



Barnfields Primary School: Design and Technology

Subject Leader Curriculum Intent, Implementation and Impact Overview			
Subject Quest: <i>Design and make products that solve real and relevant problems within a variety of contexts for the express purpose of communicating product design intent and constructability.</i>			
The Three Core Concepts at Barnfields			
<i>Design</i>	<i>Make</i>	<i>Evaluate</i>	
Intent	Supporting Research	Implementation	Impact
<p><i>At Barnfields Primary School children are taught to select and use appropriate tools safely and effectively to make a product.</i></p>	<p>Design and Technology gives developing learners the skills and abilities to engage positively with the designed and made world. Children should learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources including digital technologies, to improve the world around them. DATA (2019) state that ‘Ofsted has an important role to play in making sure that school leaders see the importance of this skill and attribute development and build opportunities for this into their school curriculum offer’.</p> <p>Design and Technology is purposeful; its essential goal is to satisfy a human need or want. DATA define this as ‘Something’ for ‘Somebody’ for ‘Some Purpose.’</p>	<p>Our Design and Technology curriculum at Barnfields is underpinned by the National Curriculum. It also serves to provide opportunities for powerful knowledge to be acquired through the school drivers of ‘Relevance and Ambition.’</p> <p>At Barnfields, Design and Technology is to be referred to in its full terminology rather than abbreviated to ‘DT.’ This is to ensure that children view the subject with all that it entails.</p> <p>Our bespoke Barnfields offer will ensure that our children will experience and have highly stimulating opportunities to learn all aspects of the Design and Technology curriculum as outlined in the National Curriculum. This coverage will see our children learning about the five aspects of Design Technology. These are textiles, food and nutrition, mechanisms, structures and electrical systems. The children are encouraged to see themselves as designers. Lesson sequences ensure that knowledge and skills are taught progressively as the children transition year-on-year.</p> <p>Staff have an agreed understanding of the Subject Rationale and use the Design Technology Road Map, Progression Grids and agreed MTP to aid consistency in delivery.</p>	<p>Children will achieve age related expectations in Design and Technology.</p> <p>Children will have experienced all aspects of the Design and Technology curriculum as outlined in the National Curriculum.</p> <p>Key skills and knowledge will be developed across a series of well-planned and sequenced lessons.</p> <p>Children will develop growing independence when using a wide range of tools and equipment.</p>

Subject Quests/Core Concepts:

At Barnfields Primary School, we understand that all subjects seek to do something – or rather the people engaging in them are seeking to do something, either collectively or individually. Once we understand the intended nature of each subject, we can then consider at greater length the knowledge that is to be imparted. These ‘quests’ and ‘Core Concepts at Barnfields’ enable us to engage in informed discussions and decisions around curriculum planning and teaching in the classroom.



<p><i>In all areas of Design and Technology the children are encouraged to consider the effectiveness of their designs and requirements of the product. Every child will have the opportunity to learn and extend their understanding and experience in a wide a variety of situations.</i></p>	<p>Designing and making satisfying products adds to the children’s sense of well-being and agency Csikzentmihalyi (1990) cites it as being in a state of ‘flow.’ The process of designing, making and evaluating promotes the satisfaction of having solved a problem, arriving at new ways of tackling problems, resilience and its purposeful and usage by others.</p>	<p>The bespoke characteristics of our Design and Technology curriculum ensures that our children access teaching in a subject that is true to its discipline: they acquire a practical form of knowledge, a distinct form of designing, and conduct evaluations of existing products and their own work.</p> <p>The Design Technology curriculum at Barnfields well-structured and follows a set teaching sequence format:</p> <ul style="list-style-type: none"> - Investigative and Evaluative Activities (IEAs) - Focused Task (FTs) - Design, Make and Evaluate Assignment (DMEA) <p>They will have design and make assignments using a range of materials, including food items that can be put together to make products.</p> <p>All of these learning opportunities, knowledge and skills support the wider curriculum too, as well as embodying the school drivers and what our vision for a Barnfields child will look like.</p>	<p>The children will develop a range of investigative skills.</p> <p>The children will develop a range of designing skills.</p> <p>The children will experience a range of designers and design making skills.</p> <p>The children will have the ability to evaluate their designs and reflect upon their work.</p>
<p><i>The children are encouraged to become innovators and risk-takers. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.</i></p>	<p>Gill Hope (Mastering Primary Design and Technology) believes that Design and Technology provides real-life contexts. It is essential for all children to learn about technology and how to design technological solutions to the needs of all peoples, understanding our dependence on the health of the planet and our interrelatedness with all life that shares earth with us.</p>	<p>Children at Barnfields will learn that designing is always (and should be) purposeful. Everything around us nowadays has been processed or manufactured to fulfil desires, needs and wants.</p> <p>Children learn to be mindful and aware of our impact upon the environment and our world. Teachers at Barnfields encourage our children to be problem-solvers, critical thinkers and innovators. They inspire the children to look for ways to solve the challenges and demands of their futures, and the future of the world.</p>	<p>Children will draw upon their problem-solving skills to support both practical and intellectual challenges.</p>

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