Longmoor Primary School

Design Technology Policy

2024 - 2026

Adopted by Governors

Chair of Governors **Signature:** *J. Wright*	**Date: 27th March, 2024**
Chair of Governors **Signature:** *J. Wright*	**Date: 23rd March, 2022**
Chair of Governors **Signature:** *J. Wright*	**Date: January 2020**

The purpose of the Design and Technology at Longmoor Primary School.

Design and technology prepares children to take part in the development of tomorrow's rapidly 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 opportunities for change and areas for improvement, and allows them to respond by developing ideas and eventually making products and systems. Through the study of design and technology, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect and evaluate on present and past design and technology, its uses and its impacts. Design and technology helps all children to become informed consumers and potential innovators. All children will have the opportunity to undertake design and technology in multiple forms throughout their time at Longmoor Primary School.

Aims

• To provide opportunities for all the children to design, make and evaluate quality products.

• To give children with the opportunity to explore food and cooking techniques, along with healthy eating and environmental issues within food production.

• To develop skills, knowledge and understanding for designing and making to the best of each child's ability; using and selecting a range of tools, materials and components.

• To become creative problem solvers as individuals and members of a team.

• To be able to use computing in conjunction with the Designing and Making process.

• To develop an ability to constructively criticise 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 past and present techniques and their uses and effects.

• To prepare the children for living in a multi-cultural society by teaching consideration for other cultures which will be both important and beneficial.

Objectives

To achieve these aims, we ensure that the planned activities our children undertake are challenging, motivating, relevant and enjoyable. We develop children's confidence in their own abilities and work by providing continual support and encouragement. Teachers also model and demonstrate how to offer peer support during team tasks to guide this understanding. We also strive to develop children's own resilience and independent problem-solving skills by ensuring they know where to access support. The children are challenged through activities and work in a way which enables them to deepen their understanding and enhance their expertise. Teachers use the Design and Technology Progression of key skills ladder (DATA) to ensure children are extended in their learning in each key area.

Teaching and learning style

The school uses a variety of teaching and learning styles 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 throughout the design and technology process: from developing ideas, through planning and making products to then evaluating and critiquing final pieces. We do this through a mixture of whole-class teaching and individual/group activities. Within lessons, we give children the opportunity to work on their own as well as working collaboratively with others. During group work, children learn to listen to other children's ideas and treat these with respect. Children critically evaluate existing products, their own work and those of others. They have the opportunity to use a wide range of materials and resources, including ICT.

In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies, including:

• setting common tasks that are open-ended and can have a variety of results;

• allowing children to collaboratively work in mixed ability groups (Kagan approach) in which each child an assigned role that enables them to participate with confidence;

• planning and delivering tasks of increasing difficulty which allows children to demonstrate deeper learning and complete extension challenges:

• providing a range of challenges through the provision of different resources;

• using additional adults to support the work of individual children or small groups;

• using targeted and specific questioning to clarify and extend learning and understanding.

Curriculum and school organisation

At Longmoor Primary School we use a skills based, cross-curricular approach to teaching and learning using objectives taken from the National Curriculum in conjunction with support materials from The Design Technology Association (DATA). We have adapted the National Curriculum scheme to the local circumstances of our school, in that we use the local environment and subject-specific topics (history, geography and science) as the starting point for certain aspects of our work. We teach DT skills discretely and through our curriculum themes, ensuring all children access all areas of the Design Technology Curriculum. To meet the requirements of the National Curriculum, it is essential that our curriculum is taught with a focus on the following key areas: Mechanisms, Textiles, Food and Structures.

We carry out the curriculum planning in design and technology in three phases: long-term, medium-term and short-term. The long-term plan maps out the units covered in each term for each year and provides an over-view of themes and key areas taught. Teachers also have specific CPD materials for each unit which supports planning and delivery of the key skills for each individual year group.

Our medium-term plans give details of each unit of work for each term. They identify the necessary learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across each term. Class teachers plan for individual design and technology sessions as part of

weekly planning. The weekly plan lists the specific learning objectives for each lesson and details how the lessons are to be taught. The class teacher keeps these individual plans, and the class teacher and subject leader often discuss them on an informal basis.

We plan the activities in design and technology so that they build upon the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

In each year group, the projects are set out in a systematic approach which is then built upon as the children progress through the school. This enables children to become increasing familiar with the specific aspects of a Design and Technology project and, in turn, develops understanding of the key vocabulary and subject specific terminology. It also enables children to revisit prior learning in Design and Technology lessons through repetition and familiarity to enable and support sticky learning. These project booklets can be easily adapted to suit the individual learning needs of children in all year groups as they are differentiated and editable. Seesaw is also used as tool to differentiate tasks and support children with special educational needs.

In Early Years Foundation Stage, Design and Technology is an integral part of teaching and learning, relating aspects of the children's work to the objectives set out in the Early Learning Goals across all seven areas of learning. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in design and technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing skills for making, and safely handling appropriate tools and construction material with increasing control.

Personal, social and health education (PSHE) and citizenship

The design and technology subject contributes to the teaching of personal, social and health education and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They develop social skills through adapting integral roles during team activities by communicating ideas and listening to suggestions. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines. They also learn through their understanding of personal hygiene how to prevent disease from spreading when working with food.

Spiritual, moral, social and cultural development

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others around them. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and

similarities. A variety of experiences teach them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

Assessment and recording

Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. They record the progress by assessing the children's work against the learning objectives for the task. Success criteria for each unit of work is discussed with the children to ensure they are aware of the expectations during the topic. At the end of a unit of work, teachers record children's attainment using the Objective Coverage grids for each unit. The subject coordinator analyses and records the attainment for each year group at the end of each term.

Teachers use the attainment that they record to plan the future work of each child and to make an annual assessment of progress for each child, as part of the annual report to parents. Each teacher passes this information on to the next teacher at the end of each year. The design and technology subject leader keeps and updates photographic evidence of the children's work on the school website. This is also shared with parents are carers. Teachers are also encouraged to update parents through photographic evidence on dojo to showcase the skills and creations of their children during Design and Technology lessons.

Resources

The children are provided with the very best resources possible, while constantly reviewing this provision in the light of curriculum changes and development. Our school has a wide range of resources to support the teaching of design and technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store.

Safety in Design and Technology

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.

Monitoring and review

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader. The work of the subject leader also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The design and technology subject leader creates an action plan for developments of the subject area and this is regularly updated and evaluated and indicates areas for further improvement.

Updated 10.1.2024 by A.Wright