



Design and Technology

Curriculum Intent, Implementation and Impact Statement



Intent

In line with the 2014 National Curriculum for Design and Technology, our aim is to provide a high-quality Design and Technology curriculum which equips children to deal with tomorrow's rapidly changing world. Design and Technology provides children with a real-life context for learning. At King David School, children receive a Design and Technology curriculum which allows children to exercise their creativity through designing and making. Children are taught to take risks, which enables them to become resourceful and innovative learners. Our curriculum aims to develop a range of practical and life skills that will enable pupils to apply their knowledge to the wider world.

Children work towards end goals following the principles of the 3S's – Make 'Something' – For 'Someone' – For 'Some Purpose'. Children are taught to combine their designing and making skills with knowledge and understanding in order to design and make a new product. In Design and Technology lessons, children are inspired to be engineers, designers, chefs and architects. Children create a range of structures, mechanisms, textiles, electrical systems and food products with a real-life purpose. The skills learned in Design and Technology help with learning across the curriculum.

By the time children leave King David School, children will have gained key knowledge and skills in the four main areas within the Design and Technology curriculum: design, make, evaluate and technical knowledge. The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.

Opportunities are sought throughout the curriculum of Design and Technology to support and promote the ethos of the school, living up to our motto of "Where Stars Shine", and meeting the Mission and Vision Statements through the Golden Threads.

Key Stage 1 National Curriculum Expectations

Pupils should be taught to:

- *design purposeful, functional, appealing products for themselves and other users based on design criteria*
- *generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology*
- *select from and use a range of tools and equipment to perform practical tasks*
- *select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics*
- *explore and evaluate a range of existing products*
- *evaluate their ideas and products against design criteria*
- *build structures, exploring how they can be made stronger, stiffer and more stable*
- *explore and use mechanisms in their products.*
- *use the basic principles of a healthy and varied diet to prepare dishes*
- *understand where food comes from.*

Key Stage 2 National Curriculum Expectations

Pupils should be taught to:

- *use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups*
- *generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design*
- *select from and use a wider range of tools and equipment to perform practical tasks accurately*
- *select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities*
- *investigate and analyse a range of existing products*
- *evaluate their ideas and products against their own design criteria and consider the views of others to improve their work*
- *understand how key events and individuals in design and technology have helped shape the world*
- *apply their understanding of how to strengthen, stiffen and reinforce more complex structures*
- *understand and use mechanical systems in their products*
- *understand and use electrical systems in their products*
- *apply their understanding of computing to programme, monitor and control their products.*
- *understand and apply the principles of a healthy and varied diet*
- *cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet*
- *become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes]*
- *understand the source, seasonality and characteristics of a broad range of ingredients*

Implementation

At King David School, Design and Technology is taught using a blocked curriculum approach. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their topics. Teachers make appropriate use of published schemes, such as PlanBEE and Twinkl, as well as units developed by the school staff.

Key skills are mapped across each topic and year group to ensure systematic progression. We have a designated cooking hub (Nest) which regulates a strict Kosher kitchen. All 'Cooking and Nutrition' lessons comply with the Kosher food laws. Mrs Cohen advises on practice regarding the Kosher rules in activities taking place in 'Cooking and Nutrition' lessons.

Year Group	Topics
EYFS	
Year 1	Use of materials Textiles and Construction Cooking and Nutrition
Year 2	Use of materials (A Pirate's Life For Me- Pirate Ship) (Snow White- Mirrors) Textiles and Construction (Rags to Riches- Money Bags) Cooking and Nutrition (Refer to cooking overview)
Year 3	Use of materials Cooking and Nutrition
Year 4	Technical Knowledge Cooking and Nutrition
Year 5	Technical Knowledge Cooking and Nutrition
Year 6	Technical Knowledge Cooking and Nutrition

Impact

Our approach to the curriculum results in a fun, engaging, and high-quality Design and Technology education. We are in the process of developing our monitoring across the subjects of the National Curriculum, moving towards measuring the impact of the curriculum through triangulation of outcomes: pupil voice, assessment and recording of achievement against the Key Skills, planning, monitoring of books, saved work and displays, lesson learning walks, discussions with teaching staff, pupils and parents. Pupils' achievement is recorded against the Key Skills and a summative grade given at the end of the academic year, which is shared with the parents in pupil reports. Comparisons are made between a cohort's progress in the subject over time and also between different cohorts' achievement against the Key Skills, and this is used to inform planning and the provision of resources. The Key Skills for Design and Technology are available in a separate document.