

## DESIGN AND TECHNOLOGY POLICY

### POLICY

#### Introduction

Design and technology is the application of practical skills and helps pupils understand the world around them. Through design and technology activities our pupils may be able to contribute to home and work in the future.

Therefore Design and Technology for St. Nicholas pupils' means:

- exploring materials
- combining materials in different ways
- using found objects and modifying them
- developing motor skills
- making things change
- making products
- using tools
- controlling tools and objects
- applying and developing knowledge of the above in other curriculum areas such as science, mathematics and English.

Design and technology capability requires pupils to combine their designing and making skills with knowledge and understanding, in order to design and make products

Design and technology is cross curricular with strong links to art and design and food technology.

#### Rationale

1. To introduce and develop design and technology for all pupils in St Nicholas School in accordance with the National Curriculum.
2. To encourage an active involvement in technology, in order to develop a sense of enjoyment and pride in the pupils' ability to design and make. Opportunities for display and celebration will be made.
3. To give pupils the confidence, competence and skills to identify, examine and solve practical problems involving the production of artefacts using a variety of approaches, materials and methods and encouraging independent work with tools and equipment where appropriate.

5. To develop pupils' understanding of the ways in which products in society work and encourage them to make evaluations and suggestions as to how a product could be improved.
6. To encourage children to make judgements of the aesthetic, economic, social and technological quality of their own work and that of others. To help pupils communicate these judgements in oral, written and graphical form (celebration sessions can be used to help evaluate finished and on-going work).
7. To help pupils develop the social skills required to work as members of a team as well as the ability to work independently when the situation demands it (concern for safe working practices is important).

## **POLICY INTO PRACTICE**

### Objectives

Therefore we will:

Ensure pupils cover a set of progressive design and make tasks over the key stages, building on past experience.

Encourage the pupils to use mathematical and scientific concepts e.g. measurement, in order to make an artefact and fair testing in order to improve it.

Use discussion, simple diagrams (symbols), freehand sketches, the written word, sketches with labels.

To encourage the pupils to explain to each other and adults what they are doing as the work proceeds, giving and accepting advice as requested.

To enable the older pupils to be involved in the display and presentation of their 2 and 3 dimensional work.

To ensure that all pupils have experience in using tools safely - cutting, joining and re-arranging and modifying a wide range of materials e.g. wood, light metals, plastics, paper and card, fabrics and food stuffs.

To develop the pupils use and understanding of the use of mechanisms and control particularly through the use of construction kits.

To present children with materials in order to develop an understanding and awareness of similarities and differences in terms of colour, pattern, texture, hardness, toughness and pliability etc.

To encourage the pupils to make decisions about their making as it progresses, evaluating and modifying for improvement.

To instruct children on the effective and safe use of a variety of hand tools and small electric tools e.g. jigsaws and glue guns.

To ensure that pupils realise the hygiene implications of working with materials, particularly food.

### Delivery and Resources

All teachers deliver design and technology. It is delivered in the Foundation Stage through guidelines from the Early Years Foundation Stage curriculum. Through Key Stage 1, 2, 3 QCA guidelines and other documents are followed with schemes of work for varying topics. The classes are expected to follow the medium term plans in which there is a module of the following; resistant materials, textiles and food technology. In the Secondary Department a specialist teacher provides an afternoon of Design and Technology for small groups of pupils on a rotational basis at Key Stage 3 - this is delivered in a dedicated area (under continuing development) within the secondary department. Delivery of Design and Technology at Key Stage 4 is with a specialist teacher one afternoon per week and Key Stage 5 is through in-house lessons, as well as through accessing link course with specialist providers e.g. skill centre and colleges. The Coordinator is responsible for the supporting the delivery of the design and technology curriculum throughout the school.

Tools and equipment will be kept in three places:

Every classroom - Construction Kits and paper/card, glue, scissors etc.  
Design and Technology room – basic and advanced modelling equipment  
Food technology room – cookery and food preparation equipment

These specialist tools will be available:

Small junior hacksaws and vices, good stainless steel scissors, needle and thread and warm glue guns, hand drills, files and abrasives, drawing instruments, shaper saws, ovens, whisks, kitchen sharp knives.

The Coordinator holds information to support delivery.

### Health and Safety

Before starting any Design and Technology work undertake a risk assessment. It is essential that the children be shown how to use tools and equipment correctly and safely.

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1. All tools should be used in accordance with the instructions given.
  2. All tools and materials should be transported safely

3. All electrical equipment must be PAT tested and in good working order.
4. Accidents, breakages and faults MUST be reported.
5. A first aid box is available and basic first aid rules will be adhered to.

### Assessment and Recording

The schools assessment policy will be followed in particular interest to design and technology:

1. Use of and reference to the curriculum support documents.
2. Observation and discussion including question and answer sessions
3. Giving oral and written feedback to pupils, during and at the end of a project.
4. Collection of final product, including evidence e.g. photographs

### Links with the community

Using the town and other visits can enrich technological development and understanding, by linking with and accessing other technology providers for discrete lessons.

## **MONITORING AND REVIEW**

This policy will be monitored on a yearly basis by the Curriculum Co-ordinator to keep up to date with any adjustments to statutory legislation or curriculum and any changes will go via the Governing Body when necessary.

## **EQUALITY, SAFEGUARDING AND EQUAL OPPORTUNITIES STATEMENT**

St Nicholas School, in all policies and procedures, will promote equality of opportunity for students and staff from all social, cultural and economic backgrounds and ensure freedom from discrimination on the basis of membership of any group, including gender, sexual orientation, family circumstances, ethnic or national origin, disability (physical or mental), religious or political beliefs.

St Nicholas School aims to:

- ☐ Provide equal opportunity for all
- ☐ To foster good relations, and create effective partnership with all sections of the community
- ☐ To take no action which discriminates unlawfully in service delivery, commissioning and employment
- ☐ To provide an environment free from fear and discrimination, where diversity, respect and dignity are valued.

All aspects of Safeguarding will be embedded into the life of the school and be adhered to and be the responsibility of all staff.

## **LINKS TO OTHER POLICIES**

ICT
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Safeguarding  
Health and Safety  
Art  
Science  
Teaching and Learning  
Maths

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