution to society.

Implementation

The Design and Technology department have established a safe learning environment for every year group, which is conducive to learning, stimulating, imaginative and relaxed where students feel supported and secure.

Key Stage 3: In Year 7 and 8 students develop a solid foundation of skills in Art and Technology. Students will develop their techniques and expand their knowledge and understanding required to be successful in the design and make projects and examinations.

Key Stage 4: In Year 9, Students complete 3 projects that have been designed to cover a range of disciplines to support the AQA GCSE Non-Examined Assessment. Students complete projects that involve investigative, disassembly and evaluative activities. Students will also demonstrate their knowledge and understanding of key topics by completing end of topic tests at Key Assessment Points to check understanding. These key topics include materials and components, control and systems, new and emerging technologies, health and safety, design and make principles and quality control. All these topics are a learning experience whereby the students' repertoire of knowledge, skills, vocabulary and understanding are extended and applied in diverse and sophisticated ways. In Year 10, students complete one in depth design and make project that covers all the elements required for the final GCSE project and prepares them to be independent in the Year 11 NEA. Throughout Year 10 and 11, students also complete in depth revision that covers the theory required for the examination.

Key Stage 5: In year 12, students complete one design and make project that covers all elements required for the major project in Year 13. Throughout the two-year course, students complete in depth revision that covers the theory required for both examinations.

Students will use a range of communication skills, including verbal, graphical and modelling skills, to help develop their design thinking and individuality. The Design and Technology projects involve a distinctive creative process that combines the intellectual with practical skills through purposeful exercises. The creative process in which students are engaged is iterative, with the crucial parts being the user of the product and high quality outcomes.

For all of these opportunities to be made available successfully, it is taught through careful and engaging planning. The assessment of work must be exemplary and the feedback to students is of a high standard, together these lead to successful progress being made by all. We value the work of all students, using assessment as a means to monitor student progress, provide information in relation to attainment on a national scale and to form a basis for individual action plans. The department operates an open door policy for students of all age groups to access the cutting-edge facilities available. Session 3s are implemented to



support those that require intervention in all key stages. Those with a passion to excel are encouraged to attend. 'Tech Club' gives those year 8 students, who are excelling in Technology, the opportunity to enhance their skills even further. Students enjoy this and most go on to study the subject at GCSE level.

Impact

Outcomes in the Design and Technology department are excellent. The nature of Design and Technology is to link to many different curriculum areas in order to develop a set of transferable skills students can enjoy in school and use in their future working lives. The department has been fortunate to keep in touch with many students who have gone on to be successful in their further education and a variety of careers but who all talk passionately of their Design and Technology experience and how it has supported them in areas from the field of engineering and design to the life of a paramedic.

Subject contact

Head of Design and Technology, Mrs Justine Tarr - jtarr@ttsonline.net