

St Laurence’s Catholic Primary School

Policy Statement

For

Design and Technology

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| **This policy was adopted:** | **October 2022** |
| **By name:** | **Mr John Holmes**  |
| **Position:** | **Chair of Governors**  |
| **Signature:** | ***J Holmes***  |

**Our Mission Statement**

We aim to celebrate our partnership with the families we serve and the community we live in.

We aim to provide an education that enables each child to reach their full potential.

Our aim is the creation of an atmosphere where all are valued, gifts and talents are celebrated and the gospel values of love, respect and justice are at the heart of all we do.

**Our Vision**

Everyone feels a sense of belonging,

Has the opportunity to shine,

To enjoy their teaching and learning

But most of all – to dream big!

**DESIGN AND TECHNOLOGY POLICY**

**Introduction**

Design and Technology (DT) prepares children to take part in the development of tomorrow’s rapidly life changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of Design and Technology, children combine practical skills with an understanding of aesthetics and industrial practices. This allows them to reflect on and evaluate present and past designs, products and their impacts.

**Aims of Design & Technology:**

* The 3 I’s (Intent, Implementation and Impact) underpin the teaching of DT. (See appendix one),
* to develop children’ designing and making skills,
* to teach children the knowledge and understanding, within each child’s ability, that will be required to complete the making of their product,
* to teach children the safe and effective use of a range of tools, materials and components,
* to develop children’s understanding of the ways in which people have designed products in the past and present to meet their needs,
* to develop children’s creativity and innovation through designing and making,
* to develop children’s understanding of technological processes, their management and contribution to society,
* to understand and apply the principles of a healthy and varied diet preparing dishes.

**Objectives**

The National Curriculum for design and technology aims to ensure that all pupils:

* Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
* Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
* Critique, evaluate and test their ideas and products and the work of others.
* Understand and apply the principles of nutrition and learn how to cook

**Strategies for implementation and planning**

At St Laurence’s we follow a long term plan for Design and Technology that the whole staff agreed to adhere to follow which is taken from the National Curriculum strands. Design and Technology and Art are delivered on half termly basis to ensure even coverage throughout the year.

Teachers from Foundation Stage to Year 6 will plan to ensure full coverage of the skills relating to the Design and Technology for their particular year group. Class teachers are responsible for their own class organisation and teaching style in relation to Design and Technology.

The school uses a variety of teaching and learning approaches in Design and Technology lessons. The principal aim is to develop children’s knowledge, skills and understanding in Design and Technology. Teachers ensure that the children apply their knowledge and understanding when developing their ideas, planning, making and evaluating products. We do this through a mixture of whole class teaching and individual/group activities. Within lessons, we give children the opportunity both to work on their own and collaborative with others. This involves listening to other children’s ideas and treating these with respect. Children critically evaluate existing products, their own work and that of other. They have the opportunity to use a wide range of materials and resources, including ICT.

**Differentiation and progression**

We plan the activities in Design and Technology so that they build upon the children’s prior learning. This is evident within our DT Progression map document and our overview of topics document. While we give children of all abilities opportunity to develop their skills, knowledge and understanding, we also build planned progression into their topic, so that there is an increasing challenge for the children as they move up through the school. Additionally, we aim to develop children’s knowledge and understanding of DT vocabulary. This is also evident on our Art and DT Long Term Overview document.

**The Early Years Foundation Stage**

Aspects of DT within the children’s work is related to the objectives set out in the Early Year Development Matters, which underpin the curriculum planning for children aged three to five. DT makes a significant contribution to the creative development of the child by allowing them to explore materials, patterns, colours, shapes, constructions, by using a range of materials and tools. It further supports the other areas of the curriculum through the choices the children make and the exploration and language. There is emphasis on independence and self-initiated learning, which enables children to freely explore resources and pursue their own creative interests and talents in addition to the planned learning experiences.

