Guiding us
step by step
into the future

Design and Technology Policy

Member(s) of staff responsible	Science and DT SLG
Governor responsible	Chair of curriculum committee
Sub-Committee responsible	Curriculum
Date agreed with staff	Staff meeting 1st October 2014
Date discussed with pupils	
Date agreed at Sub-Committee	
Date approved at Governing Body	
Frequency of policy review	
Date next review due	

Document Version Control

Issue Number	**Issue Date**	**Summary of changes**
4	**September 2014**	Update
5	January 2017	Updated to include cooking and nutrition

CONTENTS PARAGRAPH

1. INTRODUCTION

1.1. This policy explains the nature of DT and its contribution to Warden Hill Primary School curriculum.

1.2. This policy satisfies the National Curriculum requirements of Design and Technology. It was developed through discussion with teaching staff and approved by Governors.

2. PURPOSE

2.1.

- to assist members of staff in their planning of D&T teaching, especially those new to the school.
- to provide a reference for visitors to the school.
- to enable the Head and Governing Body to identify priorities, or issues pertaining to the position of D&T in the school.

2.2. Aim for D&T Education

The aim sets the overall goal for D&T education in Warden Hill Primary School. It states in brief the school's philosophy for D&T in terms of its benefits for children.

Design and Technology prepares pupils to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of life. The subject calls for pupils to become autonomous and creative problem solvers, as individuals and as part of a team. They must look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems. They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. The pupils understand and apply the principles of nutrition and learn how to cook. As they do so, they reflect on and evaluate the present and past design and technology, its uses and effects. Through design and technology, all pupils can become discriminating and informed users of products and become innovators.

Through Design and Technology we aim:

- to provide a range of structured and differentiated activities which develop breadth and progression.
- to develop knowledge and teach skills in order to design and make products successfully.
- to help children become aware of and investigate simple products by disassembly and evaluation.
- to provide adequate time, access to information, skills and resources to make a good quality product.
- to motivate pupils by providing interesting and stimulating experiences.
- to provide equal opportunities and develop the qualities of individual pupils.

2.3. **Objectives for D&T Education**

Whilst the aim sets the overall goal, the objectives describe the detail. The objectives provide a list of what the D&T curriculum should enable children to know, understand and do. They also identify attitudes that the curriculum should promote.

Developing, planning and communicating ideas

1. Pupils should have the opportunity to:

    - generate ideas by drawing on their own and other people's experiences.
    - develop ideas by shaping materials and putting together components.
    - talk about their ideas.
    - plan by suggesting what to do next as their ideas develop.
    - communicate their ideas using a variety of methods, including drawing and making models.

Working with tools, equipment, materials and components to make quality products

2. Pupils should have the opportunity to:

- select from and use a range of tools and equipment to perform practical tasks and work with these following safety guidelines.

- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

- measure, mark out, cut and shape a range of materials.

- assemble, join and combine materials and components.

- use simple finishing techniques to improve the appearance of their product, using a range of equipment.

- follow safe procedures for food safety and hygiene.

Evaluating processes and products

3. Pupils should have the opportunity to:

- explore and evaluate a range of existing products

- evaluate their ideas and products against existing design criteria

- understand how key events and individuals in D&T have helped shape the world (KS2)

Knowledge and understanding of materials and components

4. Pupils should have the opportunity to:

- explore the working characteristics of materials (for example, folding paper to make it stiffer, plaiting yarn to make it stronger.)

- explore and use mechanisms in their products (for example, wheels and axles, joints that allow movement.)
- understand and use electrical systems in their products (KS2)
- apply their understanding of computing to program, monitor and control their products (KS2)

Cooking and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. At Warden Hill we believe that learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Key stage 2

- 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.

3. EQUAL OPPORTUNITIES

3.1. All pupils are entitled to a broad and balanced D&T curriculum in order that they may better understand how the environment in which they live, work and play and the products they use and consume are designed and made.

3.2. The full range of activities in D&T will be made available to all children.

4. THE ROLE OF THE DESIGN AND TECHNOLOGY CO-ORDINATOR

Whilst responsibility for the D&T curriculum rests with the Head Teacher, the DT Co-ordinator has the delegated responsibility to lead and monitor the schools DT curriculum. As such the Design and Technology Co-ordinator should:

- support colleagues in their development and understanding of detailed work plans and implementation of schemes of work and in assessment and record keeping.
- ensure that all the keys skills are being covered throughout the key stages and that there is progression from one year group to the next.
- keep up to date with developments in D&T.
- provide D&T training through staff meetings.

The Head Teacher will provide the Co-ordinator with the necessary resources and time to achieve this aim.

5. CURRICULUM ORGANISATION

Design Technology will be:

- included in the taught curriculum for each term.

- taught within topics and linked to other subjects where relevant.

Copies of schemes of work will be held by class teachers and the D&T co-ordinator will have an overview of the topics that are being taught in D&T throughout the school.

