



Our Approach to Teaching Design Technology

At Whitehall Junior School, we are committed to providing our pupils with a well-rounded education. Our curriculum is planned in a logical and well-considered way, to enable pupils to build upon their skills and have a secure knowledge base from which connections in learning are made. We use 'beautiful' resources from credible sources to enrich our lessons.

What is the big picture for Design Technology?

The big picture for Design Technology is the development of the fundamental skills, throughout D.T lessons, that can be applied to everyday life.

Children should learn across the five areas of D.T: Food technology, textiles, stiff materials, mouldable materials and mechanical and electrical materials. Throughout the study of these areas, they should progressively advance in the products they are able to construct.

In addition to this, children should learn the design process: Research, design, make and evaluate and should always aim to develop their evaluation skills throughout every unit of study.

What is magical about it?

Design Technology can be applied to everyday life - children love D.T lessons! Children who do not excel academically are able to express themselves and be recognised for their ability in subjects, such as D.T, which is always empowering. The standard of products produced at our school is high and walking through the corridors it is always apparent that time and care has been spent on D.T units.

Why is Design Technology an important subject to learn?

Design Technology is a creative subject and a subject that is extremely important in school. It is an opportunity for children to express themselves and get messy! Without it, children would miss fundamental life skills, such as cooking, sewing and moulding. As well as this, they are able to evaluate their ideas and designs and think about solutions should problems arise. These are skills applicable to all subjects and everyday life.

'Creativity is intelligence having fun.' Albert Einstein

What do we love about Design Technology?

We love Design Technology because every unit taught is different and builds on different skills. Children are able to be creative and express their individuality in their designs. Most of all, it is fun!

How do we want our pupils to talk about Design Technology?

Using subject specific vocabulary such as 'cast on', 'eye of the needle', 'rubbing', 'rolling', 'baking', 'switch', 'circuit', 'mould' and so on. Also, with an appreciation of the process. A product is not made without prior thought and each thought should be carefully analysed and evaluated.

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Lesson 1	Research Lesson Introduction to the unit What is Design Technology? Which unit are you studying? Introduce topic vocabulary from vocabulary lists and explore significant etymology.
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	<p>Prior learning - what have they learnt previously? Which units have they completed? What skills have they developed? How can these skills be applied to this unit? Explore subject-specific vocabulary, e.g. 'threading', 'moulding', 'measuring', etc. Display such terms so they become embedded within lesson conversation. Research into the specific product/focus task. Taste testing? Practical tasks.</p> <p>Complete research pages in the design booklet (if you are you using one, if not, quality discussion). At least three detailed design booklets must be completed each year (one per term). Design booklets may also be used for additional units if themed days are planned, however, these could be presented as summaries of the design process.</p>
Lesson 2-3	<p>Design Lesson/s</p> <p>Starter: Practical task - focusing on the skills you are developing in this unit. Refer back to vocabulary list; recap the key words for this unit. Buzz words for the lesson, 'if this word is used in your spoken or written words then...'</p> <p>Every lesson should start with a practical task.</p> <p>Sewing: you're threading a needle.</p> <p>Food: you're developing skills for the end product e.g. if you're making gingerbread, you're rolling flour and sugar and constructing mini models.</p> <p>Stiff materials: you're measuring, cutting and joining different materials.</p> <p>Mouldable materials: you're using moulding techniques to create objects, e.g. a face using clay.</p> <p>Electrical and mechanical: testing different mechanisms, circuits, etc.</p> <p>Design Brief</p> <p>What does our end product need to look like? How are we going to get there? What skills are we going to build upon? By the end of this unit what will we be able to do? For example: 'To make scones to sell to our parents as an enterprising project, making a profit for X'.</p> <p>Design Specification</p> <p>What specifications does the product need to meet? If a chair for X is to be designed, what would it need to have to meet the required purpose? Target Market: Who is the product aimed at? Materials: Which materials will you use to make the product? Needle, glue gun, saw, etc. Aesthetics: What will it look like? E.g. Egyptian masks have to have gold and blue stripes, etc. in order that they... Function: What is the purpose? We are baking gingerbread to make Gingerbread houses to sell to raise funds at the Christmas Fayre (purpose is very important!) Tools: What will help you making your product? 3D effects: If applicable - 3D effects like noses, eyes for masks, etc. Health and Safety: Very important in D.T. How are we going to keep ourselves and others safe? E.g. needles still in fabric, food hygiene very important, etc.</p> <p>Initial Designs</p> <p>Why is it important to have a variety of designs? Do you think the best designer had one idea or four designs to take the strongest elements from each option. Each design should be coloured (within the lines) and labelled. Each design should be evaluated against the specification. How does it meet the specification? How can it be improved?</p>

	<p>Final Design Once evaluated, a final design is chosen and designed using elements to meet the design brief and specification.</p> <p>Complete design pages in the booklet.</p>
Lesson 3-5	<p>Make lesson/s Reminder of the 'end goal'. Which skills have we developed over the past three weeks? Children are given the opportunity to make their product independently. Constant evaluation is required. Exploit opportunities for self-reflection/AfL.</p> <p>Complete 'make' pages in the booklet.</p>
Lesson 6	<p>Evaluation Lesson Evaluation should be apparent during every lesson. No end product should be 'perfect' but a chance for evaluation. What went well? What would be better if the project was repeated? Which skills have been developed?</p> <p>Complete evaluation pages in the booklet.</p> <p>Assessment As Ofsted research suggests, quality D.T teaching should ensure 'that pupils know how well they are doing and what they should do to move on to the next level.' At the end of each unit, children should tick off the 'I can' statements they have achieved, then the teacher should also do this. Each end product should be photographed and stuck into the booklet. Children should then be assessed against their research, design, make and evaluate skills and a target is to be given for the next unit. This should also be stuck onto the back of the booklets (or be included within them).</p>