

# Design and Technology Policy

# St Stephen's (Kearsley Moor) C E Primary School

**Reviewed 2024** 

"Design is a fundamental human activity, relevant and useful to everyone. It is creative and practical and allows pupils to apply what they have learnt in other subjects-." "It's not just about what it looks like and feels like. Design is how it works". James Dyson, Inventor / Steve Jobs, Designer.

**Mission Statement:** St Stephen's aims to develop its children and staff to reach their full potential in a happy and caring environment, enshrined in our Key Christian Values of Love, Hope, Faith and Trust.

St Stephen's Statement of Intent for the Curriculum: Our aim is to provide a stimulating, creative and exciting curriculum which inspires, challenges and motivates; giving every child the opportunity to achieve. It is built around a range of collaborative and self-directed activities which extend and develop individual interests and talents and prepares children to be valued and responsible members of society.

## INTENT

Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. At St Stephens, we encourage children to use their creativity and imagination, to design and make products which solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We aim to, wherever possible, link work to other disciplines such as history, science, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

In the EYFS we provide opportunities for children to:

- Develop a curiosity and interest in the designed and made world through investigating, talking and asking questions about familiar products;
- Develop confidence and enthusiasm through frequent exploration of construction kits to build and construct objects, and activities for exploring joining, assembling and shaping materials to make products;
- Extend their vocabulary through talking and explaining about their designing and making activities

# IMPLEMENTATION

Design and technology will be taught through Plane Bee units of work. There are 3 units of work per year group and each meet the National Curriculum objectives and allow children to develop their skills in the following areas: Cooking and Nutrition, Stable Structures, Programming and Electrical Systems, Mechanical Systems, Textiles and Inventions and Achievements.

Each design and technology project will be taught once weekly or in a week block dependent on the length of each project, this is up to each class teacher's discretion.

Each child will Design -> Make -> Evaluate through each unit.

Some units are inspired by inventors which our children will learn about and become a part of the inventor's journey towards creating something that we use on a daily basis, e.g. reinforced concrete W B Wilkinson.

#### Role of the subject leader

The subject leader will:

- Inspire learning by implementing a new scheme Plan Bee, which will enable the children to feel purposeful and motivated to upskill themselves through investigations in each scheme of work.
- Ensure high quality resources and equipment is available for each class and specific units taught.
- Purchase, organise and maintain equipment to make them easily accessible for colleagues.
- To uphold our school ethos by incorporating recycled materials and junk modelling where appropriate.
- Monitor and evaluate the learning and teaching of design and technology through Plan Bee within the school and its impact.
- Devise an action plan to show future developments and review progress.
- Attend courses and cluster meetings for CPD and report back to staff;
- Explore ways to raise the profile of design and technology within school and make links with local businesses.
- Encourage parents to be involved in their children's learning in design and technology.

All Children are given enrichment opportunities to design, make and evaluate through our Forest School teaching. Whereby children use natural resources to design and make something fit for purpose within our eco-garden or to build our relationship with nature e.g. habitat building, making bird feeders etc. This enrichment opportunity is available to all children throughout school and encompasses how we can showcase our skills and knowledge through risk-taking and creative problem solving, whilst all ideas and suggestions are valued.

In the EYFS children begin learning through our Builder's Yard, where they can hammer nails, screw with screwdrivers and create their vision.

On a regular basis, every half term the children have the opportunity to bake and make something for someone in mind e.g. Mother's Day.

This gives the children a purpose and an audience to make their product for. They can choose between flavours, shape, texture, toppings and the overall display. The children also build up concepts of risks and how they can protect themselves whilst being risk-taker and understanding the importance of this at the very beginning before exploring through first hand experiences.

### IMPACT

#### Assessment

Each class teacher will assess using the National Curriculum objectives that each unit covers. Class teachers will informally assess the children as the unit progresses, as each stage of the journey to designing a product is different depending on the unit. At the end of each unit our children are encouraged to complete a Design Proforma, these allow the children to delve into their previous skills and knowledge and be able to self-assess more accurately and effectively.

Throughout the school each Level (1-4) of Design Proforma progressively has more detailed questions in order for each child to understand every step they took in their journey to making their final product.

Consequently, each child will be able to identify what they need to improve on for future projects.

Samples of work will be collated in a designated Design and Technology folder, alongside pictures being shared with parents/carers on Dojo and the subject leader. These samples will be used for identifying progression and expectations, alongside monitoring this progression through each year group.

Class Teachers will display non-perishable products until the end of the half-term.

#### Special Education Needs and Differentiation

D&T education is one particular area of the Curriculum which allows a great deal of pupil creative expression and non-verbal communication. Therefore, we aim to use the area of Design, Art and Craft and as a means of supporting children with S.E.N. to develop their own learning skills and levels of personal self-esteem.

Each teacher will make every effort to adapt all areas of the D&T Curriculum to suit the individual needs of the children in their class. Children with any form of Special Educational Need will be able to access the D&T curriculum with great success. If any teacher is unsure about adapting their D&T planning to suit the needs of children in their class, then they should speak to the D&T co-ordinator or to the SEN coordinator.

Worksheets can be adapted where necessary. The demands of the tasks and choices can we changed to meet individual needs, such as fine motor difficulties.

#### **Equal Opportunities**

It is our intention to provide each and every pupil with a broad and balanced D&T curriculum. A curriculum which also approaches those key issues associated with multiculture and gender. It is our belief that all children (regardless of their own particular ethnic group) have the same entitlement to a broad and varied multi-cultural D&T education, an education which provides a unique insight into the historical and contemporary traditions of both their own culture and that of other nationalities. In addition, every effort is made to seek out ways of reinforcing sexual equality within the classroom where both sexes are treated fairly and are provided with the same educational opportunities.

#### Health and Safety

In teaching certain practical elements of D&T to pupils, we recognise that safety is a key issue. All safety precautions must be taken. This is done by recognising health and safety in the classroom organisation and, furthermore, by giving children guidance on how to use the equipment provided. Monitoring the pupils in small groups helps overcome the problems of safety when using potentially dangerous D&T equipment. Children will be introduced to the correct techniques for handling D&T equipment and will develop these techniques as they progress through the school. The co-ordinator is always available to guide staff in the safest ways of using various equipment.

#### Food - hygiene and safety

- A trained teaching assistant will support with work on food. He or she will ensure all equipment is clean and in working order. Plastic aprons will be worn by adults and children working with food.
- Food will be purchased nearer to the date of the 'make' process.
- Any children identified with allergens should have an alternative way of 'making' their product but with the same outcome.