



Design and Technology Curriculum Vision

Quality of Education: Manifesto

Curriculum Intent

The Creative Curriculum aims to provide an inspiring, rigorous and practical approach to learning in order to develop all learners' skill, creativity and imagination. Learners will design, make, think critically, learn crucial life skills and become digitally literate. They will develop a broad range of subject knowledge whilst also demonstrating their understanding through designing, analysing and evaluating in a range of contexts. Through the refinement of key skills and knowledge at KS3, learners will be able to develop their understanding enough to confidently explore their creativity and independently express themselves during Key Stage 4 and beyond.

In Design and Technology students will:

- 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
- Demonstrate their understanding that all design and technological activity takes place in contexts that influence the outcomes of design practice
- Develop realistic design proposals as a result of the exploration of design opportunities and users' needs, wants and values
- Use imagination, experimentation and combine ideas when designing
- Develop the skills to critique and refine their own ideas while designing and making
- Communicate their design ideas and decisions using different media and techniques, as appropriate for different audiences at key points in their designing
- Develop decision-making skills, including the planning and organisation of time and resources when managing their own project work

- Develop a broad knowledge of materials, components and technologies and practical skills to develop high-quality, imaginative and functional prototypes
- Be ambitious and open to explore and take design risks in order to stretch the development of design proposals, avoiding clichéd or stereotypical responses
- Consider the costs, commercial viability and marketing of products
- Demonstrate safe working practices in design and technology
- Use key design and technology terminology, including those related to: designing, innovation and communication; materials and technologies; making, manufacture and production; critiquing, values and ethics

Curriculum Implementation

There have been a number of changes in staffing over recent years which have led to students having varying experiences of the Open Bucket subjects within the creative curriculum. Through the recent appointment of Head of the Creative Department, Head of Art and Head of Computing the aim is to provide stability in these subjects to bring them in line with the success of Hair and Beauty. Whilst our aim is to ensure all students study the full curriculum before specialising in subjects of their choice, initially the creative team will be looking to ensure that all learners have had equal experiences and therefore multiple year groups may be studying the same content whilst we implement a scheme of learning that can be built upon. Over the next few years the KS3 curriculum will be further developed to provide students with a balanced and broad curriculum which builds knowledge and skill progressively to prepare them for future learning and employment. The table below demonstrates how that will gradually introduced.

Design and Technology	KS3			KS4	
	Year 7	Year 8	Year 9	Year 10	Year 11
SOL Overview	Students design and manufacture a product with a focus on iterative design, ergonomics and product analysis (9 Week Rotation – 1 double lesson per week)	Students design and manufacture a product with a focus on iterative design, ergonomics and product analysis (9 Week Rotation – 1 double lesson per week) New progressive SOW to follow next year.	Not currently offered in year 9 New progressive SOW to follow next year.	Not currently offered at KS4 Introduction of GCSE D&T Sept 2020	

Our students have one double lesson (1hr40) per week during Year 7 and 8. Throughout Year 7 and 8 students will rotate around Food & Nutrition, Art, Computing and DT. This equates to 9 week rotations (18hours/900minutes) of each creative subject a year. Each subject has their own scheme of learning which will be repeated to ensure that all students have had an equal learning experience of the broad and balanced curriculum. Computing has taken on the Cross Trust curriculum and the Director of Computing has been liaising with the Head of Computing to ensure consistency.

Due to the instability of previous year this is the first year in which a full curriculum can be offered. Heads of department all have experience of working with a variety of exam boards and are confident in interpreting the specifications they are teaching. Design and Technology has been reintroduced at KS3 in Year 7 and 8 with a view to it been gradually built up into a KS4 qualification being offered in September 2020 by which time students will have had some KS3 preparation.

The KS3 curriculum is aimed at ensuring all students have covered the KS2 and 3 curriculum and have all have equality in experience in comparison to the varied experience of creative subjects they may have experienced at primary level. Resources are supplied by subject leaders and are reviewed and updated after each rotation to make improvements based on experience. Teachers are expected to differentiate their lessons according to student need.

Metacognition (Learning Scientists)

In order to ensure our students have the best possible chance of success we ensure that there is spaced practice between learning aims, making sure that learning is re-visited and extended. Following practical activities students are required to reflect on their developments focusing on retrieval practice, consolidating prior learning and developing understanding. Concrete examples are shared with the students to make sure they fully understand the concept being delivered. Throughout the KS3 and 4 curriculum spaced practice will be planned in to support in making learning "sticky".

SMSC/Building Character/Cultural Capital

Spiritual development in Design and Technology

Spiritual development is of a very high importance 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 and 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 & components they will use when designing and making. We encourage sustainable thinking through the active application of the '6 R's' and to highlight the impact on environmentally sensitive areas of the world. The 6 Rs include: reinvent/rethink, refuse, reduce, reuse/repair, recycle, replace/rebuy.

Social development in Design and Technology

Social development is a key feature of all Design and 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 other and to accept each other's unique personality. We encourage effective conversations about the work we do through self & peer evaluation, and to give and accept constructive criticism as a vehicle to improve students learning outcomes.

Cultural development in Design and 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 student's 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

Curriculum Impact

Homework

Students will experience a range of homework experiences from the different subject areas. However, in all areas homework is used to support progress taking place in lessons and to consolidate learning. In Design and Technology students are given the opportunity to further their design ideas through research and development.

Assessment

KS3:

Students work in two booklets; a class notes book and an assessment booklet. It is in the assessment booklet that self, peer and teacher assessment will take place. There will be photographic evidence of practical work and selected pieces of work will be assessed and graded. There will be clear evidence in red pen of teacher assessment, WWW, EBI and grades. In green pen students will self-reflect and respond to teacher feedback.