**Key Stage One**

Through a range of creative and practical activities, pupils in Key Stage One are taught the knowledge and skills needed to engage in the process of designing and making. Children are provided with opportunities to apply their skills to a range of relevant contexts. In Key Stage One, children design purposeful products by creating drawings, templates and through the use of IT. They make products using a range of tools, equipments and materials. Children evaluate their own products against a given design criteria. Throughout Design and Technology lessons, children will start to develop an understanding of the technical vocabulary associated with their topic. E.g. structures, mechanisms, joining, finishing etc. Children will also use the basic principles of a healthy and varied diet to prepare dishes and understand where food comes from.

**Key Stage Two**

Through a range of creative and practical activities, pupils in Key Stage Two are taught the knowledge and skills needed to engage in the process of designing and making. Children are provided with opportunities to apply their skills to a range of different contexts. The children use research (IT) to develop a design criteria to consider a product’s purpose and target audience. They create sketches, prototypes and diagrams to develop their designs, before making their product using a wider range of tools, equipment, materials and skills. Key Stage Two children critically evaluate existing products, their own work and that of others. Throughout Design and Technology lessons, children will further develop an understanding of the technical vocabulary associated with their topic (including electrical systems). Children will develop a greater understanding of key events and individuals that have shaped the world. They will also develop an understanding of the key principles of healthy and varied diet, be able to prepare and cook a variety of dishes and know where and how a range of ingredients are grown, reared, caught and processed.

**Relationship to other Subjects (Including IT)**

Design & Technology is taught as a subject specific activity through a combination of whole class teaching, group work and individual work. Cross-curricular links are identified when appropriate. E.g. The children can apply scientific and mathematical knowledge to create products which are functional. Children have the opportunity to use IT as a tool to support their learning within IT. This can be done through product research and the designing of their own product.

**Assessment, Reporting and Recording**

The children’s sketchbooks are a good source of evidence showing good practice. Photographic and examples of children’s work is also regularly added into the whole school big DT book. Areas of success and next steps can be shared with the children. We are currently in the process of creating a new DT assessment, which will be fully implemented for Autumn Term 2022. Pupils’ progress is reported to parents annually as part of the child’s school report as well as updates on class seesaw.

**Monitoring and Evaluation**

The Design and Technology Subject Leader monitors planning and samples of work as part of on-going subject monitoring. They will collect samples from all year groups and collate in the Design and Technology Evaluation Book. They also scrutinise children’s work in their Topic Books to find strengths and areas of development, in relation to the teaching and learning of Design and Technology. They will also conduct pupil interviews and evaluate their findings. The findings from these forms of monitoring will be shared with the Senior Leadership Team (SLT) and update the “subject SDP” as appropriate.

**Display**

It is important that children’s success in Design and Technology are acknowledged and celebrated appropriately. This will be done through displays in classrooms and around school.

**Equal Opportunities and Special Educational Needs**

Equal opportunities are considered when we decide upon the resources we provide and the teach strategies that we employ. In our curriculum planning we ensure that all children, with due respect to their culture, religion and background, have equal access to all areas of the curriculum, equipment and resources. Teachers differentiate activities within Design & Technology to ensure that the specific needs of individual children are best met.

**Health and Safety**

Health and Safety is important, particularly when working with tools, equipment and resources. Children should be given suitable instruction on the operation of al equipment before being allowed to work with it.

Children need to be taught how to:

* use tools and equipment correctly
* recognise hazards and risk control

Children should be:

* strictly supervised in their use of equipment at all times
* taught to respect the equipment they are using and to keep it stored safely while not in use
* taught to recognise and consider hazards/risks and to take action to control these risks, having followed simple instructions.

**Food Hygiene**

* Pupils and staff will take care to undertake appropriate hand washing and other hygiene related activities prior to preparing food.
* Pupils and staff working with food must wear aprons designated for cooking.
* All jewellery should be removed and hair tied back.

**Resources**

Classrooms have a store of basic resources. Specialised resources/equipment are stored at the back of the hall curtain.

**Management**

The role of the Design and Technology Subject Leader is to:

* advise and support staff in the planning, teaching and learning
* monitor teachers’ planning as part of on-going subject monitoring and evaluation of practice
* audit, identify, purchase and organise all the Design and Technology resources/equipment, ensuring that they are readily available and well maintained (budget dependent)
* document and review the agreed ways of working through a written policy and scheme of work
* keep up-to-date on the use of Design and Technology in the curriculum
* promote Design and Technology throughout the whole school.

