Dove Bank Primary School

DESIGN & TECHNOLOGY POLICY

This policy was approved by the Governing Body of Dove Bank Primary School at their meeting on.....

Signed..... Chair of Governors

Introduction

This policy has been informed by National Curriculum 2014 guidance for design and technology.

Purpose of study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High -quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Aims and 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.

Additional aims for 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

We use a variety of teaching and learning styles in design and technology lessons.

All teachers are encouraged to develop a repertoire of flexible, active learning methods, as well as an understanding of how children learn. Teaching methods may include a variety from the following:

- Effective strategies for starting and ending lessons, sharing objectives with the children
- Encouraging an active, questioning approach among the children
- Providing opportunities for children to work both individually and as part of groups
- Problem solving, with older children deciding on their own lines of enquiry
- Developing strategies to encourage independent learning
- Focusing on key skills, concepts and attitudes of the subject
- Time for reflection, review and evaluation

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

Units are planned in line with the national curriculum and will allow for clear progression. Units will be designed to enable pupils to achieve stated objectives. Pupil progress towards these objectives will be recorded by teachers as part of their class recording system. Staff will follow medium term plans with objectives set out in the national curriculum and use the same format for their weekly planning sheet. Our use of Cornerstones Maestro Curriculum helps us ensure both coverage of the Design and technology curriculum throughout the year and cross curricular links to work in other subjects.

Short-term planning: Individual plans are devised for each art and design lesson. These plans list the specific learning objectives for each lesson and give details of how to teach them. They build on the medium-term plans.

Each topic will need to be reviewed, informally by the teachers and TAs 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 in our school by providing valuable opportunities to reinforce what the children have been doing in their English lessons. 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.

Computing - 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 - Our groupings allow children to work together and they understand how we expect them to do this. 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 Provision and More Able Pupils

As an inclusive school we recognise the need to tailor our approach to support children with special educational needs as well as those who are identified as gifted and talented.

We teach design and technology to all pupils, whatever their ability and individual needs. Through our Design and Technology teaching, 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.

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 and record end of unit achievements. 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. Each teacher passes this information on to the next teacher at the end of each year.

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 in their individual topic books.

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.

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 never be used.
- 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 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.

Equality, Diversity and Inclusion

At Dove Bank Primary School, we aim to ensure that no pupil experiences harassment, less favourable treatment or discrimination within the learning environment because of their age; any disability they may have; their ethnicity, colour or national origin; their gender; their religion or beliefs.

We value the diversity of individuals within our school and do not discriminate against children because of 'differences'. We believe that all our children matter and we value their families too. We give our children every opportunity to achieve their best by taking account of our children's range of life experiences when planning for their learning.

The planning and organising of teaching strategies for each subject will be consistently reviewed to ensure that no pupil is disadvantaged. This is in line with our Inclusion Policy.

T Vale April 2020