

'Together we Flourish and Achieve'

Our Curriculum

Design Technology

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Contents

Intent	3
Implementation.....	5
Curriculum Overview	5
Impact and Assessment	7
Inclusion.....	8

Intent

At Spaxton and Stogursey, in design and technology the intention is for pupils to develop the confidence to identify problems, generate ideas, plan and create products and evaluate their outcomes.

We aim to raise pupils' awareness of how design and technology shape the way they live, work and interact with the world. We aim to encourage pupils to become resourceful, enterprising individuals who have the skills to contribute to and improve the world around them.

We believe that all children should:

Design

Learn how to generate, develop and communicate ideas that respond to real problems and user needs.

Make

Apply practical skills to select tools, materials and techniques to construct high-quality, functional products.

Evaluate

Reflect critically on their own work and the work of others, using feedback and criteria to improve outcomes.

Technical knowledge

Build an understanding of how products work, including the properties of materials, mechanisms, electrical systems and nutrition.

At Spaxton and Stogursey we use Kapow Primary's D&T curriculum to support our work in this area. knowledge is defined using three interrelated categories:

- **Substantive knowledge** – the factual and conceptual understanding that underpins the design and creation of products, such as knowing how structures gain stability or how nutrients contribute to a healthy diet.
- **Disciplinary knowledge** – the thinking processes used by designers, including how problems are explored, decisions are justified and ideas are refined through evaluation and feedback.
- **Procedural knowledge** – the practical skills and techniques pupils need to make products effectively and safely, such as joining, cutting, shaping or finishing.

This is underpinned by our school curriculum intent which in turn is underpinned by the QET principles.

At Spaxton and Stogursey, we deliver a broad and balanced curriculum to all our pupils. Through our ambitious curriculum offer, that has been carefully designed to ensure it is sequential and progressive through each stage, we believe it allows:

1. **Holistic Development:** It supports the overall development of our children, addressing their academic, social, emotional, and physical needs. This approach ensures that our pupils at Spaxton and Stogursey are well-rounded and prepared for next stage of learning and any other future challenges.
2. **Engagement and Motivation:** A varied curriculum keeps our pupils engaged and motivated by offering a range of subjects and activities. Our broad and balanced curriculum offer helps cater to different interests and learning styles, making education more enjoyable and effective for all.
3. **Critical Thinking and Problem-Solving:** Exposure to a wide range of subjects encourages critical thinking and problem-solving skills. Our pupils learn to make connections between different areas of knowledge, enhancing their cognitive abilities.
4. **Cultural Awareness and Respect:** Our broad curriculum includes subjects like history, geography, and the arts, which help our pupils understand and appreciate different cultures and perspectives. This fosters respect and empathy for others. This is particularly important due to our village rural location.
5. **Preparation for Future Learning:** Our balanced curriculum provides a strong foundation in core subjects like English and maths while also introducing pupils to other areas of knowledge. This prepares them for more specialised learning in secondary education and beyond
6. **Personal Growth and Well-being:** Subjects like physical education, music, and art contribute to pupils' physical and emotional well-being. They provide opportunities for self-expression, creativity, and physical activity, which are crucial for healthy development.

Our school curriculum is bespoke and designed to meet the needs of the children in our school. It is underpinned by the Quantock Education Trust curriculum principles (SMART) which guide the development and review of the curriculum in all schools in the Trust:

- A strong and carefully Sequenced curriculum, so that children and young people's learning progresses in a way that builds knowledge intentionally and cumulatively
- A curriculum that Motivates children and young people so they can value and experience joy in learning whilst developing their own unique voice.
- An Ambitious curriculum, so that children and young people are challenged and empowered to think deeply and critically and grapple with complexity, challenge assumptions, question accepted authorities and embrace curiosity.
- A curriculum that is Responsive, so that it meets the needs of children and young people in our local community as well as opening doors to the wider world.
- A curriculum that is Transformative, so that children and young people can put their learning to use as active citizens, working for social justice, environmental stewardship and a healthy, equitable world, enabling them to build character and shape their future.

Implementation

We use Kapow as the resource to support the delivery of the design and technology curriculum. In key stage 1 this is delivered through a two-year rolling plan and in Key stage 2 a four-year rolling plan. Where prior skills are needed the curriculum is planned, as far as is possible, to allow for the progression of skills. Teachers will adapt lessons accordingly to allow for the age and skill range in their classes. The Design and technology scheme of work aims to inspire pupils to become curious, creative and innovative thinkers with a broad understanding of how products are designed and made, in other words, to think like designers and engineers.

