

ST. THOMAS OF CANTERBURY C OF E JUNIOR SCHOOL "Realising the potential of every child within a caring, Christian community"

# Design and Technology Policy

# Introduction

Design and technology offers opportunities for pupils to develop their designing and making skills, nurturing creativity and innovation. The subject calls for pupils to become autonomous and creative problem solvers, as individuals and members of a team. Pupils should develop their capability to create quality products, increasing their understanding of technological processes and products. As they do so, they reflect on what works well and what can be done to improve their own and other people's designs. They should be able to evaluate present and past design and technology. They should be able to draw on knowledge and understanding from other areas on the curriculum and use computers in a range of ways.

# Curriculum

Six, interrelated principles have been agreed by the National Curriculum Expert Group for D&T. They describe the features of a genuine D&T experience from the pupils' perspective and can be applied to all material areas and aspects of the subject. Each principle should be evident to a greater or lesser degree in each project that pupils undertake. The principles do not represent an exhaustive list, but provide a helpful starting point for clarifying and securing the distinctive nature of D&T in the classroom. The new National Curriculum requirements are consistent with the six principles:

- User pupils should consider who their products are for
- **Purpose** pupils should decide which tasks their products will perform
- **Functionality** pupils should think about how their products will work
- **Design Decisions** pupils should have opportunities to make informed choices
- Innovation pupils should have scope to be original with their thinking
- Authenticity pupils should design and make products that are real, believable and can be evaluated through use

# Assessment and accountability

Short-term assessments will be an informal part of every lesson to check understanding and give the teacher information, which will help to adjust weekly lesson plans. Ongoing medium term assessment will take place throughout the course of the year, using the Chris Quigley milestones. Long-term assessments will take place towards the end of the school year to assess and review pupils' progress and attainment. The Design Technology Curriculum Subject Leader will retain evidence of coverage. In many instances, it will be preferable to photograph and video work and a folder of digital photographs and videos are kept on the network. Curriculum coverage, individual attainment and effort will be reported to parents, colleagues and schools in the next phase. Alongside teacher assessments, children should also take an active role in evaluating their own learning and progression.

# Organisation

At St. Thomas' we operate a two-year timetable within the Lower School [Years 3 and 4], and within the Upper School [Years 5 and 6]. The equivalent of 45 minutes per week is allocated to design and technology, but this is blocked into units of 1½ hours per week. This can be taught as a complete half term but it can be split into blocks to allow flexibility within the topic but will cover the same amount of time. The Design Technology work is usually related to the units of work from the geography, history or science schemes. Pupils are taught in mixed ability classes with differentiation including extension and support.



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# Special Educational Needs

We aim to make appropriate provision for pupils identified as having special educational needs. The most effective teaching in the classroom for children with special educational needs is the same as for all children, teaching which is relevant and will encourage, interest and motivate them. Teaching Assistant support is offered to class teachers during their Design and Technology lessons; this can be used to work with children who have special needs.

There are many ways for the work to be adapted to meet the needs of the full ability range. For example:

- Varying input;
- Changing content or even the task;
- Availability of resources;
- Grouping pupils;
- Support from TAs, the class teacher or other adults;
- Response/ Outcome.

# Most Able Children

"Gifted and talented children benefit from pacy, purposeful classrooms where teaching is personalised, inspirational and fun." (Effective provision for gifted and talented children in Primary Education, DfES October 2006)

To cater for the needs of such children we take into account and strive to develop the specific learning behaviours of:

- Greater reflection;
- Exploration of diverse viewpoints;
- Consideration of difficult questions;
- Formulation of opinions;
- Problem solving and enquiry;
- Connections between past and present learning;
- Regular use of higher order thinking skills (analysis, synthesis and evaluation);
- Independent thinking and learning.

(Effective provision for gifted and talented children in Primary Education, DfES, October 2006)

Our lesson plan format provides opportunities to reflect upon and plan for those children who require challenge and to develop the aforementioned learning behaviours.

# Computing

A rota allows all classes access to the Computing Suite. Frequent use is also made of extra PCs in the classroom, in addition to the interactive white board for whole class teaching. Computing can be used for researching, designing, programming, monitoring and control products.



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# **Recording and Expectations**

Design Technology is recorded in a variety of ways. Sometimes a booklet will be made to reflect the skills needed for that project, other times it will be recorded in the form of photos or videos so that the finished product can be taken home. Copies of these can be found in the Curriculum Subject Leader folder.

#### Marking

Marking should always reflect the objective from the beginning of the lesson. Written work may be marked with a comment on the written sheet or may have a 'post it' note attached so as not to spoil the finished product.

#### Design Technology Curriculum across the curriculum

We recognise the importance of Design Technology skills and techniques being applied to other curriculum subjects. We value chances for the pupils to make connections between subjects and to put into practise in one subject the skills base that they are learning in another subject. "Learning (should be) seen as a seamless whole and links (should be) made explicit in all (pupils) do" (NCSL Research Associate Summary Report, Spring 2007). Opportunities for this arise in a variety of subjects such as Science (e.g. healthy eating, nutrition), Mathematics (e.g. construction of nets and measuring), P.E. (e.g. healthy lifestyles) and Computing (e.g. researching, designing, programming, monitoring and control products).

