



St. Thomas' CE Primary School

D&T Policy

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Introduction

This document is a statement of the aims, principles and strategies for the Teaching and Learning of Design and Technology.

What is Design and Technology (D&T)?

Design and Technology is the process of designing, making and evaluating products fit for a purpose or improving, refining and extending the use of existing products. It involves the creative application of the principles of science to solve practical problems and is subject to the constraints of economic and social acceptability. Through the Design and Technology process, children are encouraged to reflect on past and present designs, their uses and functionality, which will allow them to become innovators and risk takers when making their own products. By providing a real life purpose to their learning, children can be inspired to become the next designers, creators, engineers and inventors of tomorrow.

Aims

Our aims in teaching Design and Technology at St Thomas' are that all children will:

- develop the knowledge, skills and understanding necessary to design, make and evaluate products fit for a purpose
- develop the practical skills to work with a wide range of materials and components
- develop understanding of control systems, energy and structures
- to teach children the safe and effective use of a range of tools, materials and components
- to develop children's creativity and innovation through designing and making,
- to develop children's understanding of technological processes, their management and contribution to society.

Principles of the Teaching and Learning of Design and Technology

Design and Technology is important because

- technological capability is essential to living and working in a technological society.

Design and Technology is a foundation subject in the National Curriculum. The fundamental skills, knowledge and concepts of the subject are set out in "Design and Technology in the National Curriculum" where the single programme of study is divided into 3 main sections.

- designing skills and making skills, including planning and evaluating
- knowledge and understanding
- the range of activities required to ensure development of capability.

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.

For the purposes of assessment and reporting 2 attainment targets are identified

- designing
- making

Strategies for the Teaching of Design and Technology

The D&T curriculum is organised on a creative curriculum basis wherein

- pupils develop their capability through focused practical tasks in which they develop and practise particular skills and knowledge
- pupils also engage in activities to investigate, disassemble and evaluate simple products

- capability is developed through specific assignments in which pupils design, make and evaluate a product using a range of materials and components.
- Objectives are covered over a 2 year rolling programme linked to Narrative Immersion books and themes.

The predominant mode of working in Design and Technology is co-operative group work and individual work although class teaching is used where appropriate.

Within this structure

- groups are usually of mixed ability
- children are encouraged to develop interpersonal skills through discussion, enquiry and negotiation and working as part of a team.

There is no specialist teaching in Design and Technology, it is taught by class teachers.

Homework may be used to support Design and Technology through tasks such as

- library research
- bringing artifacts from the home environment into school for display and discussion.
- Making own examples at home supported by parents.

The emphasis in our teaching of Design and Technology is on providing opportunities for pupils to combine their designing and making skills with knowledge and understanding in order to design and make products. The focus is on the assignments in which we encourage children increasingly to take control of their own learning.

Thus:

- work in Design and Technology draws on knowledge from all other subjects in the National Curriculum especially science, mathematics and art
- work throughout the year aims to build the skills, knowledge and understanding necessary to complete the chosen assignment.

Excellence in Design and Technology is celebrated in display and presentation including

- Suitably mounted displays in classrooms and throughout the school
- presentation of work in assemblies
- Shared on Class DOJO for parents
- Shared on Twitter for parents

Strategies for Ensuring Progress and Continuity

- the planned implementation of National Curriculum Design and Technology in our school will ensure that there is progression and continuity throughout Early Years and Key Stages 1 and 2.
- a two year cycle of topics is planned to ensure full coverage of the National Curriculum.
- progression is measured in terms of increased complexity, accuracy and improved quality.

Equal Opportunities

Design and Technology can be an excellent vehicle for promoting equal opportunities. Access to DT learning experiences will be provided to all children regardless of gender, race, culture, language, religion, disability, economic and social background and any other factors, which may limit progress and acceptance.

The Role of the Design and Technology Co-ordinator is to

- take the lead in policy development and the production of schemes of work designed to ensure progression and continuity in Design and Technology throughout the school

- support colleagues in their development of detailed work plans and implementation of the schemes of work and in assessment and record keeping activities
- monitor progress in Design and Technology
- take responsibility for the purchase and organisation of resources for Design and Technology
- keep up to date with developments in Design and Technology education and disseminate information to colleagues as appropriate.
- to review and update the Design and Technology policy when required

The Design and Technology Subject leader monitors samples of work all year through regular book looks and pupil voice. Findings will be shared with the senior management.

Assessment

Assessment activities are incorporated into our teaching programme. Informal and formal assessments are vital elements of the assessment procedure.

We use

- Assessment by observation of the children during lesson time
- Pupil Voice by class teacher or subject leader
- assessment by product - i.e. drawings, plans, artefacts, etc, produced by the children
- Formative assessment through questioning
- Assessment through discussion in which children are encouraged to evaluate, modify and improve their own work and progress.
- Termly assessment criteria is highlighted when covered and children working below or above ARE are noted.

Adaptive Teaching

This is most often achieved through the setting of open-ended tasks that allow children to work to their own level of ability. It can also be achieved by breaking down content into steps, verifying levels of support (such as support of TA's as well as the class teacher) and visual support.

Strategies for Recording and Reporting

Records of progress in Design and Technology:

- Are ongoing and recorded on short term planning sheets under assessment
- Reporting to Parents is done through parents evening and annually through a written report.

Strategies for the Use of Resources

Classroom Resources in Design and Technology are stored in a central store. They contain all resources needed for that topic. On completion of the topic any further resources required to replace the ones used in readiness for the next topic should be reported to the coordinator for re-ordering. When reordering the coordinator should be mindful of the lack of storage space available in school.

Health and Safety Issues in Design and Technology include:

- use of materials, tools and techniques in accordance with Health and Safety requirements
- appropriate storage of tools and materials
- teaching children to recognise hazards in a range of products, activities and environments and take action to control the risk to themselves and others.

At all times, school staff should evaluate the risk of using material, tools and techniques and are in charge of behaviour and safety.