Design and technology lessons are delivered every other half term in two-hour lessons.

Curriculum Overview

Reception

Autumn 1	
Autumn 2	Structures – Junk Modelling
Spring 1	
Spring 2	Structures - Boats
Summer1	
Summer 2	Textiles - Bookmarks Cooking and Nutrition - Soup

KS1

	Cycle A	Cycle B
Autumn 1		
Autumn 2	Mechanisms <ul style="list-style-type: none"> Matching slider game Wheels and Axles 	Mechanisms <ul style="list-style-type: none"> Making a moving monster Fairground Wheel
Spring 1		
Spring 2	Structures <ul style="list-style-type: none"> Stable structures 	Structures <ul style="list-style-type: none"> A Chair for a Bear
Summer 1		
Summer 2	Textiles <ul style="list-style-type: none"> Simple Stiches Cooking and Nutrition <ul style="list-style-type: none"> Smoothies 	Textiles <ul style="list-style-type: none"> Pouches Cooking and Nutrition <ul style="list-style-type: none"> Balanced Diet

KS2

	Cycle A	Cycle B	Cycle C	Cycle D
Autumn 1				
Autumn 2	Textiles <ul style="list-style-type: none"> Cushions Stuffed toys 	Digital World <ul style="list-style-type: none"> Wearable technology Monitoring Devices 	Textiles <ul style="list-style-type: none"> Fastenings Bags 	Digital World <ul style="list-style-type: none"> Mindful moment timers Navigating the world
Spring 1				
Spring 2	Electrical Systems <ul style="list-style-type: none"> Electric Poster Wobble Bots 	Mechanical Systems <ul style="list-style-type: none"> Pneumatic toys Gears and Pulleys 	Electrical systems <ul style="list-style-type: none"> Torches Steady hand game 	Mechanical Systems <ul style="list-style-type: none"> Cars Automata toys
Summer 1				
Summer 2	Structure <ul style="list-style-type: none"> Product packaging Bridges 	Cooking and Nutrition <ul style="list-style-type: none"> Eating Seasonally Developing a recipe 	Structure <ul style="list-style-type: none"> Pavilions Playgrounds 	Cooking and Nutrition <ul style="list-style-type: none"> Adapting a recipe Come Dine with me.

Impact and Assessment

We assess pupils as we observe them during lessons and mark their work following this, annotating with appropriate comments, if necessary. Design and Technology skills and learning can be enhanced through effective verbal challenges.

At the beginning of each unit, prior learning is explored through a variety of means such as; retrieval, pre-assessment 'brain dumps', use of KWL grids or quizzes.

Each class has impact tasks at the end of a unit to support the teachers' assessments, book looks, observations of design and technology lessons, pupil voice and the end of year teacher assessments all contribute to the overall assessment of Design and technology.

Inclusion

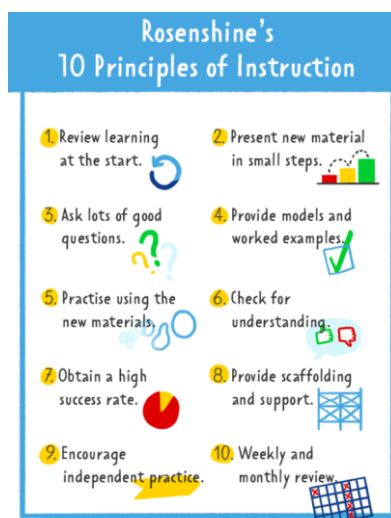
At Spaxton and Stogursey we believe that **All** leaders are leaders of SEND, and as such is it our responsibility to ensure an inclusive approach to promote the wellbeing and academic progress of **all** our children in whole curriculum. By removing barriers to learning and supporting the growth of the whole child we are helping **all** to succeed.

In the Trust, we have adopted an evidence-based approach to supporting **all** of our children as we believe what is good for all can be vital for some.

We use the EEF 'Five a day' principles to support our repertoire of teaching strategies daily in response to individual needs.



These work in conjunction with the work we have been doing on Retrieval with Kate Jones and Rosenshine's Principles of instruction such as small step learning, modelled examples, independent practice.



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