It is the responsibility of each class teacher to identify additional resource needs in relation to their project. Any shortages, breakages or losses should be reported immediately to the Design and Technology Subject Leader.

**REVIEW OF POLICY**

The effectiveness of this policy will be reviewed annually by the Senior Leadership Team and every three years by the Governing Body. If changes are made to the policy, the Governing Body will ratify amendments.

**Policy written by:** Laura Owens (Design and Technology Subject Leader)

This policy was reviewed: October 2022

Signed: J Holmes

Designation: Chair of governors

Date: 20th October 2022

**Appendix one**

**Design and Technology Curriculum**

**Intent, Implementation and Impact**

**Intent**

At St Laurence’s we aim to provide all children with a broad and balanced curriculum which prepares them for life beyond primary education. We encourage children to use their creativity and imagination, to design and make a range of products that solve real and relevant problems within a variety of contexts, starting in the Early Years Foundation Stage (EYFS) to Key Stage 2 (KS2).

Design and Technology (DT) is an inspiring, rigorous and practical subject that encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. Through the study of DT, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industry. This allows them to reflect on and evaluate past and present technology, its uses and impacts on the wider world. Reading and vocabulary is at the heart of our curriculum. Our aim is to provide all children with the knowledge, skills and vocabulary associated with DT, which are in line with the EYFS curriculum and National Curriculum.

**Implementation**

Our DT curriculum combines skills, knowledge, concepts and values to enable children to tackle real problems. It can improve analysis, problem solving, practical capability and evaluation skills. The children are encouraged to become innovators, risk-takers and resilient, whilst applying their knowledge and skills from other subjects in the curriculum.

During the EYFS pupils explore through a combination of child initiated and adult directed activities, which meets the specific area of learning (expressive arts and design). They have the opportunities to:

* Explore paint, using fingers and other parts of their bodies as well as brushes and other tools.
* Express ideas and feelings through making marks, and sometimes give a meaning to the marks they make.
* Explore different materials, using all their senses to investigate them.
* Use their imagination as they consider what they can do with different materials.
* Make simple models which express their ideas.
* Make imaginative and complex ‘small worlds’ with blocks and construction kits, such as a city with different buildings and a park.
* Develop their own ideas and then decide which materials to use to express them.
* Join different materials and explore different textures.
* Create collaboratively, sharing ideas, resources and skills.

The teaching of DT within KS1 and KS2 school follows the National Curriculum using Plan Bee schemes of work. This supports all teachers with a clear and effective structure to ensure children’s learning is building on previous skills and enables children to embed their learning in their long-term memories.

As part of the planning and delivering process, teachers need to consider the following:

* Clear and well thought out sequence of lessons for each DT topic, which carefully plans for progression and depth.
* Key vocabulary and specific vocabulary used which matches each topic and skills.
* The needs of all children are considered and monitored, including those with SEND and disadvantaged children.
* To ensure that children fulfil each stage of the designing process. E.g. investigating existing products, designing, making and evaluating.
* DT work is clearly evident within the back of every child’s Sketch Book. This can be evidenced in a range of different ways. E.g. Seesaw/Tapestry (for EYFS) and photographs.
* Trips and visiting experts who will enhance the learning experience (when necessary).
* A means to display and celebrate the pupils’ DT work in their class.

Food technology is implemented across the school with children developing an understanding of where food comes from, the importance of a varied and healthy diet and how to prepare this.

**Impact**

### Our DT curriculum is high quality, well thought out and is planned to demonstrate progression. We measure the impact of our curriculum through the following methods:

### Monitored by the Subject Lead throughout the year in many forms. E.g. Book scrutiny, pupil interviews to discuss their learning and understanding, lesson observations etc.

### Teachers assessing the learning of each term against the planned outcomes, knowledge and skills for their specific DT topics.

DT assessments are completed at the end of every term (by the Class Teachers) and the data is collated and analysed by the Subject Lead.