Outwoods Primary School

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Design Technology Policy

In accordance with the school's curriculum, Design and Technology is a foundation subject at Outwoods Primary School. The subject involves a creative human activity which brings about desired changes by making things, controlling things or making things work better. This should involve careful design and making, using relevant knowledge and resources. It should take into account the impact of change on the individual, the community and society and the environment.

Design and Technology provides pupils with the understanding to enable them to function effectively in a rapidly changing technological world. It provides pupils with the opportunity to become more aware of how and why things are made and how they work. Active involvement in Design and Technology provides opportunities for pupils to think, reason, plan, execute and evaluate. It develops in pupils the ability to think and plan a logical sequence towards an objective and to pursue goals, which can be realistically achieved. It brings together and utilizes knowledge, skills, understanding and concepts from other curriculum areas in investigative and problem-solving activities. It develops in pupils an awareness of the concepts of quality in the design and manufacture of three dimensional artefacts or systems. The pupils will have opportunities to work independently and as part of a team to develop their Design and Technology capability through three main activities:

1. Investigation and Evaluation Activities – (IDEAs)
2. Focused Practical Tasks to develop skills – (FTPs)
3. Design and Make Activities – (DMAs)

Design and Technology also seeks to develop an understanding of the implications of technological innovation, both in terms of beneficial and detrimental effects. It sets such developments in the context of scientific, social, environmental and moral issues. Design and Technology requires pupils to use a variety of materials - including textiles, mouldable materials, food, electrical components, stiff and flexible sheet materials, mechanical components and structures. These are used in conjunction with components and processes in the design and manufacture of artefacts and systems. In addition this subject offers pupils opportunities to experience a sense of personal satisfaction and enjoyment, and imposes on pupils the disciplines of safe working practices.

AIMS

In Outwoods School we aim:

- To provide a range of structured activities which develop a progression and breadth of experiences.
- To develop progression in designing and making skills combined with knowledge and understanding.
- To nurture creative problem solving and innovation in the production of high quality products.

- To explore values about the attitudes to the made world and how we live and work within it.
- To develop an understanding of technological processes, products and their manufacture, and the contribution to our society.
- To motivate pupils by providing interesting experiences.
- To ensure all children have equal opportunities and access during D.T. activities.

OBJECTIVES

Pupils should have opportunities to:

- Work with a range of materials and use them appropriately.
- Develop realistic outcomes to assignments.
- Evaluate their work and make improvements where necessary.
- Use a variety of tools and equipment safely and correctly.
- Take increasing responsibility for their own work.
- Develop appropriate vocabulary / terminology.
- Develop social skills through group and partner work.
- Use computers in a range of ways to develop and communicate design ideas.

STATUTORY REQUIREMENTS

The teaching of Design and Technology at Outwoods Primary School initially follows the Early Years Curriculum for the Foundation Stage. QCA schemes have been adopted for both Key Stage 1 and Key Stage 2, and are an integral part of the "whole school" creative curriculum delivered in the school, and meets the Key Stage 1 and 2 requirements of the National Curriculum.

TEACHING AND LEARNING

The Early Years Curriculum and QCA schemes of work used for the delivery of the curriculum at Outwoods Primary School link Design and Technology topics to other topics in the curriculum. The Focussed Practical Tasks are the skill-based activities where the children's work is heavily directed to practise, or develop particular skills. The investigational activities are the exploratory part of a topic to raise awareness of materials, methods of manufacture or mechanisms presently used. In our teaching of these activities we are trying to:

- Encourage children to raise the quality of their work.
- Encourage safe, economics and appropriate use of materials and tools.
- Relate and apply their learning to and from other areas of the curriculum.
- Encourage children to see their progression of Design and Technology skills from year to year.

Both focussed practical tasks (FPT's) and investigational activities (IDEA's) will be used primarily as a means of teaching relevant skills and knowledge. The design and make activities (DMA's) are the more open activities where the children can use theirskills to make their best design solutions.

The children's written work should show evidence of the different aspects of a topic. The children's evidence should show design, making & evaluating incorporating technical knowledge to reinforce understanding.

Differentiation

In the organisation of pupil's learning, a number of strategies may be employed to meet the differing needs, to allow individual progress:

- Common tasks which are sufficiently open ended for all children to respond at different levels of skill.
- Stepped tasks within a unit of work, where successive parts are more demanding and some children only cover the early parts.
- Pupil groupings which may be based on abilities or needs.
- Different resources for individuals or groups, where some resources may give more help while other resources demand more or give more scope for initiative.
- Teacher Assistant support tailored to individual needs, including Special Educational Needs.

Assessment and Progression

The design and make assignments are used particularly throughout years 1 – 6 to provide evidence for formative assessment, using the progressive level descriptions of attainment in the national curriculum. The pupils' technology books will provide evidence of their progressing skills, being used continuously through each year. The use of photographs of work in the pupils' books helps overcome the practical difficulties of keeping evidence of actual work.

A portfolio of samples of work, at differing levels, should be maintained by the D.T. co-ordinator.

Health and Safety

When working with tools, equipment and materials, in practical activities and in different environments, pupils should be taught:

- About hazards, risks and risk control.
- To recognise hazards, assess consequent risks and take steps to control the risks to themselves and others.
- To use information to assess the immediate and cumulative risks.
- To manage their environment to ensure the health and safety of themselves and others.
- To explain the steps they take to control risks.

This policy is to be read in conjunction with;

Human Rights Act
Equal Opportunities Act
Disability Discrimination Act