Design Technology

Intent

Skills based program in relation to DATA requirements for Key Stage 3. Each learning unit has been designed by starting with selected learning objectives from the new DATA requirements. This can be found at the front of the pupil's books in Key Stage 3. The projects have been developed with tasks, activities and experiences which provide opportunities for students to learn and demonstrate what they have learnt. Assessment opportunities have been designed in where teachers can assess whether students have learnt what the unit has set out to teach them, through pupils' filling the progression grid and completing assessments from their Subject Knowledge organisers (Uploaded on Show My Homework).

In Key Stage 4, we want pupils to understand and apply iterative design processes. They should be able to create and use imagination to design and make prototypes that solve real and relevant problems. Pupils can consider their own and others' needs, wants and values.

Students will be able to understand the importance of Design and Technology as a means of communication, health and personal growth. To understand the value of Design and Technology in a society of different cultures and professions. To recognise that Design and Technology helps us to understand and negotiate our emotions and place within our evolving technological world. To enable students to experience a range of skills in different materials areas to help them solve challenges in the real world. To give young people an awareness of social, moral, global and environmental impact.

We want our pupils to learn by providing opportunities for them to develop their capability. By combining their design and making skills with knowledge and understanding they learn to create quality products. Pupils like making decisions for themselves and doing practical work. It is vital that we show in the early stages of Key Stage 3 the importance of the theory aspect.

Implementation

At Key Stage 3 the curriculum enables children to acquire; knowledge and skills, which are secured through application (over time and in different contexts) to develop understanding (change in long term memory) and allows children to seek meaning and achieve personal growth.

We are focused on the progression of content and concepts through the KS3 curriculum that accelerates progress within a progressive and purposeful Curriculum. The curriculum is an opportunity to inspire children to be successful designers and be able for pupils to be motivated and imitate their teachers in a variety of activities.

This allows children to thrive. The content of the curriculum is progressive and is based on consolidating and revisiting content over time to secure progress over time.

The expectations and exemplar work are widely distributed to support learners to understand the expected standards and the content of the curriculum.

Examination – 2 hours, 100 marks (50% of GCSE) Non-exam assessment (NEA) – 30 to 35 hours, 100 marks (50% of GCSE)

Teaching (pedagogy)

Given the assessments teachers are freed to plan to meet the needs and support all children to feel and be successful. In Design Technology lessons we are able to demonstrate outstanding progress. Which we intend for our pupils to be able to replicate. Through the use of advancing booklets and exemplar work we are able to provide direction to pupils of activities. Pupils take opportunities to critique their own and others work through peer assessments.

Assessment (formative and summative)

Formative assessments happen through verbal feedback, which is evidenced in books. Pupils have summative assessments in the form of Subject Knowledge Organisers which are uploaded to their Show My Homework account at the beginning of the year. Pupils are assessed on their knowledge termly.

Impact

Attainment (qualifications and assessments)
Design Technology GCSE, Product Design A Level.

Progress

Students will be able to understand the importance of Design and Technology as a means of communication, health and personal growth. To understand the value of Design and Technology in a society of different cultures and professions. To recognise that Design and Technology helps us to understand and negotiate our emotions and place within our evolving technological world. To enable students to experience a range of skills in different materials areas to help them solve challenges in the real world. To give young people an awareness of social, moral, global and environmental impact.

Pupils will be able to demonstrate their understanding that all design and technological activity takes place within contexts that influence the outcomes of design practice and develop realistic design proposals as a result of the exploration of design opportunities and users' needs, wants and values.

Pupils use imagination, experimentation and combine ideas when designing, develop the skills to critique and refine their own ideas whilst designing and making. Pupils communicate their design ideas and decisions using different media and techniques, as appropriate for different audiences at key points in their designing.

Decisions on making skills are considered, including the planning and organisation of time and resources when managing their own project work. Pupils develop a broad knowledge of materials, components and technologies and practical skills to develop high quality, imaginative and functional prototypes. We encourage pupils to be ambitious and open to explore and take design risks in order to stretch the development of design proposals, avoiding clichéd or stereotypical responses. We expect our students to adhere to safe working practices in design and technology.