

# **BEAM COUNTY PRIMARY SCHOOL POLICY FOR DESIGN AND TECHNOLOGY**

## **Introduction**

This document is a statement of the aims, principles and strategies for teaching and learning of design and technology at Beam Primary School.

**'Tell me and I forget-Show me and I may remember-Let me do it and I learn.'**

## **Our Vision**

**At Beam we aim to provide an enriched, creative inspiring curriculum in a stimulating environment.**

## **What is design and technology?**

Design and technology is a body of knowledge that contributes to the school curriculum by preparing young people to cope in a rapidly changing technological world. The subject enables them to understand how to think and intervene creatively to improve that world. It helps pupils to become discriminating users of products, to contribute to their home life, the community and, in due course, it broadens their understanding of industrial production, as they develop systems and make products that enhance the quality of life.

**Through design and technology, pupils learn to become autonomous, creative problem solvers both as individuals and in working with others.**

## **Aims**

1. Engage the interests of all children and help sustain their motivation and enjoyment of learning
  2. Maintain and develop the confidence and ability of all children to solve technological problems
  3. Help develop the social skills necessary to work as a member of a team, as well as the ability to work independently when the situation demands
  4. Develop skills by focusing on the three key elements of materials, mechanisms and safety by incorporating...
    - Focused practical tasks
    - Product evaluation and investigation  
**(we want children to develop awareness of the nature and application of technological products and how to evaluate fitness for purpose.)**
    - Processes of designing and making **(we want children to be involved in purposeful design and make activities which result in the development of products.)**
- Stimulate curiosity, imagination and creativity
  - Promote the ability to communicate ideas and information through a variety of media
  - Develop an appreciation of the importance of quality
  - Develop the ability to identify safety hazards and risks and take appropriate action

- Provide the opportunity to design for, and consider the needs of, other people

**Through design and technology we will also promote pupils' spiritual, moral, social and cultural development. (See the last page)**

Through design and technology we will aim to involve the wider community.

### **Principles of the teaching and learning of design and technology**

At Beam children will learn to produce practical solutions to real problems. Children will develop technical understanding and making skills, learn about design methods and investigate their environment and the materials around them.

### **How this can be achieved**

Design and technology lessons involve a combination of whole class, group and individual teaching. The learning opportunities can be divided into three main areas.

#### **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 (DMA)**

#### **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 KS1 will tend to be shorter in duration and, as children move towards the end of KS2, their designing and making will become more complex and therefore more time consuming.)

Teachers should be aware that design and technology has many links with other subjects and that contributions can be made to many other areas in particular to ICT, English, mathematics, science, art and design.

### **Principles for inclusion in Design and Technology**

In planning and teaching design and technology teachers will have due regard to the following:

- Setting suitable learning challenges
- Responding to pupils' diverse learning needs;
- Overcoming potential barriers to learning and assessment for individuals and groups of pupils.

### **Monitoring and Evaluation**

- The design and technology subject leader will monitor and evaluate

planning to ensure coverage of the design and technology curriculum and that activities closely match objectives.

- Keep a portfolio for design and technology that will include photographs of pupils at work, examples of planning and examples of pupils' work (actual and photographed)
- Where appropriate observe lessons to monitor teaching and then feed back progress to Leadership Team.
- Keep up to date with new developments and inform staff.
- Encourage other members of staff in their design and technology teaching and give support where/when appropriate.
- Ensure that design and technology resources are available and appropriate to the needs of the staff.
- Audit resources regularly and take overall responsibility for equipment and resources

The subject leader will carry out all of the above on an on-going basis.

The TA's and LSA's, when available during design and technology lessons, will if required:

- Support the class teacher in delivering design and technology, and in particular support children with special educational needs where timetabled to do so.
- Collect resources, if requested to do so by the class teacher.
- Maintain safe working practice for themselves and to others in their group

### **Assessment**

Assessments in design and technology are based on teacher observations and made at the end of each unit. The end of unit expectations provide broad descriptions of achievement within each unit for teachers to decide where a child's progress differs markedly from that of the rest of the class. Their experiences and progress will be documented in their written annual report.

### **Resources**

All resources, both consumable and non-consumable are located in the D&T cupboard and in Year group boxes contained in classroom cupboards. It is the responsibility of each class teacher to collect resources and then return them after use. If any resources become broken during use, the design and technology subject leader needs to be informed as soon as possible.

**Through design and technology we will also promote pupils' spiritual, moral, social and cultural development.**

Useful links are the ECM principles:

- **Be healthy** – Food technology and hygiene safety during cooking activities. Promotion of a healthy and balanced diet by making informed choices of food/ingredients through discussion and understanding of consequences of poor choices.
- **Stay safe** – Children should be made aware of the risks and possible hazards they may encounter when using tools and materials, they should be encouraged to evaluate their own safety to promote awareness of what they may encounter in the outside world. To be made aware that materials have limitations and need to be considered carefully for their intended purpose. Children should be made aware that good design can lead to people staying safe.
- **Enjoy and achieve** – Children should have the opportunity to enjoy quality products, materials and tools in order to produce items of personal worth/value, which can be celebrated by themselves, peers and parents. Children should be made aware that even unsuccessful attempts of work can be celebrated in the world of design as part of the on-going evaluation process that leads on to better understanding and designs. Children should be made aware that successful D&T can lead to others enjoying and achieving as a result of what designers have made.
- **Make a positive contribution** – Children should be made aware that design can make a positive contribution to peoples lives by being shown examples of good design and how it has had a positive impact.
- **Achieve economic well-being** – Children should be made aware that design can be a rewarding career path and an exciting route through higher education. Children should be shown or made aware of how much of the world in which we live in is driven by design and designers.

Written: September 2013.

Reviewed: January 2014

**To be reviewed: January 2015**

**Signed:** \_\_\_\_\_

**Signed:** \_\_\_\_\_  
(Governor)