

QUEEN'S DRIVE INFANT SCHOOL



DESIGN & TECHNOLOGY POLICY

July 2020

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DESIGN TECHNOLOGY POLICY

VISION

Encourage and develop creativity, problem solving, planning and evaluation skills.

Design Technology (DT) teaches children become innovative, informed users of products and technology. It combines practical skills with an understanding of aesthetic, social, environmental and industrial issues.

AIMS AND INTENT

The aims for DT are to:

- develop creative, technical and practical expertise needed to perform everyday tasks confidently;
- build and apply knowledge, understanding and skills in order to design and make prototypes and products for a range of users;
- critique, evaluate and test ideas and products;
- understand and apply the principles of nutrition;
- learn basic cooking skills.

Children will acquire and apply knowledge and understanding of:

- Materials and components
- Mechanisms and control systems
- Structures
- Existing products
- Quality
- Health & Safety

Children apply scientific, mathematical, IT and art skills. They develop communication skills through questioning, describing and presenting ideas and are encouraged to evaluate and improve throughout the design process. Practical experiences foster resilience, and flexibility.

IMPLEMENTATION AND ORGANISATION

In EYFS, DT is taught through continuous provision within the aspects of *The World/Technology* (as part of the *Understanding the World* area of learning) and *Exploring Media & Materials* (as part of *Expressive Art and Design*). By the end of the EYFS children should be able to;

- Manipulate materials to achieve a planned effect;
- Select appropriate resources and adapt work where necessary.
- Select the tools and techniques they need to shape, assemble and join the materials they are using;
- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Know about similarities and differences in relation to objects, materials.

Experiences include:

- Asking questions about how things work;
- Talking about what they are doing and what they have discovered;
- Learning about a variety of customs and cultures;
- Responding to drawings and pictures and drawing their own;
- Investigating and using a variety of construction kits, materials, tools and products;
- Using a range of materials to express ideas;
- Exploring colour, shape, texture & form;
- Selecting their own resources;
- Developing making skills for a variety of purposes;
- Handling appropriate tools and construction materials safely and with increasing control;
- Exploring and sharing their thoughts, ideas and feelings through a variety of design & technology ideas.

Key Stage 1- The teaching and learning principles for Key Stage 1 are set out in the National Curriculum, as follows:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristic

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical Knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products

The curriculum is organised to enable cross curricular links where possible and useful. It takes into consideration how the units build on each other and are linked within the National Curriculum guidelines and QCA scheme of work.

EYFS strategies for teaching are guided by EYFS opportunities and experiences and given structure and sequence under the headings of *Understanding the World* and *Expressive Art and Design*.

In KS1 D&T is taught one half term each term (broadly alternating with Art). D&T is often taught in a block unit over a single week rather than as a weekly lesson over a half term.

Using 'Teaching backwards', teachers assess the starting point of learners through the use of pre-assessments and teachers 'demystify the destination' through the design and make stages using WAGOLLs to demonstrate. Teachers cater to the different needs of the children providing challenges and supporting by giving children feedback during the make stage.

Resources are kept in the group room. Specific unit resources are kept in labelled boxes. The co-ordinator manages the curriculum budget, re-ordering and up-dating resources where necessary with one main order at the beginning of each academic year.

Health & Safety

All adults involved with any aspect of preparing and cooking food with children in school have been given guidelines for Health & Safety with particular reference to Food Hygiene procedures. Children are also taught why it is important to follow these guidelines.

Adults who work with children designing and making must set a positive example and teach pupils so they begin to recognise and learn about:

- Hazards, risk and risk control;
- Recognising hazards, assessing consequent risks and taking steps to control them;
- Using information to assess the immediate and cumulative risks;
- Managing their environment to ensure the health and safety of themselves and others;
- Explaining the steps taken to control risks.

PLANNING

Long term planning

The inbuilt progression set out by the National Curriculum gives a basic structure and starting point for teachers to plan from and follow. The whole school DT Progression Map shows clear progression of skills from EYFS to Year Two according to each strand of the subject. The KS1 Long Term Planning Grid shows which topic and strand of D&T is taught each term.

Mid-term planning

The DT Co-ordinator provides Skills and Knowledge to cover each half term and also provides a theme in KS1 in order to cover the whole curriculum. (DT Progression Map)

Short-term planning

This is completed by individual teachers and within Year Group Teams. In KS1 the teachers follow the topics detailed on the KS1 Long Term Planning Document.

IMPACT / ASSESSMENT AND MONITORING

Summative Assessment - Children will be recorded on insight each half term that DT is taught as a discrete subject. They will be assessed as either 'Above', 'Expected', 'Below' or 'Well Below' for each unit taught. Parents are given an annual report outlining their child's progress. Parents are also informed verbally in consultation about their child's progress during the past year. Governors are

informed of cross school attainment as part of quality assurance procedures. OFSTED provides a wider assessment of Design Technology teaching by measuring outcomes by national expectations.

Formative Assessment - This is an on-going process and includes:

- Spoken feedback between pupils and teachers;
- Marking on children's work within the lesson.
- observations of pupil's answers to differentiated teacher questioning;
- annotating planning to show who has achieved what in each lesson;
- following the schools policy on assessment;
- regular updating on *Insight*;
- in the EYFS using the Development Matters and Foundation Stage Profile.

The learning objectives are clearly defined at the beginning of each lesson. Teaching staff provide ongoing feedback from assessment and effective use of WAGOLL or Magpie (Modelling good examples of work both provided by the teacher and those taken from the class)

The Co-ordinators role is to ensure effectiveness of DT teaching and learning across the school. The Co-ordinator will work with outside agencies in order keep themselves and other staff up to date with technological skills and knowledge by attending courses. They will keep aware of any changes or developments which will affect the teaching of Design Technology in school. They will also offer support on a day to day basis and report to parents and governors.