



DESIGN & TECHNOLOGY

INTENT

At The Queenswell Federation, we seek to provide a range of exciting DT opportunities for children. We aim to provide a motivating and meaningful context for children's learning that will spark their curiosity. This will include:

- investigative activities - where children critically evaluate existing products to inform their own design considerations;
- focused practical tasks - where children are given the opportunity to learn and practise new skills and techniques which they can utilise in making products;
- 'design and make' assignments - where the children are given the opportunity to be creative, using what they have learned through previous activities.
- evaluating an end product - where children decide if it is fit for its purpose and what changes could be made to improve their design.

IMPLEMENTATION

During their time at our school, children will understand that DT involves making something for somebody for some purpose and will make functional products with a clear purpose in mind. Particular skills will be taught in each year group and skills will grow in complexity with each year group, building on the children's prior knowledge. Students will evaluate existing products, as well as their own work, throughout the making process and evaluate their final product against their own design criteria. They will develop an understanding of the ways in which people have designed products in the past and present to meet their needs and creativity and innovation will be developed through designing and making.

LINKS TO EYFS – Expressive Arts and Design

Intent

At Queenswell we support children to develop their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. At Queenswell we encourage children to access resources in the classroom and outdoor learning area independently in order to express themselves freely and through their own preferred method. The quality of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.

Implementation

We provide an *artistically rich* environment. This includes:

- High quality continuous provision including workshop area, creative art area, malleable area, role play area and music area which children are encouraged to use independently to explore and experiment as well as with adult modelling and demonstration of key skills (e.g. tools and techniques).
- Reading to children and engaging them actively in stories, rhymes and poems – using and making props to support story telling
- Artist studies e.g. Andy Goldsworthy
- DT workshop in reception



DT Overview and Learning Questions (optional activities)

Children will Design/Make and Evaluate each project. By Year 6 they will be evaluating during the process and adjusting their models accordingly.

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
EYFS	Understanding the World / Expressive Arts /and Design, Physical Development Personal, Social and Emotional Development					
	<ul style="list-style-type: none"> ● Explore how things work. ● Explore different materials freely, in order to develop their ideas about how to use them and what to make. ● Create closed shapes with continuous lines, and begin to use these shapes to represent objects. ● Use large-muscle movements to wave flags and streamers, paint and make marks. ● Choose the right resources to carry out their own plan. ● Use one-handed tools and equipment. ● Select and use activities and resources, with help when needed. ● Explore, use and refine a variety of artistic affects to express their ideas and feelings. ● Return to and build on their previous learning, refining ideas and developing their ability to represent them. ● Create collaboratively, sharing ideas, resources and skills 					
Year 1		Technical Knowledge How can I make my picture move using sliders? <i>Victorian picture books</i>	Technical Knowledge Can I assemble, join and attach to make my model stronger and more stable? <i>Antarctic Diorama</i>		Cooking/nutrition Do I know my hands and working area need to be clean? <i>Grow and make Cress sandwiches</i>	
Year 2		Technical Knowledge- Can I measure materials for my product? create products with wheels and axles? <i>Wagon for a dragon</i>	ART/Technical Knowledge Can I create and decorate 3D models from 2D shapes How can I strengthen them?	Cooking/nutrition Can I talk about the different tastes and textures? <i>Cooking for the enormous crocodile</i>	Technical Knowledge - Can create a product with winders that allow for movement? <i>Magical woodland with winding mechanism</i>	
Year 3	ART/Technical Knowledge Can I create and decorate 3D models from 2D shapes How can I strengthen them? How can I make a strong structure? <i>papier Mache volcano</i>	Painting /DT Technical Can I explore how to make a moving part inside my model Levers/Sliders//pop out <i>circus model</i>				Cooking/nutrition Where does food come from? What is a nutritious meal? <i>school garden visit</i>
Year 4		Textiles /Sewing – Technical Knowledge Can I sew simple stitches? <i>Sew a rabbit – Edward Tulane</i>	Technical Knowledge (Possible) Design and construct pandoras box	Cooking/nutrition Can I appreciate that ingredients can be fresh, pre-cooked and processed? <i>Cooking (cat biscuits)</i>	Technical Knowledge Can I apply a range of finishing techniques, including those from art? <i>Sewing skills</i>	

<p>Year 5 Can I evaluate my work both during and at the end of the project?</p>		<p>Technical Knowledge Can I make sure that the materials chosen have functional properties and aesthetic qualities? Create a floating vessel to escape - flood lands</p>	<p>Technical Knowledge-ART- sewing Can I select suitable tools and equipment and begin to explain my choice in relation to the skills and techniques I will be using? tapestries- Tudor events</p>		<p>Cooking/nutrition Can I understand that food is grown, reared and caught in the UK, Europe and the wider world? Can I use a range of techniques?</p>	<p>Technical Knowledge Can I explore cams Levers and pulleys to make a model move?</p>
<p>Year 6 Can I evaluate my work both during and at the end of the project?</p>	<p>Technical Knowledge Can I mix and combine functional materials Anderson shelter</p>	<p>ART./Science Technical Knowledge Can I aim to make and achieve a quality product? can I use a circuit to create light or sound to my model? Flashing Christmas decoration</p>			<p>Technical Knowledge Can I understand how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose? Research projects using iPad</p>	<p>Cooking/nutrition There are many different diet types-Can I use a range of cooking techniques and be confident about why I am using them? -International links</p>