Design and Technology

Intent

High-quality Design and Technology education makes an essential contribution to the creativity, culture and well-being of our pupils here at Stamford Park Primary School. The Design and Technology curriculum combines the acquisition of skills, development of knowledge and the understanding of key concepts to enable children to tackle real world problems. It aims to improve children's analytical, problem solving, practical capability and evaluation skills. Children are encouraged to become innovators and evaluators.

Implementation

In E.Y.F.S., opportunities are provided to develop key skills through continuous provision and also set tasks. From an early age, both of these approaches help to develop a curiosity and interest of craft making, constructing structures and cooking. From Reception to Year 6, planning is provided and adapted from the Kapow scheme of work. Key skills, knowledge and vocabulary for Design and Technology have been mapped across the school to ensure progression between year groups. This ensures all three key strands are built upon and revisited throughout a child's journey through our school. We provide context for the children's work in Design and Technology, so that real-life problems are solved, actual structures are studied and the purpose of specific products or recipes are researched when developing the children's skills throughout the programme of study.

During a Design and Technology lesson, children are taught to:

Design

- 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 diagrams, prototypes, pattern pieces and computer-aided design.

Make

- Select from and use a wide range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately.
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.

Evaluate

- 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 to shape the world.

Technical knowledge

- Apply their understanding of how to strengthen, make more robust 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 program, monitor and control their products.
- Understand and apply the principles of a healthy and varied diet.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Impact

At Stamford Park Primary School, because we focus on progression of key skills, technical knowledge and vocabulary, we can measure the impact of our curriculum in the following ways:

- Teacher, peer and self-assessment of final products.
- Moderation of teacher assessment to ensure parity across year groups.
- Use of the Insight assessment system to ensure that children of all groups such as, S.E.N.D., Pupil Premium, E.A.L. and genders are all catered for.
- Interviews with pupils by the Design and Technology coordinator to check the children's key skills, technical knowledge and vocabulary.
- Staff meetings to feedback analysis to practitioners and suggest points for improvement in future lessons.
- Continuous professional development for staff is selected by practitioners and the Design and Technology coordinator to improve the impact of lessons.