

Curriculum Policy for Design and Technology

SS Peter and Paul RC Primary School

Autumn 2015

Introduction

Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. They are taught to look for opportunities and to respond to them by developing a range of ideas and making a range of products. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators.

Aims of Design & Technology

- to develop children' designing and making skills,
- to teach children the knowledge and understanding, within each child's ability, that will be required to complete the making of their product,
- to teach children the safe and effective use of a range of tools, materials and components,
- to develop children' understanding of the ways in which people have designed products in the past and present to meet their needs,
- to develop children' creativity and innovation through designing and making,
- to develop children' understanding of technological processes, their management and their contribution to society.

Design & Technology in relation to the National Curriculum

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.*

Children will design and make a range of products. A good quality finish will be expected in all design and make activities appropriate to the age and ability of the pupil.

The work covered in each year group ensures a balance of:

- investigative, disassembly and evaluative activities,
- focused practical tasks,
- designing and making assignments.

Principles of Teaching and Learning

Design and Technology will engage the children in a broad range of designing and making activities which involve a variety of methods of communication, eg speaking, designing, drawing, assembling, making, writing and using information and communication technology. These activities can be differentiated through careful planning and the selection of resources which are appropriate for different ages and abilities. All children must be encouraged to design and make and must be stretched in designing and making. Access may be ensured through Learning Assistant support. Writing frames can be modified easily to support or stretch children. Teachers will ensure that they have a clear idea of the skills, knowledge and understanding to be taught in each unit of work that are indicated in the "minimum framework". Units of work have been selected and planned to ensure a balance of materials, skills, knowledge and understanding throughout each Key Stage. Units of work are planned to include designing and making assignments (DMAs) supported by focused practical tasks or skills teaching (FPTs) and work involving reviewing existing products

(IDEAs). All children should have a breadth and balance of experience. Care should be taken to ensure activities do not have a gender bias. Use of multicultural stimuli wherever possible enhances and enriches design possibilities.

Relationship to other Subjects

Design & Technology is taught as a subject specific activity through a combination of whole class teaching, group work and individual work. Cross-curricular links are identified when appropriate. E.G The children can apply scientific and mathematical knowledge to create products which are functional.

Equal Opportunities and Special Needs

Teachers ensure that children have access to the range of Design & Technology activities and use opportunities within Design & Technology to challenge stereotypes. Children are encouraged and supported to develop their Design & Technology capability using a range of materials. Teachers differentiate activities within Design & Technology to ensure that the specific needs of individual children are best met.

Assessment, Reporting and Recording

The children's workbooks are a good source evidence of good practice. Areas of success and next steps can be shared with the children. An annual report to parents details progress and achievements made in designing and making.

Monitoring and Evaluation

The Design and Technology Subject leader monitors planning and samples of work in all year groups on a termly basis. Findings will be shared with the senior management.

Resource Management

Funding for Design and Technology will be within the school budget plan for each financial year. There is a central Design and Technology budget to cover the purchase of equipment such as tools, construction kits, consumable materials, books and other resource materials. The class teachers will be responsible for ordering equipment and materials related to themes. It is the responsibility of each class teacher to identify additional resource needs in relation to their project. Equipment and materials have been organised in the central store. This will be maintained by the Design and Technology co-ordinator supported by non-teaching assistants as required. Any shortages, breakages or losses should be reported immediately to the Design and Technology subject leader.

Hygiene and Safety

It is important that children are taught essential life skills to enable them to participate confidently and safely in designing and making in society. Teachers have a duty to introduce children to a wide variety of production processes and the correct tools for the task. Children must design considering health and safety issues and consequences and operate in a safe and hygienic manner when designing. The subject leader, if required, supports teachers to teach the skills necessary ensuring that children can design and make safely.

D.T. Resources

Resources include:

Balsa wood, dowling, ramin, card, wooden wheels, plastic cogs, nails, screws, straws, tape. Tools including hacksaws (and spare blades), screwdrivers, cutting tools, G-clamps, hammers, sandpaper, materials.

A range of cooking equipment.

Work benches can be found in hall cupboard