# **Lewknor C of E Primary School Design and Technology Policy October 2017 – October 2020**

### Aims and objectives

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 needs and opportunities and 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 practice. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

# The aims of design and technology are:

- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- to enable children to talk about how things work, and to draw and model their ideas;
- to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- to explore attitudes towards the made world and how we live and work within it;
- to develop an understanding of technological processes, products and their manufacture, and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making.

#### Teaching and learning

The principal aim is to develop children's knowledge, skills and understanding in design and technology. Teaching ensures that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. This is done through a mixture of whole-class teaching and individual/group activities. Within lessons, all children are given the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources.

In all classes there are children of differing ability. We recognize 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:

- setting common tasks that are open-ended and can have a variety of results;
- setting tasks of increasing difficulty where not all children complete all tasks;
- grouping children by ability and setting different tasks for each group;
- providing a range of challenges through the provision of different resources;

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

# Design and technology curriculum planning

DT is taught in periods of blocked time allowing for the development of skills and understanding in depth.

Whilst DT will at times be related to topic work or other cross-curricular links, teachers also plan specific activities to provide adequate development of the skills, knowledge and understanding associated with the subject. Planned activities will take account of pupils' previous experience in DT.

Teaching delivery will vary according to the activities being undertaken, but will include class, group and individual instruction and guidance, exposition and demonstration, and the use of questioning and discussion. Teachers will ensure that the objectives of lessons and the criteria for success are clear to all pupils.

Teaching in DT should address the fact that all children will develop their ability to make products and to learn and apply skills at different rates. Differentiation is therefore a key issue and will be open ended and planned differentiation will be by the outcome and by tasks set according to ability. Individual children will be supported by relevant questions from the teacher. These interventions from the teacher to individuals will increase their thinking, extend the range of options that may be considered and raise individual standards. There will also be times when the individual needs are met through differentiated tasks. Both approaches need to be used to ensure that all children, including the least and most able, can be working to their full potential in all DT lessons.

The class teacher completes lesson plans for each design and technology lesson. These list the specific learning intentions for each lesson and detail how the lessons are to be taught.

We follow the new curriculum for design and technology which 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.

## Teaching design and technology to children with special needs

We teach design and technology to all children, whatever their ability. Design and technology also forms part of our school curriculum policy to provide a broad and balanced education to all children. Teachers provide learning opportunities that are matched to the needs of children with learning difficulties.

#### Assessment and recording

The class teacher assesses children's work in design and technology by making assessments as pupils are observed working during lessons. Progress is recorded by assessing children's work against the learning objectives for their lessons.

#### Resources

Our school has a range of resources to support the teaching of design and technology across the school. The design and technology subject manager and teachers maintain all basic and specialist equipment in this area.

#### **Health and safety**

The general teaching requirement for health and safety applies in this subject. We teach children how to follow proper procedures for food safety and hygiene and using tools.

# Roles and responsibilities of the subject leader

- to support and guide the practice of teachers and support staff;
- to ensure coverage, continuity and progression in planning;
- · to monitor and evaluate the effectiveness of DT teaching and learning;
- to update documentation where necessary;
- to produce action plans for the School Development Plan, prepare bids and manage the DT budget effectively;
- to liaise and consult with outside agencies where appropriate;
- to prepare and lead INSET;
- to attend relevant INSET training;
- to review regularly the contribution made by DT to a meaningful curriculum.