

# St. Laurence C.E. Primary School Design & Technology Policy 2023



This policy outlines the teaching, organisation and management of the Design & Technology taught and learnt at St. Laurence's C. E. primary school. It reflects the school's values and ethos. The implementation of the policy is the responsibility of all the teaching staff.

# **Curriculum Statement**

### Intent

At St Laurence's Primary School, we believe that the teaching and learning of Design and Technology is essential to prepare our pupils for the modern world. Children are encouraged to develop a greater understanding and knowledge of design and technology, as well as their safe use of tools and equipment. Through the teaching of Design and Technology, we will show children the best inventions both past and present, and encourage them to develop a critical understanding of the impact of such inventions.

At the core of all we do are our three main values: creativity, trust and wisdom.

The Design and Technology curriculum at St. Laurence's enables children to develop their creativity and imagination as pupils design, make and evaluate products in a variety of contexts.

Pupils will develop trust in their own ability to apply new skills by being encouraged to take risks and become resourceful, innovative, enterprising and capable pupils. Pupils are expected to reflect and evaluate their work, thinking about how they can make changes in order to continuously improve.

Pupils will develop wisdom as they acquire subject knowledge and skills that draw upon other areas of their learning such as mathematics, science, engineering, computing and art.

## Implementation

At St Laurence's, we use a variety of teaching and learning styles to deliver Design and Technology lessons. Each year group completes at least three Design and Technology topics per year (one a term), at least one of these being a unit on Cooking & Nutrition. These topics are taught through either a weekly lesson or in a block. Teachers have identified the key knowledge and skills for each topic and consideration has been given to ensure progression across topics so that children can achieve a deep understanding of Design and Technology as they journey through the school.

## **Disciplinary Concepts**

Disciplinary concepts define how someone successfully uses their knowledge of principles, theories and processes to improve their understanding of their chosen subject. In order to make this clear for pupils, we describe disciplinary concepts as "Being a Designer..." and in our curriculum, they are defined as:

- Design
- Make
- Evaluate
- Technical Knowledge

## **Substantive Concepts**

Substantive concepts are concepts that repeatedly appear in subject areas and pupils deepen their understanding of over time. In D&T, this means we repeatedly design and make SOMETHING, for SOMEONE, for SOME PURPOSE so our substantive concepts are these six interrelated principles:

- User
- Purpose
- Functionality
- Design Decisions
- Innovation
- Authenticity

For each unit of work, pupils are given vocabulary lists of substantive concepts and substantive knowledge. The substantive concepts will reappear in these lists with the expectation that pupils will deepen their understanding over time. The words pertaining to substantive knowledge will usually be new learning.

## **EYFS**

In the Early Years Foundation Stage, Design and Technology is taught through the areas of learning referred to as Physical Development (PD), Understanding the World (UTW) and Expressive Arts and Design (EAD). We follow the Development Matters Early Years Curriculum which supports children in acquiring a succession of stepping stones that will enable them to achieve their Early Learning Goals.

## **Impact**

At St Laurence's, our children will:

- Be able to test, critique and evaluate their products and ideas as well as those of others.
- Understand and apply the principles of nutrition and learn how to cook.
- Develop a good knowledge, understanding and appreciation of a range of materials and how they have multi-purpose uses.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make products for a wide range of users.
- Have a clear enjoyment and confidence in Design and Technology that they will then apply to other areas of the curriculum.

# **Assessment**

Assessment for learning is continuous throughout the planning, teaching and learning cycle. At St Laurence's, we use summative and formative assessment to determine children's understanding of key knowledge and skills.

Assessment is supported by use of the following strategies:

- Observing children at work, individually, in pairs, in a group and in class during whole class teaching.
- Using differentiated, open-ended questions that require children to explain their understanding.
- Provide effective feedback, including interactive marking, where appropriate, to engage children with their learning and to provide opportunities for self-assessment, consolidation, depth and target setting.
- Use of specific and measurable learning questions for each lesson which children and teacher's review against the agreed success criteria.
- Each child's attainment and progress in Design and Technology is formally reported to parents at the end of the school year in the end of year report.
- Each unit of work ends with the assessment of the project, which should assess against the disciplinary concepts, substantive vocabulary list and link to the national curriculum.
- In the Early Years, children are assessed according to the Development Matters attainment targets and at the end of the Foundation years against the Early Learning Goals.

### **Cross- curricular links**

Design and Technology is a subject that touches on many other areas taught in schools, from Mathematics to Art. For example, a link may be made to compliment both Design and Technology and maths lessons to teach measurement/ quantities etc. Cross-curricular outcomes are identified prior to teaching.

# **SMSC Development**

Spiritual Development is nurtured through the process of creative thinking and innovation which inspires our pupils to bring out undiscovered talents; this builds self-confidence and a belief in their unique abilities. We also seek to develop a sense of 'moral conscience', through thinking about the moral dilemmas raised in designing and making new products and the wider impact this may have on the environment as a result of the materials used. Design and Technology supports social development by providing opportunities for our children to work as a team, recognising others' strengths and sharing equipment safely when designing and making new products in order to maintain a safe, secure, learning environment. Design and Technology supports cultural development by encouraging children to research and reflect on ingenious products and inventions. Children look at the diversity of materials and ways in which design technology has improved our quality of life in the past and present, and how it will most certainly benefit us in the future

## Role of the subject leader.

The subject leader's responsibilities are:

- To ensure a high profile of the subject;
- To ensure a full range of relevant and effective resources are available to enhance and support learning
- To model the teaching of Design and Technology
- To ensure progression of the key knowledge and skills identified within each unit and that these are integral to the programme of study and secure at the end of each age phase
- To lead further improvement and development of the subject as informed by effective subject overview
- To ensure that the Design and Technology curriculum has a positive effect on all pupils, including those who are disadvantaged or have low attainment
- To ensure that approaches are informed by and in line with current identified good practice and pedagogy.

# **Equal Opportunities**

At St Laurence's we are committed to providing a teaching environment which ensures all children are provided with the same learning opportunities regardless of social class, gender, culture, race, special educational need or disability. Teachers use a range of strategies to ensure inclusion. Support for specific individuals is well considered and planned for, with consideration given to how greater depth and further challenge can be implemented.

# **Gifted and Talented**

At St. Laurence's each teacher will liaise with the gifted and talented co-ordinator to ensure individual children's needs are met and that appropriate targets are set and reviewed regularly. Class teachers are mindful of the extra needs of gifted and talented children, different questioning techniques and activities to allow further progression and challenge.

## Inclusion

All pupils are entitled to access the Design and Technology curriculum at a level appropriate to their needs. To ensure inclusion, teachers use a range of strategies. Independent tasks, as well as teaching, are well adapted, to ensure full accessibility, as well as to provide appropriate support and challenge to different groups of learners. The

school makes full use of additional adults who are deployed effectively to ensure that identified children can make progress in each curriculum area, according to their full potential.

# **Role of the Governors**

Governors are responsible for ensuring the effective delivery of the National Curriculum in Design and Technology. The subject leader will ensure that the Governing Board is kept up to date with the actions and initiatives which are relevant to the subject. Regular reviews of action plans are sent to the governors throughout the year and the governors meet with subject leads and provide link governor reports to the governing board annually.