

Lovers' Lane Primary and Nursery School



DT Policy

Date Reviewed: September 2022

Next review date: September 2023

DT Policy

Introduction

Lovers' Lane Primary is a friendly and caring school in which the children are supported and encouraged through lessons, assemblies and playtime to achieve their best in every aspect of their learning. Within our diverse and inclusive community, we aim to nurture individuals and develop pride and mutual respect for each other and our school through our core values - Show Respect, Work together, Aspire and Nurture.

This policy sets out Lovers' Lane Primary and Nursery School's aims and strategies for the successful delivery of Science. This policy should be read in conjunction with other relevant school policies such as the Safeguarding, Equal Opportunities, Curriculum, Finance, Teaching & Learning, SEND and Assessment policies. The policy has been developed by the DT Leader in consultation with the Headteacher, SENCO, Leadership Team and teachers. Guidance from consultants and pupil, parent and staff voice questionnaires have shaped and will continue to help shape this policy. This policy is based on government recommended/statutory programmes of study. It is anticipated that this policy will be reviewed at the start of every academic cycle.

Aims and Objectives

Pupils will be required to design and make products that solve real and relevant problems taking into account their own needs and wants. They will look at Design and Technology in a variety of contexts, relating their ideas to an evaluation of past and present technological advances. They should develop a critical understanding of how DT helps us in our daily lives and how it contributes to the creativity, culture, wealth and well-being of the nation.

The aims of DT are:

At Lovers' Lane Primary School, we aim to:

- To provide opportunities for all the children to design and make quality products.
- To provide children with the opportunity to explore food and cooking techniques along with healthy eating and environmental issues within food production.
- To develop design and making skills, knowledge and understanding to the best of each child's ability; using and selecting a range of tool, materials and components.
- To become creative problem solvers as individuals and members of a team.
- To develop an ability to criticise constructively and evaluate their own products and those of others.
- To help the children develop an understanding of the ways people in the past and present have used design to meet their needs.
- To reflect on and evaluate such techniques, its uses and effects.

Health and Safety

The safety of the children is the responsibility of the class teacher. The children are made aware of the safe use and correct procedure involved when using tools and equipment in a learning environment and how to follow proper procedures for food safety and hygiene. The children are made aware of the need to be careful and to understand that their actions can affect others. The children build up a range of skills when using equipment to reduce unnecessary risk. Rotary cutters are to be used with a safety ruler. Craft knives are used only by 5/6 under direct supervision of an adult. Glue guns are used (low temperature) under supervision. All staff, including helpers, are made aware of food safety procedures when working with food to minimise any risks. The children wear protective clothing if necessary.

Curriculum

The curriculum will be planned by teachers within year groups and supported by the co-ordinator. The programmes of study will be used to provide opportunities for teaching Disciplinary and Substantive skills and knowledge, and application of these to making products of quality. To ensure children are developing the relevant skills associated with Design and Technology in the wider world, children should work in a range of contexts such as the home and school, gardens and playgrounds, the local community, industry and the wider environment.

KS1

When designing and making, pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable

- explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products

Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be 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 and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

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 shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products

Cooking and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from

Key stage 2

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

Assessment:

Assessment has two main purposes

- Assessment of learning (also known as summative assessment).
- Assessment for learning (also known as formative assessment).

At Lovers' Lane Primary School, we recognise that AfL lies at the heart of promoting learning and raising standards of attainment. We further recognise that effective AfL depends on actually using the information gained. In DT Assessment is achieved through observations, discussions and evaluations of finished products.

All staff use assessment tickets to assess the children's knowledge and skills at the end of each topic. These tickets are passed up through school so that we can track children's progress and plan accordingly.

Resources:

Resources are regularly audited and replenished. Although the DT coordinator takes responsibility for this, it is expected that staff will report damages or used consumables to the DT Coordinators.

Inclusion:

At Lovers' Lane, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non-statemented. Adaptations are made to support learning.

Monitoring, Evaluation and Feedback:

Work and plans will be scrutinised regularly to monitor differentiation of work and the sequences of units of work. Assessment procedures will be revisited during INSET and staff will track the progress of their pupils annually. This information will be scrutinised by phase teams and put into progress reports each year. The fulfilment of the DT curriculum will be monitored through display work and children's work, for example, the use of photographs and children's observations. Lessons will be observed annually or as the Head Teacher deems necessary and coordinators will be available to help staff work towards their professional development targets.

Monitoring will be achieved through:

- Work scrutiny.
- Learning walks.
- Observations.
- Pupil voice.
- Teacher voice.
- Reflective teacher feedback.
- Learning environment monitoring.
- Dedicated Science Leader and Assessment Leader time.

Evaluation and Feedback will be achieved through:

- Dedicated DT Leader and Assessment Leader time.
- Using recognised standards documentation for end-of-year expectations.
- Written feedback on evaluation of monitoring activities to be provided by the DT Leader in a timely manner.
- Feedback on whole school areas of development in regard to DT to be fed back through insets/AOB/staff meetings.

Roles and Responsibilities of Subject Leader:

- Raising the profile of DT for all stakeholders.
- Monitoring the standards of DT and feeding back to staff in a timely fashion so they can act on areas for development.
- Ensuring assessment systems are in place for DT.
- Maintaining overall consistency in standards of DT across the school.
- Reporting on Science at specific times of the year to the Governing Body/Head/Staff.
- Auditing the needs of the staff in terms of training/CPD.
- Actively supporting staff with their day-to-day practice.
- Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.

- Attending training and keeping abreast with the latest educational technology initiatives.
- Using nationally recognised standards to benchmark DT.
- Creating Action Plans for Science and supporting a long-term vision which feeds into the whole school development plan.
- Keeping an up-to-date log of all resources available to staff.
- Procuring physical and online resources that demonstrate best value.
- Reviewing the DT curriculum and developing it as needed.

Health and Safety:

In their planning of activities, teachers will anticipate likely safety issues. They will also explain the reasons for safety measures and discuss any implications with the children. Children will always be encouraged to consider safety for themselves, others and the environment and the resources they use, when undertaking DT activities.