#### Display

Display is an important means of achieving quality in work. It can reinforce the need for products to be aesthetically pleasing as well as purposeful. It is also a means of promoting communication of thoughts, ideas and designs, and promoting a sense of achievement. Pupils' work may be displayed before completion and it may consist of drawn or modelled designs, annotations and evaluations as well as final products. Displaying work that conveys the process of designing is especially valuable.

#### Planning

Design Technology planning operates at three levels; whole school planning (long-term); year group planning (medium-term); individual teacher's planning (short-term). Planning follows the National Curriculum and the Design and Technology Association resources. Schemes of work for each year group have been written. Teachers discuss planning for the following week at weekly planning meetings in year groups.

#### Monitoring and Evaluation

The Curriculum Subject Leader, the Headteacher and Deputy Headteacher monitor and evaluate the design technology curriculum throughout the year.

Work should be monitored to ensure that the policy is being carried out in each class across the school. The Design Technology Subject Leader will carry out these monitoring exercises at least once a term. (see Subject Leader Yearly Planner)

Various areas are monitored including: the quality of teaching; the learning environment; the implementation of the design technology curriculum policy; planning, recording and reporting; analysis of assessment; progression in learning; continuity; perceptions of children; the standards of achievement and the use of resources.



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## Partnership with Parents

At St. Thomas' we believe in the importance of working together with parents in all aspects of school life. Parents are informed of the topics to be taught through termly curriculum guides. They are invited in to help with topics such as cooking and textiles. Homework will be set when it enhances the topic. Parents may be asked to contribute ingredients to our cooking topics.

The School expects parents to:-

- Be actively involved in their children's design technology learning both in school and at home;
- Understand and support the school's design technology and homework policy and scheme of work.

# Role of the Curriculum Subject Leader

The Curriculum Subject Leader co-ordinates the monitoring of the teaching and learning of design technology within the school. Evidence used to inform such evaluations includes:

- teachers' plans;
- lesson observations include formal observations and informal drop-ins;
- interviews with children and staff;
- sampling of work;
- teacher assessments;
- discussion with individual staff (with assistance as needed).

The Curriculum Subject Leader will conduct regular discussions with staff on their needs in design technology. Issues that occur as a whole-school issue will be targeted for development through professional development meetings and INSET days. These will take place in a negotiated programme alongside other curriculum priorities. Individual staff will, of course, have particular needs. The Curriculum Subject Leader will provide support using a range of possible methods:

- working alongside the teacher in the classroom on the particular area of need;
- suggesting relevant INSET courses;
- providing list of books, articles etc. that the teacher could consult;
- providing informal support through discussions, help with planning and assessment where necessary.

The needs of NQTs and new members of staff will be assessed by the Curriculum Subject Leader as they join the school. The design technology Curriculum Subject Leader will introduce the new member of staff to the policy, scheme of work, resource materials and assessment and recording systems.

Support staff will be given guidance by the SENCO, design technology subject leader or class teacher on the teaching and assessment of activities for the groups or children that they manage. The support staff will attend relevant INSET days or sessions when necessary.

The Curriculum Subject Leader also considers any opportunities for assisting parents in their support of children's work at home. This may be the circulation of ideas at Parents' Evening or through the planning of a meeting for parents to learn new strategies or games.

The Curriculum Subject Leader controls the budget for resourcing design technology. The amount allocated is decided on a yearly basis and is dependent on the priorities in the School Development Plan.



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## **Disability Equality Scheme**

At St Thomas of Canterbury Church of England Junior School we recognise our duties and responsibilities under the Disability Discrimination Act as outlined in our Disability Equality Scheme and Action Plan. (December 2007)

It is our aim that through specific and accurate planning, resource allocation, differentiated teaching and use of adult intervention and support (where necessary), that every child, irrespective of disability, will have full access to the curriculum and feel and be enabled to participate actively in developing to their full potential their skills, knowledge and understanding. We will ensure that all 'reasonable adjustments' are made to help both children and adults with identified special needs and disabilities to participate in the design technology curriculum.

# Role of the Governing Body

Every governor takes a special interest in at least one curriculum area or focus in the school. At present there is a named governor for Design technology who supports the Curriculum Subject Leader and keeps up to date with policies, strategies, procedures, etc. through regular visits. These visits are used to become familiar with and monitor Design technology teaching, observe lessons first hand and to promote levels of accountability, challenge and support. Following a governor visit, a written report is submitted to the Design technology Subject Leader/Headteacher and discussed at a full governing body meeting.

#### Review

The policy will be reviewed at least every 3 years, or as new guidance becomes available to schools from the Local Authority (LA) or Department of Education (DfE).

Policy reviewed: November 2014

Next policy review date: November 2017