

'Dream, Believe, Achieve!'
'With God, all things are possible.' Matthew 19:26

Design & Technology Policy

Psalm 25:4 Show me your ways, LORD, teach me your path.

Policy Date:	November 2022
Policy Review:	November 2025
Signature of Headteacher:	Retyre

Aims and Objectives

Design and technology helps to prepare children for the developing world. The subject encourages children to become creative problem-solvers, both as individuals and as part of a team. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues. Design and Technology helps all children to become discriminating and informed consumers and potential innovators. It should assist children in developing a greater awareness and understanding of how everyday products are designed and made.

The aims of design and technology in our school 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 foster enjoyment, satisfaction and purpose in designing and making;
- To use ICT software to assist our designing and learning.

Teaching and Learning Style

We use a variety of teaching and learning styles in design and technology lessons. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole class teaching and individual/group activities. All ideas will be treated with respect. Children critically evaluate their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

Children will be given the opportunity to work within three main areas of development during each topic:

1. Investigative, disassembly and evaluative activities (IDEAs)

These activities provide opportunities for the children to explore existing products and to gain skills, knowledge and understanding which can be applied in a design and make assignment.

2. Focused practical tasks (FPTs)

Focused practical tasks provide opportunities to learn and practice particular skills and knowledge.

3. Design and make assignments (DMAs)

A design and make assignment provides an opportunity for the children to combine their skills, knowledge and understanding to develop products that meet a real need. (In general DMAs in Key Stage One will tend to be shorter in duration and, as children move towards the end of Key Stage Two, their designing and making will become more complex and therefore more time consuming.) In all classes there are children of differing ability. We recognise the fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child.

Design and Technology Curriculum Planning

We carry out the curriculum planning in design and technology in three phases: long, medium and short term. The long-term plan maps out the units covered in each term during the key stage. The design and technology subject coordinator works this out in conjunction with teaching colleagues in each year group.

Our medium term plans give details of each unit of work for each term. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across each term.

Class teachers complete a plan for each design and technology lesson. These list the specific learning objectives for each lesson and detail how the lesson will be taught. The class teacher keeps these individual plans.

We plan the activities in design and technology so that they build upon 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.

The planning will be completed through a cross curricular approach ensuring the DT has a link to the topic being studied. Teachers will give each DT theme a purpose.

Each topic will need to be reviewed, informally by the teachers and TA's within the year group to ascertain the enjoyment had by the children, the effectiveness of developing skills and the quality of purpose.

The Foundation Stage

We encourage the development of skills; knowledge and understanding that help reception children make sense of their world as an integral part of the school's work. We relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control. These activities, indoors and outdoors, attract the children's interest and curiosity.

Contribution of design and technology to teaching in other curriculum areas.

English

Design and Technology contributes to the teaching of English by providing valuable opportunities to reinforce prior learning. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

ICT

We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw and paint programs to model ideas and make repeating patterns. The children also use ICT to collect information and to present their ideas through draw and paint programs.

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 also learn about health and healthy diets. Through their understanding of personal hygiene they also learn how to prevent disease from spreading when working with food.

Spiritual, moral, social and cultural development

Collaborative work in design and technology develops respect for the abilities of others and a better understanding of themselves. In addition, they develop a respect for the environment, for their own health

and safety and that of others. They learn to appreciate the value of similarities and differences. A variety of experiences teaches them to appreciate that all people are equally important.

Special Needs Pupils.

We teach design and technology to all pupils, whatever their ability. We provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs.

Where pupils are to participate in activities outside the classroom, we carry out a full risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

Gifted and Talented Pupils.

Through this policy we aim to:

- Ensure that we recognise and support the needs of our children;
- Enable children to develop to their full potential;
- Offer children opportunities to generate their own learning;
- Ensure that we challenge and extend the children through the work that we set them;
- Encourage children to think and work independently and in group situations.

Assessment and Recording.

Teachers assess work in design and technology by making observations of the children working during lessons. They record progress made against the learning objectives for that lesson. At the end of a unit of work, children undertake a review of their work that focuses upon an evaluation of the finished product and an overview of the various tasks undertaken.

Teachers make an annual assessment of progress for each child, as part of the annual report to parents.

Due to the practical nature of design and technology, evidence of work undertaken by children can be in the form of teacher's notes or as a photographic record. Samples of the design process and end product are also valuable evidence.

The design and technology subject coordinator can review evidence of the children's work.

Resources.

Our school has a wide range of resources to support the teaching and learning of this subject across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store located at the top of the stairs in the Hall.

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 coordinator. Their work also involves supporting colleagues in the teaching of this subject, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. Lesson observations are also, occasionally, undertaken and the subject coordinator regularly reviews evidence of the children's work.

Design and Technology Policy Statement regarding the use of Food

When working with food:

- An adult will be required to supervise activities involving cooking and food handling/preparation.
- When undertaking food activities the appropriate Health and Safety Procedures must be adhered to.
- When working with food all children should follow personal hygiene guidance (tie back hair, clean apron, use of blue plasters and washing hands)
- Teachers should check the dietary needs of the children in their class to identify any foods that should not be available to specific children, or groups of children.
- Any perishable food should be stored in a fridge.
- Only the equipment in the food cupboard, which is for food use only, should be used.
- Glass and wooden items should only be used with supervision.
- Only use equipment set aside to use with food.
- Set aside an area for children to wash their hands.
- Teachers taking part in any food activity should dress appropriately and follow the same procedures as the children with regard to any rules regarding personal hygiene.
- Ensure that all equipment is cleaned and put away in the food cupboard.
- Ensure that all children use their own equipment when tasting food.
- Certain spoons should be identified and used when placing food onto plates for children to taste food, teachers/TA's need to ensure children do not use their own.
- See the school's Health and Safety Manual for further guidance.

Health and Safety

All adults leading DT lessons/ activities should ensure that they have read and understood the D and T Health and Safety section of the Policy.

Adults should ensure that:

DT equipment is not left out and unsupervised, floors and work surfaces are kept clean and tidy and all tools used must be of good quality, in good condition and stored safely.

Direct safety instructions should be given to children each time they undertake a design and technology activity.

Children should be given suitable instruction on the operation of all equipment before being allowed to work with it.

Children should be strictly supervised in their use of equipment at all times. Adult to child ratio must be appropriate to the activity e.g. closer supervision on activities such as use of a glue gun.

Children should be taught to recognise and consider hazards and risks and to take action to control these risks, having followed simple instructions.

Specific health and safety points will need to be included onto topic plans. These will help teachers to identify activities of a high risk and highlight any areas in which they need to reduce risk or ensure safe practice.

Risk assessments for specific tools should be referred to during the planning and use of equipment. These will be found in the risk assessment file on the staff shared area of the network and in a folder as a paper copy with the DT resources.