

# Design Technology Curriculum



*'Inspiring and achieving success for all!'*



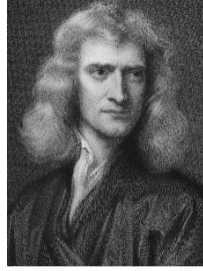






Upton Cross Academy

## Intent

At Upton Cross Academy, we aim to provide children with a DT education that is relevant in our rapidly changing world. We want to encourage our children to become problem solvers who can work creatively on a shared project. We believe that high-quality DT lessons will inspire children to think independently, innovatively and develop creative, procedural and technical understanding. Our DT curriculum provides children with opportunities to research, represent their ideas, explore and investigate, develop their ideas, make a product and evaluate their work. Children will be exposed to a wide range of media including textiles, food and woodwork; through this, children will develop their skills, vocabulary and resilience.

## Implementation

### Characteristics of Learning

								
<b>Ernest Shackleton</b> I can find out and explore.	<b>William Shakespeare</b> I play with what I know.	<b>Sir Isaac Newton</b> I am willing to have a go.	<b>Beatrix Potter</b> I am involved and can concentrate.	<b>Emmeline Pankhurst</b> I keep on trying.	<b>Kelly Holmes</b> I enjoy achieving what I set out to do.	<b>Steven Hawking</b> I have my own ideas.	<b>Isambard Brunel</b> I make links in my learning.	<b>David Hockney</b> I choose ways to do things.

## Impact

At Upton Cross Academy, Our DT Curriculum is developing to provide well thought out lessons and topics that demonstrate progression. In addition, we measure the impact of our curriculum through the following methods: reflection on standards achieved against the planned outcomes; pupil discussions about their learning, which includes discussion of their thoughts, ideas, processing and evaluations of work. As designers, children will develop skills and attributes they can use beyond school and into adulthood.

### 2 Year Rolling Programme

	KS1		LKS2		UKS2	
	Year A	Year B	Year A	Year B	Year A	Year B
<b>Autumn Term</b>	<i>Moving Pictures</i>	<b>Dips and Dippers (Optional unit)</b>	<i>Mechanical Posters</i>	<i>The Great Bread Bake off</i>	<i>Felt Phone cases</i>	<i>Super Seasonal Cooking</i>
<b>Spring Term</b>	<b>Our Fabric Faces (Optional unit)</b>	<i>Sensational Salads</i>		<b>Levers and Linkages (Optional unit)</b>		
<b>Summer Term</b>	<i>Fabric Bunting</i>	<i>Pirate Paddy's packed lunch problems</i>	<i>Edible Garden</i>	<i>Let's go fly a kite</i>	<i>Marbulous Structures</i>	<i>Automata Animals</i>

### SEND Strategies

	Here is how we will help:
Attention Deficit Hyperactivity Disorder	<ul style="list-style-type: none"> <li>Praise positive behaviour at each step to encourage increased self-esteem</li> <li>Ensure clear instructions are given throughout the lesson</li> <li>Provide time limited learning breaks</li> <li>Ensure step-by-step instructions are given, so each child knows what part of the lesson they are working on (for example, the design, the creation or the evaluation)</li> <li>Provide additional time for the pupils to express their ideas before the lesson with a pre-teach where appropriate</li> <li>Provide D &amp; T tools when necessary to avoid distractions during teacher input</li> </ul>
Anxiety	<ul style="list-style-type: none"> <li>Ensure the child knows the support available on offer before the lesson begins</li> <li>Provide lots of opportunities to ask questions to clarify thinking and ideas during the lesson</li> <li>Teach problem solving before the lesson, and strategies to overcome problems that might be faced in these subjects</li> <li>Model how to use D &amp; T tools before setting any work</li> <li>Use a 'Now and Next' board to explain any changes to the routine, for example if a child will be sitting somewhere else to complete group work, manage this before it happens</li> </ul>
Autism Spectrum Disorder	<ul style="list-style-type: none"> <li>Use a visual timetable so the child knows what is happening at each stage of the day</li> <li>Understand if your child is hypo-sensitive or hyper-sensitive and how they will manage the sensory work you are asking them to partake in</li> <li>Provide materials and textures that they can use and understand this information before the lesson</li> <li>Avoid changing seating plans</li> <li>Ensure outcomes are clear, with a clear end point to the lesson, so children know when they have reached this.</li> <li>Use simple, specific instructions that are clear to understand</li> </ul>