Core skills: English, Numeracy and Computing

Design Technology will make a significant contribution to core skills, in particular children will be:

- encouraged to share their ideas through writing, such as plans or diaries, and through drawing, talking, questioning and listening

- encouraged to apply mathematical skills in their DT, such as measuring, and presenting survey results in the form of graphs and charts

- encouraged to take advantage of information technology, such as:

- word processing to present their plans and evaluations
- graphs and charts to present their survey data in an attractive and appropriate way
- drawing to represent their ideas in pictures and words
- software where it is available to control products such as lights and buggies

6. IMPLEMENTATION

Teaching will be planned to implement this policy and the Schemes of Work whilst taking advantage of children's interest. A wide range of teaching approaches are appropriate for D&T and the approaches selected will be well matched to clearly defined learning objectives, the needs of different children and the available resources.

6.1. Teaching approaches and class organisation

The teaching and organisation of D&T will include:

- a balanced experience of D&T in each KS which gives attention to:
  - designing and making tasks, focused practical tasks, and tasks in which products are investigated
  - construction materials, construction kits, food and textiles
- questioning to explore children's understanding of technological ideas and their associated scientific and mathematical concepts, e.g. in structures, mechanisms.
- actions to ensure equal access for boys and girls such as providing additional work with technical construction kits for those who have no previous experience.
- actions to enable children with special needs to participate as fully as possible in class/group and individual D&T activities.
- appropriate challenges for the more able.

- individual and collaborative group work.

- whole class activity such as:
  - the demonstration of new concepts, skills and techniques
  - meeting with someone for whom a product is to be designed and made
  - sharing and presenting ideas and results

- a range of communication methods will be used by teachers and children: speech, diagrams, overhead displays, videos, wall displays, published work schemes.

- sufficient repetition will be allowed to consolidate designing and making skills.

- children will work in pairs or small groups for social development and to demonstrate to each other what they can do.

6.2. **Planning**

Teaching plans/schemes of work will:

- be based on this policy and the National Curriculum for Design and Technology.

- clearly identify learning objectives in addition to experiences.

- give attention to other curriculum areas necessary to support and enhance D&T activity.

- identify areas for further attention and inform future planning and review.

- should clearly identify specific activities and learning outcomes for all children.

6.3. **Safety**

D&T activities must be safe for children and adults.

Teachers should refer to:

- the school policies for Health and Safety plus Health and Safety guidance sheet for D&T.

- the safety booklet held by the Science department.

Teachers should ensure that:

- dangerous tools such as saws and hammers will be collected and returned to central resources by staff and not children.

- use of dangerous tools such as shaper saws, craft knives and cold glue guns will be closely supervised by a responsible adult.

- use of kitchen equipment during practical food technology activities will be closely supervised by a responsible adult.

6.4. **Resources**

Resources for teachers:

- a collection of teacher resources will be found in the resources room adjacent to the computer suite.
- in the key stage one building there is a D&T trolley in the photocopier room.
- year groups will be responsible for purchasing and storing resources for their particular D&T projects.

Resources for children:

- children will be encouraged to identify, access, use and return DT resources stored in the classroom and corridors and work stations (refer to safety requirements in 4.5).

- the D&T Co-ordinator supported by all staff will monitor the availability, stock level, use and condition of resources.

Special areas and equipment

- the food technology equipment is held in the kitchens of the KS1 and KS2 departments.
- use of equipment and the room will be used in negotiation with other members of staff.

Visits and visitors

Design and Technology activity may be stimulated by visits and visitors.

- some educational visits may be used to complement planned D&T activities.

Helpers

- parents and other adults will be encouraged to support D&T in all years.

- Teaching Assistants will be informed of the purpose of their work with specific groups and individual children including an emphasis on encouraging pupil independence and where appropriate, guidance on safety.

- will be instructed in the safe and appropriate use of tools, equipment and materials.

7. ASSESSMENT

7.1. Teacher assessment is used to inform future planning and to review children's capability.

- D&T assignments are used throughout the key stages to assist with formative and summative assessment. Children are encouraged to make an oral or written evaluation of their work in technology throughout the key stages. Children will use booklets to plan, record, assess and evaluate their work. The D&T coordinator will set up pupil conferences across both key stages to provide the children with the opportunity to reflect on their learning in D&T and to look for ways in which to develop their knowledge and skills within the subject.

7.2. Reports to parents

Reports to parents will satisfy the national requirements and the school policy and:

- identify children's strengths and areas for development in D&T on an annual basis.

- make reference to: - designing and making

  - knowledge and understanding

  - - evaluation

- at the end of each Key Stage, indicate the child's overall standard in relation to the nationally agreed levels of achievement for D&T.

8. D&T REVIEW

The Policy will be monitored by the subject co-ordinator and reviewed in line with the School Development Plan. Each year the D&T co-ordinator will write a whole school action plan detailing the main areas of focus and development in D&T for the coming year. This will be shared with the staff. Throughout the year the action plan will be reviewed.

Authorised by: .....
Head Teacher

Effective: Immediately