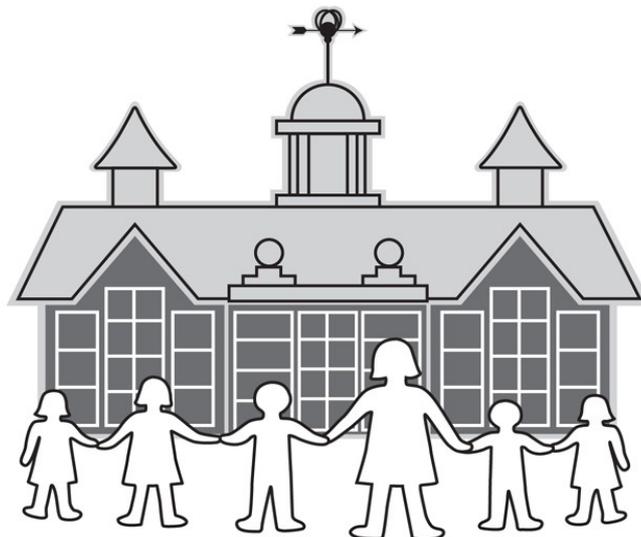


North Ealing Primary School



Design and Technology Policy

School lead for this policy: Emma Harte	
Policy to be approved by the Curriculum Committee	
Committee with oversight for this policy - Curriculum	
Policy last reviewed by the Governing Body	26/06/2013
Policy last ratified and adopted by Full Governing Body	N/A
Policy / Document due for review	07/2017

North Ealing Primary School Design and Technology Policy

Documents drawn on:

³⁵₁₇ National curriculum 1999

³⁵₁₇ NES Design and Technology Policy 2007

³⁵₁₇ Department for Education Design and Technology Programmes of Study for Key Stages 1-3 (<http://media.education.gov.uk/assets/files/pdf/d/design%20and%20technology%2004-02-13.pdf>)

Statement of intent:

Design and Technology involves the application of knowledge and skills when designing and making products. The activities undertaken will enable our children to consider the needs of individuals and of society within the context of a caring community. Undertaking design and technology activities in school will give our children opportunities to use a range of materials and processes and to work independently or as part of a team. We aim to ensure that the activities undertaken in North Ealing School will impact on the children's local environment and support them in the wider world. The purpose of this policy is to ensure the effective delivery of the National Curriculum for Design and Technology and to promote the delivery of the subject within cross-curricular activities.

During Key Stage 1, pupils learn how to think imaginatively and talk about what they like and dislike when designing and making. They build on their early childhood experiences of investigating objects around them. They explore how familiar things work and talk about, draw and model their ideas. They learn how to design and construct objects safely and may use ICT as part of this process.

During Key Stage 2, pupils work on their own and as part of a team at a range of designing and making activities. They think about what products are used for and the needs of the people who use them. They plan what has to be done and identify what works well and what could be improved in their own and other people's designs. They draw on knowledge and understanding from other areas of the curriculum and use computers, software (such as SketchUp and Scratch) and hardware (digital microscopes/ data-logging packages) in a range of ways in order to develop their ideas.

Teaching will ensure that the specific expectations of 'knowledge and understanding' are applied when 'developing ideas', 'planning', 'making products' and 'evaluating' them.

Rationale:

"Through creativity and innovation, design and technology continue to shape our lives. Using an activity-focused approach, a high-quality design and technology education should give pupils opportunities to create, innovate, design, make and evaluate a variety of well-crafted products. Pupils should be taught the technical skills and craftsmanship to execute practical tasks, thereby developing confidence in using these skills." (DfE, 2013)

Aims:

North Ealing School endeavours;

- ³⁵/₁₇ To provide a range of structured and appropriately-differentiated activities which develop a breadth of experience and progression in skills. Where possible, these will relate to the interests and everyday experiences of our pupils.
- ³⁵/₁₇ To develop knowledge and to teach skills in order to assist in the design and making of products successfully.
- ³⁵/₁₇ To develop the children's knowledge of tools by allowing them to experiment under teacher supervision and to encourage them to use tools sensibly and safely within their art work.
- ³⁵/₁₇ To help children become aware of and to investigate simple products through disassembly and evaluation.
- ³⁵/₁₇ To provide adequate time frames, access to information, skills and resources in order to develop an effective, useful and appropriate end-product.
- ³⁵/₁₇ To motivate pupils by providing interesting and stimulating experiences.
- ³⁵/₁₇ To provide equal opportunities for access to tools and skills and to develop the qualities, aptitudes, skills and intelligences of individual pupils.
- ³⁵/₁₇ To enable children to use design and technology to solve a range of problems.

Impact:

Through learning the principles of design and technology in conjunction with other areas of the curriculum (Science/Maths/Computing etc.), pupils will develop their own capacity for individual excellence. Through individual and team endeavours, they will learn the necessity of clear planning, effective/efficient production, collaboration with others, self and peer-evaluation and flexibility. It will also provide them with opportunities to use computing skills in a range of practical applications.

These skills will have a clear impact on their ability to function in the world of work at a later stage of their lives as well as in the classroom and local community - where they will be better-equipped to serve as useful members of society.

Additionally, they will learn to be resourceful and pro-active in everyday problem-solving situations through knowledge of the importance of flexibility of approach and through listening to the ideas of others. They will come to understand that they must take into consideration the function of the product and its users. Throughout the course of a project, they will be able to consider the implications of their choices of materials and, thereby, engage meaningfully with the Reduce, Re-use, Recycle agenda.

