

# DREW PRIMARY SCHOOL

## Design Technology Policy



***'Learning today for tomorrow's world'***

Agreed at Governing Body Meeting on \_\_\_\_\_

Signed Headteacher: \_\_\_\_\_

Signed Chair of Governors: \_\_\_\_\_

**Name of Policy: DT**

**Date June 2014**

<b>Agreed at Policy Committee Meeting on:</b>	
<b>Signed Head teacher:</b>	
<b>Signed Chair of Governors</b>	

## **History of Policy**

<b>Date</b>	<b>Notes</b>
<b>June 2014</b>	<b>Policy Updated by Haleh Arefani: DT Leader</b>
<b>June 2014</b>	<b>Policy reviewed by Policy Committee</b>
<b>September 2014</b>	<b>Policy reviewed by Policy Committee</b>

## **PURPOSE**

At Drew Primary School we are committed to providing fun, engrossing learning opportunities to engage all children in Design and Technology. Design and Technology is an inspiring and practical subject. It gives children the opportunities they need to be creative and imaginative in a variety of contexts, ranging from design to problem solving. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art through strong, relevant cross curricular links.

High quality Design and Technology education makes an essential contribution to the creativity, culture, wealth, and well-being of the nation. This policy reflects our schools values and philosophy in relation to the teaching and learning of Design and Technology. This policy has been developed through a process of consultation with school staff and governors. All activities have been risk assessed to ensure the safety of all pupils.

## **AIMS AND OBJECTIVES**

Through the teaching of Design and Technology we aim to help 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.
- All activities have been assessed to reduce the risk of accident and ensure the safety of all pupils.

The above aims are consistent with our schools philosophy and take account of the National Curriculum.

## **PLANNING**

Planning is the responsibility of the class teachers who deliver the lessons across the school. Guidance and support will be provided by the Design and Technology leader.

Planning is used to:

- Set clear achievable goals;
- Ensure work is matched to pupils' abilities, experiences and interests;
- Ensure progression, continuity and subject coverage throughout the school;
- Provide criteria for assessment and evaluation of teaching and learning.

## **PROCEDURE**

Design and Technology will be taught as part of a whole school approach to a broad education for all children. This in practice means that where there are opportunities for teacher to make links with other subjects this will be done. The DT curriculum will link directly with our History and Geography curriculum and where these subjects link with 'The Power of Reading' a further link will be made.

## **CURRICULUM GUIDANCE**

### **EYFS**

Design and Technology is taught in EYFS as a part of the topic work covered during the year. Children are encouraged through to develop their Design and Technology skills through daily independent activities and termly focused work as outlined in the Development Matters document. Design and Technology contributes to a child's Expressive Arts and Design development and Physical Development.

### **KEY STAGE ONE**

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment.

When designing and making, pupils should be taught to:

#### **Design**

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

#### **Make**

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

#### **Evaluate**

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

#### **Technical knowledge**

- build structures, exploring how they can be made stronger, stiffer and more stable

- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

## **KEY STAGE 2**

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

### **Design**

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

### **Make**

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

### **Evaluate**

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

### **Technical knowledge**

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

## **COOKING AND NUTRITION**

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

### **Key stage 1**

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

### **Key stage 2**

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

## **Design and Technology History and Appreciation**

Through evaluation of past and present design and technology, children will develop a critical understanding of impact on daily life and the wider world.

## **ASSESSMENT**

We are investigating a range of assessment formats.

## **EQUAL OPPORTUNITIES**

All children have the same access to Design and Technology regardless of their ability, gender, race or cultural background. Differentiation will ensure that activities are tailored to children's needs from supporting those with SEN through challenging those identified as Gifted and Talented.

This policy is linked to the Health and Safety Policy and Art policy.

## **HOMEWORK**

Opportunities for home-school projects will provide children with opportunities to extend their learning at home.