

ST MARGARET'S COLLIER STREET SCHOOL

POLICY FOR DESIGN AND TECHNOLOGY

Rationale

Design and technology is an inspiring, rigorous and practical subject which is concerned with developing children's ability to operate creatively, effectively and confidently in the man-made world. By designing and making themselves children tackle a wide variety of issues, drawing upon a broad base of knowledge, skills and values. Design and technology recognises the importance of 'knowing how' as well as 'knowing that'. High quality design and technology makes an essential contribution to the creativity, culture, wealth and well being of the nation.

Aims

- to develop capability in the skills, processes, knowledge and understanding involved in designing and making
- to develop a critical awareness about the made world and the recognition that pupils can bring about change
- to develop a sense of enjoyment and pride in pupil's ability to design and make
- to develop a range of skills related to decision-making and management
- understand and apply the principles of nutrition and learn how to cook

Objectives

These objectives, derived from the aims, will guide us in our decisions in relation to planning schemes of work. They will also form the basis of evaluation.

To develop capability in skills, processes, knowledge and understanding involved in designing and making.

- to provide opportunities for pupils to combine designing and making skills with knowledge and understanding in order to design and make products
- to develop an understanding of the processes of designing and making
- to encourage an active involvement in technology, in order to develop a sense of enjoyment and pride in their ability to design and make
- to ensure that all pupils have experience in using tools, cutting, joining and re-arranging and modifying a wide range of materials e.g. wood, metal products, plastics, paper, card, fabric, junk and food stuffs
- to promote a safe working environment and safe working practices
- to present children with materials in order to develop an understanding of similarities and differences in terms of colour, pattern, texture, hardness, toughness and pliability

To develop a critical awareness about the man made world and the recognition that pupils can bring about change.

- to develop pupils' understanding of the ways in which products in society work and encourage them to make evaluations and suggestions as to how a product can be modified and improved
- to develop an understanding of how designers work to meet people's needs and values
- to provide opportunities for pupils to design and make products in response to needs and opportunities

- **To develop a sense of enjoyment and pride in pupils' ability to design and make.**
- to celebrate the value of designing and making activity, evaluating their own, each others and other people's work, both past and present
- to encourage the children to explain to each other and adults what they are doing as their work proceeds, giving and accepting advice as requested
- to recognise how their work and that of other pupils can be improved
- to display pupil's work and work of other designers
- to give pupils the confidence and skills to identify, examine and solve practical problems involving the production of artefacts using a variety of approaches, materials and methods

To develop a range of skills related to decision-making and management.

- to provide opportunities for children to work independently and in teams
- to help children work within constraints e.g. time, materials, space, equipment, ability, health and safety
- to develop a sense of responsibility for their working environment and resources
- to encourage the flexibility and openness of mind necessary to meet challenges
- to encourage the children to evaluate their own work and to recognise how their finished product may be improved

To understand and apply the principles of nutrition and learn how to cook

- to 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.

Principles of Teaching and Learning

Design and technology will engage the children in a broad range of activities which involve a variety of methods of communication e.g. speaking, designing, making, writing and using IT.

Breadth and Balance

Activities will cover the statutory programmes of study and will be differentiated through careful planning and the selection of resources which are appropriate for different ages and abilities.

Units of work will be planned to include designing and making assignments supported by focused practical tasks and work involving existing products.

We will ensure that pupils cover a set of progressive designs and constructing tasks over the Key Stages, building on past experiences.

Relevance

We live in an environment which has been designed and made and is constantly changing. It is therefore important for children to develop an understanding of the made world through first hand experience.

Design and technology can be made relevant by using interesting contexts for pupils' design and technology activities. Where possible, pupils design and make products responding to real needs and opportunities, e.g. the need for reflective arm bands on dark nights, or those they can relate to e.g. using a story as a starting point.

Cross-curricular skills and links

Design and technology draws upon and develops skills, knowledge and understanding from across the curriculum. Appropriate links can be made with other curriculum areas but we need to take care that activities lead to mutual enrichment rather than mutual distortion.

Design and technology can make contributions to cross curricular elements in the development of key concepts, skills, values and attitudes. Design and technology has a particularly strong link with the following cross curricular themes.

Appropriate Early Years experience for children pre-National Curriculum will be planned to develop areas of learning related to design and technology e.g. developing an understanding of the world around them, using materials and tools to make things, developing language skills.

Opportunities to apply design problems to real world situations will be sought e.g. designing pop up books for infants or designing an adventure playground for a local park. Local and regional resources could be used to help with research and product analysis.

Equal Opportunities

All activities will be taught to stretch the able and support the less able pupils. Boys and girls will be given equal opportunity to access all material areas and processes. Teachers may wish to have single gender groups in order to prevent one gender capitalising on the learning outcomes e.g. the use of construction kits.

Physically disabled pupils should be supported with the learning aids such as special tools and work places. In a minority of cases process will be undertaken by teachers or TA's to ensure progress to the next stage of learning.

In the majority of cases emphasis will be placed on enabling pupils to access the curriculum through modified teaching styles and in some cases the use of TA's.

Teachers must be sensitive to design problems linked to ethnicity and religion. A wide range of cultural images and contexts should be used in design problems e.g. looking at Indonesian designs prior to designing a kite.

Health, Safety and Hygiene

It is important that pupils 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 pupils to a wide variety of production processes and the correct tools for the task.

When designing pupils must consider health and safety issues and consequences and operate in a safe and hygienic manner.

Assessment, Recording and Reporting

There will be continual assessment using a range of appropriate techniques including observation, discussion or written work.

Of particular interest to design and technology is:

1. Observing children whilst they are engaged in learning
2. Acting as an audience for a product presentation
3. Discussing learning objectives with all the class or a group
4. Giving oral feedback to a child/children from work previously completed
5. Listening to children (without being involved)
6. Annotating/marking children's work
7. Collection of drawing and writing
8. Planning review questions that are built into an activity
9. Photographic evidence
10. Self assessment and peer group assessment

A statement of the pupil's effort and attainment in design and technology will form part of the annual report to parents.

Role of the Subject Leader

Regular reviews will determine the needs of design and technology. These needs will be identified in the School Plan.

Resources

There is a central system for storing design and technology equipment. It is the responsibility of each class teacher to identify resource needs in relation to the schemes of work and to inform the subject leader of these needs.

Review

This policy will be reviewed by the subject leader regularly and staff and governors will discuss any changes that are necessary.

This policy should be read in conjunction with other school policies.