

NHGS - Design Technology - Intent, Implementation and Impact

Intent (Aims and purpose)

We aim to create the very best design literate students who are *enquiring, confident and enthusiastic* to define and solve problems; by placing the 'user' at the heart of these problems we encourage our students to become knowledgeable about the resources needed to help them create even better solutions.

We challenge students to think, act and speak like those working in the field would. We do this by equipping students with 21st century skills to empower impact and change; we challenge them to think about industrial developments and technological advancements, environmental and economic factors, the role of sustainability and ethics in user-centred design, demographic change and sociocultural influences around the world in order to visualise future possibilities. In Food students cover the relationship between diet, nutrition and health as well as the impact of a poor diet.

Our curriculum at NHGS goes far beyond what is taught in lessons, for whilst we want students to achieve the very best examination results possible, we believe our curriculum goes beyond what is examinable. As a department we offer practical extra-curricular clubs in Food, Textiles and 3D; this enables students to build confidence and increased proficiency in these areas. We take students to the BBC Good Food Show, local college workshops and Land Rover/Jaguar. We direct students to careers that stem from our material areas and in Food for example, we are passionate about students undertaking lots of cooking!

Our curriculum in Design Technology forms a backbone to our ethos statement. Examples of how our curriculum supports the ethos statement are through a range of *creative* activities that develop their skills in research, observation and empathy. Students are encouraged to form cross curricular links with other subjects such as the arts, science and maths and by recognising that Design Technology is the bridge to many other subjects helps to develop a more creative and innovative approach to designing. Skills gained in Design Technology are transferable across all other subjects.

As a knowledge engaged curriculum, we believe that knowledge underpins and enables the application of skills; both are entwined. As a department we define the powerful knowledge our students need and help them recall it by developing their technical skills that focus on visualisation and realisation of ideas and information, with a focus on drawing, digital design, physical materials and prototyping as well as knowledge and understanding of the current and emergent means of production, manufacturing and digital technologies.

We build the Cultural Capital of our students by ensuring they have an understanding of Britain's contemporary design practice and design heritage, as well as a knowledge of international design practice. We encourage wider reading and the exploration of academic theory of design.

Further rationale behind our curriculum design includes building on the knowledge acquired at KS2 and exposing them to more complex and challenging content thereafter. In Design Technology we have carefully planned progression through our rigorous curriculum along with opportunities to revisit knowledge previously covered. Content, skills and cross-curricular links are clearly defined in our schemes of work and knowledge organisers.

We feel that this quote exemplifies the importance of Design Technology in schools –

“Modern design is no longer confined to particular sectors or occupations. The skills, principles and practices of design are now widely used across many parts of the economy, while designers have always drawn on a range of different skills, tools and technologies to deliver new ideas, goods and services. Tomorrow’s innovative companies and organisations need people that have had exposure to disciplines outside their individual specialisms, that have experience of working in teams with other disciplines, and that are comfortable deploying their innate creativity and flexibility within teams and projects. Tomorrow’s innovative companies need design skills.”

DESIGN COUNCIL ‘Designing a Future Economy’ February 2018

Implementation

Collaborative curriculum planning lies at the heart of what we do in the department. We are committed to a three-year plan of developing our schemes of work. In 2019/2020 we are working on KS4 schemes of work. These are focussed on embedding challenge, metacognition, memory techniques and literacy into our departmental curriculum.

Alongside our schemes of work, we are continuing to develop knowledge organisers at KS3. This is enabling us to define the core knowledge our students need to master as well as encouraging a much more independent approach to learning.

In Design Technology we also implement our curriculum through a variety of creative teaching approaches and tasks. We provide our students with an opportunity to design and make products that solve real and relevant problems within a variety of live contexts.

Impact

We know our curriculum is working in the Design Technology department through the engagement of students throughout the school, both observed and recorded in student voice. The quality of teaching and learning in Design Technology has been praised consistently during learning walks by both external and internal observers. Our school results this year show an improving picture where both Food and Nutrition and Preparation and Design Technology gained an ALPS grade 4 for GCSE results, this compared to ALPS grade 7 the previous two years in DT.

Students are engaged in our lessons and frequently express their enjoyment of the subject and its different material areas.