Esh Winning Primary School
Our Design Technology Policy

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Aims

Our Design and Technology curriculum will allow pupils to think creatively, take risks and use their imagination to design and make products that solve real and relevant problems. They will consider their own and others' needs, wants and values. The curriculum will ensure that our pupils acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering and art. Pupils will develop an understanding of how Design and Technology impacts on daily life and the wider world through evaluating past and present technology.

Objectives

- To design and make prototypes and products.
- To evaluate and test their ideas and products of others.
- To use the language of Design and Technology.
- To develop the creative and practical expertise needed to perform everyday tasks confidently in an increasingly technological world.
- To ensure equal opportunities by offering equal access for all groups and showing children technology from different cultures.

1. 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
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
Focused practical tasks provide opportunities to learn and practice particular skills and knowledge.
3. Design and make assignments
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.

2. Design and Technology Curriculum Planning

We carry out the curriculum planning using objectives from the National Curriculum for long and short term. Each year group has three Design and Technology projects to carry out across the year. The long-term plan maps out the skills to be covered during the key stages and include the research, design, making the product and evaluating stages. They identify key skills for each unit, and ensure an appropriate balance and distribution of work across each term.

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.

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

3. Early Years

We encourage the development of skills; knowledge and understanding that help Nursery and 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 Years Foundation Stage Curriculum. 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.

4. 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.

ICT
We use ICT to support Design and Technology teaching where appropriate. 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.

5. Children with additional needs.

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.

6. 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 using 'Classroom Monitor'. 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 lead can review evidence of the children's work in their individual folders each term as objectives are taught in each year group. Upper Key Stage 2 will record their Design and Technology learning in their Topic books giving them an opportunity to record their learning with less structure.

7. Resources.

Our school has a wide range of resources to support the teaching and learning of this subject across the school. These are kept in the DT cupboard in the dining hall.

8. 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 lead. 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 lead regularly reviews evidence of the children's work.

9. <u>Design and Technology Policy Statement regarding the use of Food</u>

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.
*Ensure that the plastic work sheets, especially for use with food, cover the desk area. This sheet should be wiped down with a steriliser.
*Only use equipment for the intended purpose e.g. use with food only.
*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/teaching assistant's need to ensure children do not use their own.

10. 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. Children should be encouraged (at appropriate times) to use the blank risk assessment form to assess the risk of certain activities or tools. A class set of wipe clean forms can be found in the risk assessments folder in with the D and T resources.

Specific health and safety points will need to be included onto planning sheets. 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 can 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.