

Design and Technology at Killigrew Primary and Nursery School

Intent

At Killigrew, we **engage, inspire** and **challenge** pupils to develop their creative understanding. We encourage them to **express their thoughts** and ideas through design and technology.

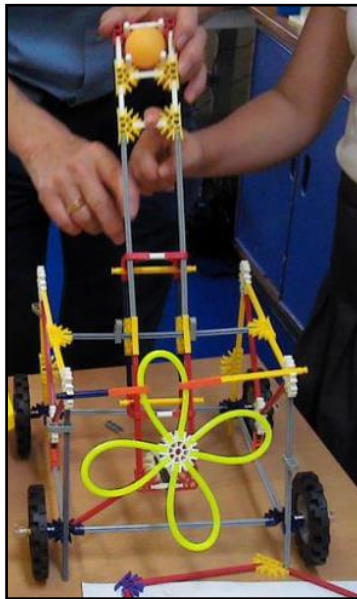
We equip them with the knowledge and skills needed to **experiment, invent** and **create** their own designs.

We want our children to know that design **reflects and shapes our history**, and contributes to the **culture, creativity** and **wealth** of our nation.

As our children learn in an increasingly **technological world**, we prepare our children with the skills they need to access this through the medium of design.

Implementation

A clear progression of design techniques, using a range of media and materials, is the basis for our teaching.



Constructing a catapult device

Design and Technology (D&T) education involves two important elements. The first is learning about the 'designed and made' world and how things work. The second is learning to design and make functional products for a particular purpose and user. We use the 'Projects on a Page' scheme of work that supports our teaching across five key headings:

1. Mechanisms
2. Structures
3. Food
4. Textiles
5. Electrical Systems

The basis for this scheme of work is a series of 21 A3 size 'project planners' that give scope for teachers to use their creativity and professional judgment, whilst ensuring the quality, integrity and rigour of children's learning.

To support the children's progress each planner is accompanied by useful sketches and diagrams as well as a glossary of technical terminology related to the project. Children learn to design, make, and evaluate, ensuring that technical knowledge is embedded throughout. Cross curricular links are made explicit, and children choose the purpose of the project themselves.

Within each term, children complete a D&T unit of work. each half term. Each unit builds on prior learning and involves a review of previously taught skills and knowledge.

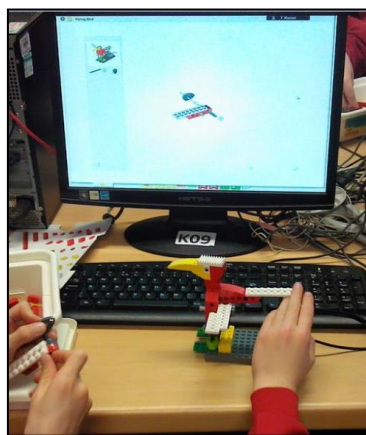
Impact

Children are reflective and evaluate their peers and their own work, thinking about how they can make changes and keep improving. They can articulate why improvement would be beneficial using subject specific terminology.

Children are encouraged to take risks, experiment, and reflect on why some ideas and techniques are successful or not. We want our children to become creative problem solvers, both as individuals and as part of a team.

Pupil voice measures how effectively children can talk about their D&T work, and this is coupled with lesson observations to ensure that the pitch and expectation progresses appropriately as the children move through the school.

Sketchbooks and written examples of design investigation, disassembly and evaluation are partly used to measure attainment. Photographs of design work enriches this formative assessment process.



Using a robotics hardware and software platform to design a moving toy