This policy will work to equip our children with the key skills of project-management, team-building and a sense of pride in their creativity. They will become more pro-active, more able to lead and more practical in their thinking and solving of problems that affect society.

Inclusion:

- ³⁵/₁₇ All pupils, regardless of race, religion, gender, class, educational need or disability will be given the opportunity to develop their design and technology skills and understanding in a safe and supportive environment.
- ³⁵/₁₇ Teachers should be aware of the individual and differing needs of all pupils including those with physical, emotional and learning difficulties as well as those pupils identified (or being monitored) as able and talented.
- ³⁵/₁₇ Alternative or adapted activities will be provided will be provided to overcome specific difficulties with tools, equipment and materials.

- ³⁵₁₇ Children with specific learning difficulties will be given more time, support or guidance as appropriate to complete the range of work. Additionally, opportunities to communicate their ideas through means other than writing and drawing will be provided for.
- ³⁵₁₇ Where needed and available, children will be supported by technological aids or specialist software.

Every Child Matters (ECM):

Educating children and ensuring that they grow up to lead safe, happy, healthy and successful lives is at the heart of what we do within North Ealing School.

The Design and Technology Curriculum is able to contribute towards the 5 outcomes of ECM in the following ways:

- ³⁵₁₇ Be healthy- In Design and Technology children will need to consider healthy eating options through eating a balance of foods. They will develop an understanding of basic nutrition and the need for exercise.
- ³⁵₁₇ Be safe – through the practical nature of the subject, pupils come to recognise the need to be safe when handling a variety of tools and electrical equipment and they learn the importance of hygienic practices when working with food.
- ³⁵₁₇ Enjoy and achieve – design and technology provides opportunities for children to engage in activities that are challenging, relevant and motivating. Pupils experience a sense of wonder at their ability to design and make.
- ³⁵₁₇ Making a positive contribution – the subject calls for pupils to become autonomous and creative problem-solvers, both as individuals and as members 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.
- ³⁵₁₇ Achieve economic well-being – in Design and Technology, children will be learning about the Made-World and how Design and Technology influences our lives. Through learning Design and Technology, pupils are prepared for working in the technological world and in a number of industries such as; engineering, construction, food industries, manufacturing and service sectors.

Assessment and Record Keeping:

Teacher assessment is used to inform future planning and to review children's capability. Design and Technology 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. Where appropriate, children will use design sheets or booklets to plan, record, assess and evaluate their work.

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

- ³⁵₁₇ Each unit is KS1 and KS2 is directly linked to the QCA and recording documents which are available to enable pupils' work to be measured against expected outcomes.
- ³⁵₁₇ The Early Years Foundation Stage (EYFS) Profiles and school tracking system (including Pupil Progress documents) are used to record assessments in Nursery and Reception.
- ³⁵₁₇ Reference can be made to the level descriptors in the National Curriculum alongside the portfolio of examples produced by NES.

Implementation and Organisation:

- ³⁵₁₇ The Design and Technology programme of study (for KS1 and KS2) is divided into 3 main areas: Design and making assignments in which pupils design and make products; focused practical tasks to develop and practice particular skills and knowledge activities in which pupils investigate, disassemble and evaluate simple products.
- ³⁵₁₇ Design and Technology learning in the EYFS takes place within Understanding of the World and Expressive Art and Design and is based on the Curriculum Guidance for EYFS.
- ³⁵₁₇ Planning is organised in line with the schemes of work for Design and Technology as set out by the QCA years 1-6, supported by the Design and Technology Association (DATA lesson plans). Planning in Nursery and Reception is based on the Curriculum Guidance for the EYFS.
- ³⁵₁₇ Design and Technology is taught as a class activity for 1.5 hours a week, on a half-termly cycle, alternating with Art and Design. Further opportunities for design and technological learning will also present themselves within other subject areas.
- ³⁵₁₇ A range of teaching styles, taking advantage of the use of ICT (microscope/IWB/ video/ DVD as well as the available hardware and software available in the school) helps to promote a positive attitude towards design and technology.

Safety:

- ³⁵₁₇ Teachers always teach the safe use of tools and equipment and insist on good practice.
- ³⁵₁₇ The craft knives and rotary cutters will only be used by responsible Year 4, Year 5 and Year 6 children under direct supervision.
- ³⁵₁₇ The glue gums will be used by Key Stage 2 children only when supervised.
- ³⁵₁₇ Food will be brought and used on the same day it is needed as storage is difficult.
- ³⁵₁₇ Food safety procedures will be followed when preparing for food activities.
- ³⁵₁₇ Staff will ensure that allergies and permissions are planned for before any food items are used (lactose-intolerant/vegan/allergens etc.)

Resources:

- ³⁵₁₇ Resources for each unit are stored in appropriate year groups or in the central resources room. Specialist resources need to be requested from the Design and Technology Co-ordinator in anticipation of teaching the unit.

³⁵/₁₇ The Design and Technology Co-ordinator is available for support in areas of the curriculum where it is needed.

See also School Policies on:

³⁵/₁₇ SEN

³⁵/₁₇ Inclusion

³⁵/₁₇ EYFS

³⁵/₁₇ Equal Opportunities

³⁵/₁₇ Assessment and Record Keeping

³⁵/₁₇ Teaching and Learning

³⁵/₁₇ Health and Safety

³⁵/₁₇ Able and Talented

³⁵/₁₇ Computing

³⁵/₁₇ Science