	<ul style="list-style-type: none"> <li>Understand your student's skills, and where their starting place is</li> </ul>
Dyscalculia	<ul style="list-style-type: none"> <li>Provide concrete resources to help with mathematical equations, drawing scale and planning D&amp;T projects</li> <li>Make a resource box for different D&amp;T project stages</li> <li>Use technology available during the design process if required</li> <li>Ensure the child knows the support available on offer before the lesson begins</li> <li>Provide electric measuring tools for cooking to aid independence</li> </ul>
Dyslexia	<ul style="list-style-type: none"> <li>Use simple, specific instructions that are clear to understand</li> <li>Pre-teach vocabulary linked to D&amp;T that will help the child to succeed in the lesson such as planning, designing and evaluating</li> <li>Differentiate the learning intention so the child understands what is being asked of them</li> <li>Model how to use D&amp;T tools before setting the work</li> </ul>
Dyspraxia	<ul style="list-style-type: none"> <li>Make the most of large spaces before starting projects</li> <li>Provide looped scissors if needed</li> <li>Ensure the tools you are using are accessible to the child i.e. Rulers with handles</li> <li>Provide a lesson breakdown, with a clear end, a tick list might be beneficial</li> <li>Provide an equipment list, words, or visuals, with the tools and materials needed during the lesson</li> <li>Model how to use D&amp;T tools before setting the work</li> <li>Differentiate the size and scale of a project and its end result</li> </ul>
Hearing Impairment	<ul style="list-style-type: none"> <li>Make sure instructions are clear and concise, in case the child lip reads, and in case of an emergency</li> <li>Give instructions when the room is quieter, and be mindful of additional noise when cooking, or using loud tools like hammers</li> <li>Pre-teach vocabulary linked to D&amp;T that will help the child to succeed in the lesson like planning, designing and evaluating</li> <li>Try to arrange tables in a circular shape</li> <li>Provide sign language visuals where possible</li> </ul>
Toileting Issues	<ul style="list-style-type: none"> <li>Encourage children to use the toilet before working on a project, as they may feel this isn't as easy when they are wearing protective clothes and covered in clay/glue/cooking ingredients etc.</li> <li>Encourage children to wear protective clothes that make access to the bathroom more manageable</li> </ul>
Cognition and learning challenges	<ul style="list-style-type: none"> <li>Use visuals to break down each stage of the design process down into clear, manageable tasks</li> <li>Use language that is understood by the child or take the time to pre-teach language concepts including design, develop and evaluate</li> <li>Provide resource lists with visuals so children know what resources they need for an activity and can begin to access these independently</li> <li>Model how to use D&amp;T tools before setting the work</li> <li>Physically demonstrate the lesson and expectations include designing, making and evaluating where possible</li> <li>Support the children with their organisation in the lesson especially when cooking to make sure they do not default from the final product</li> <li>When cooking, or making something provide checklists which can be ticked off</li> </ul>
Speech, Language & Communication Needs	<ul style="list-style-type: none"> <li>Provide instructions that are clear, concise and match the language of the child, delivering these instructions slowly</li> <li>Use a visual timetable when necessary</li> <li>Use visuals on resource lists</li> <li>Use visuals on resource boxes so children know which one to access</li> <li>Encourage designs and evaluations to be done using pictures and child's voice where possible and then recorded by an adult</li> </ul>
Tourette Syndrome	<ul style="list-style-type: none"> <li>Provide short, simple, clear instructions</li> <li>Try and keep the children calm in a lesson, although D&amp;T can be exciting, as this can lead to a tic</li> <li>Provide additional support with cutting, using looped scissors and handled rulers</li> </ul>
Experienced Trauma	<ul style="list-style-type: none"> <li>Provide opportunities to be curious and explore the tools and resources that children will use</li> <li>Use simple, specific instructions that are clear to understand, and deliver these slowly</li> <li>Slowly build up the tools a child can use, as they become more confident in their work, especially in regard to cooking</li> <li>Model and remind children behavioural expectations when using tools including clay and cooking, and safe ways of using these including health and hygiene. Use visuals if needed.</li> <li>Before the lesson, come up with strategies for if difficulties occur during the lesson, and ways these can be overcome, reminding children that D&amp;T is about trial and error.</li> </ul>
Visual Impairment	<ul style="list-style-type: none"> <li>Make sure you have the child's attention before giving instructions</li> <li>Encourage children to verbalise their design and evaluation as well as their thoughts and feelings if possible</li> <li>Make sure resources are well organised and not cluttered</li> <li>When drawing designs or writing evaluations, provide thicker, dark pencils to write with</li> <li>Provide enlarged examples of the work to be completed</li> <li>Provide children with additional time when exploring new textures and materials</li> </ul>