



## Curriculum Intent: Design and Technology

### Subject vision

Design and Technology is about problem solving. At Helsby we aim to achieve this by providing curriculum opportunities for our students to develop their capability, combining their designing and making skills with knowledge and understanding in order to create high quality products that meet a specific need and improve society in some way. At Helsby we offer students the ability to work with practitioners of the subject, to share their enthusiasm and love for the subject and all that it contains. Students at Helsby are introduced to increasingly sophisticated resources, including dedicated teaching environments, computer aided designing and manufacturing equipment. We encourage our students to use their knowledge, skills and understanding to prompt their engagement in a wide variety of activities and issues. Students at Helsby design and make products that solve real and relevant problems within a variety of given contexts.

### We deliver our curriculum intent on a subject level by:

*At KS3 Design and Technology* we deliver a curriculum that encompasses both practical and theoretical work which together enables students to acquire sound subject knowledge and develop practical skills. In Design and Technology at Helsby, students are introduced to a large range of equipment within the specialist workshops where they develop the creative, technical and practical expertise alongside knowledge, understanding and skills. These are then applied to design and make prototypes and products for a wide range of users. Students work with a variety of materials including timbers, metals, and polymers, paper and board.

*At KS4 and KS5 Design and Technology* we prepare students to participate confidently and successfully in an increasingly technological world. Students at Helsby will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise. At KS5 students are able to choose their own context in which to problem solve, drawing on their knowledge and skills gained from previous key stages.

### Enrichment

Students at Helsby have the opportunity to be Design and Technology Ambassadors where they are involved with a variety of tasks and roles within the specialist facilities to support the work of students, teachers and support staff. This develops their leadership and organisation skills and promotes confidence outside of their everyday routine. Students are encouraged to consider the role of Design and Technology within the wider realms of society and to bring this into the classroom, through the use of practical skills and research tasks

In Design and Technology, students '**Achieve success**' by:

<p>Encouraging high aspiration and a love of learning</p>	<ul style="list-style-type: none"> <li>• Students in all key stages are challenged to exceed their own targets and to reflect on how to improve their work.</li> <li>• Practical work fosters a love of the subject and provides opportunities for students to apply their subject knowledge.</li> <li>• Students are encouraged to apply knowledge and skills developed in lessons to their everyday personal experiences of interacting with manufactured products.</li> <li>• Students are encouraged to broaden their personal experiences of design by analysing and evaluating a range of every day items.</li> </ul>
<p>Maximising progress and potential</p>	<ul style="list-style-type: none"> <li>• The knowledge and skills developed by students is layered in that the next academic year builds on the previous.</li> <li>• Students are provided with opportunities to evaluate their work and identify ways in which to improve the outcome and skill level.</li> <li>• Work is differentiated appropriately to ensure all students can access the curriculum, make maximum progress and fulfil their potential.</li> </ul>
<p>Providing rewarding learning experiences</p>	<ul style="list-style-type: none"> <li>• Students are provided with a blend of practical and theoretical lessons which engage all types of learner.</li> <li>• Lessons take place in subject specialist rooms providing an appropriate and positive learning environment in which to engage the students and deliver the curriculum.</li> <li>• When undertaking their practical work, students get to keep their successfully made product to take home and be proud of.</li> <li>• The practical element of curriculum allows for a lot of differentiation by outcome which ensures a rewarding learning experience for all students.</li> <li>• Praise is used regularly to promote a positive learning environment and experience.</li> </ul>
<p>Offering diverse opportunities</p>	<ul style="list-style-type: none"> <li>• Students are able to explore and make a wide range of products, using the influences of others throughout the curriculum.</li> <li>• Opportunities are provided for students to choose, design and make their own interpretation of practical work.</li> </ul>
<p>Recognising and celebrating all achievement</p>	<ul style="list-style-type: none"> <li>• Students are provided with individual verbal feedback in practical lessons which identifies the successes of their work and any possible areas to improve</li> </ul>

	<p>on in order to develop and make further progress.</p> <ul style="list-style-type: none"> <li>• Students are encouraged to share their own successes with the group, whether it be design based or practical. This includes peer and self-assessment</li> </ul>
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In Design and Technology, students '**Value Others**' by:

Contributing to a safe school environment	<ul style="list-style-type: none"> <li>• Students are taught how to work safely using a range of machinery in the workshops.</li> <li>• Students are taught about potential hazards, complete risk assessments and help to keep themselves and others safe.</li> </ul>
Showing tolerance, respect and fairness	<ul style="list-style-type: none"> <li>• Practical work provides opportunity for paired and team work in which students develop tolerance, respect and fairness.</li> <li>• The sharing of specialist equipment further develops these qualities.</li> <li>• Students are encouraged to understand, use and appreciate the influence of other students and of other cultures in their work.</li> </ul>
Listening to and respecting others' views	<ul style="list-style-type: none"> <li>• Class discussion allows many opportunities for developing personal opinions and respecting the views of others.</li> <li>• As design issues are explored, students start to form personal opinions and are encouraged to accept those of others.</li> </ul>
Appreciating and embracing diversity	<ul style="list-style-type: none"> <li>• The D&amp;T curriculum provides opportunities for students to explore topics including multicultural society, inclusivity as well as the needs of different groups in society.</li> <li>• Students are encouraged to understand, use and appreciate the influence of other cultures in their work.</li> </ul>
Being an active member of our school and local community	<ul style="list-style-type: none"> <li>• Students are encouraged to apply skills learnt in lessons to make and contribute to charity events in school and the local community e.g. HoHoHelsby decorations, key rings &amp; jewellery sales.</li> <li>• Students are actively encouraged to apply what they have learnt in a real life context, making wise decisions about their own purchasing choices.</li> </ul>
Co-operating with others	<ul style="list-style-type: none"> <li>• Practical work continually requires and fosters student cooperation with each other as well as support and teaching staff.</li> <li>• Students are encouraged to help each other when embracing new specialisms.</li> </ul>