

# Design and Technology Policy



Gwladys Street  
Community Primary and  
Nursery School

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Design and Technology Policy

**Links To Whole School Aims**

**We want our school to be one:-**

1. Where everyone has access to an engaging, creative and challenging curriculum that promotes a love of learning.
2. Where everyone feels safe, happy and secure in our learning community.
3. Where everyone works in partnership with the wider school community.
4. Where Golden Opportunities are provided in an Inclusive Setting.
5. Where everyone respects each other and works as a team to achieve our GOALS.
6. Where children develop lively, enquiring minds, self-confidence and independence.
7. Which promotes a healthy lifestyle and positive, spiritual and moral values.

**1. Intent.**

In Design Technology at Gwladys Street, we would like to ensure that all children leave with an enthusiasm and enjoyment for Design Technology, which is deeply rooted within an understanding of the processes in which it is involved. We will aim to do this by:

- Encouraging and developing creativity and imagination within the subject, and fostering an interest that will stay with them for the rest of their lives.
- Giving all children opportunities to investigate, design and make products, whilst enabling pupils to become resourceful and innovative. Children are able to solve real and relevant problems, considering their own and others' needs, wants and values.
- We aim to, wherever possible, link work to other areas of the curriculum such as mathematics, science, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness.
- We encourage our children to be 'risk-takers' and innovators to review and evaluate their work.
- Building on prior knowledge - this is a key part of our curriculum, allowing children to become fluent in understanding the impact Design Technology has on daily life and the wider world.

**2. Implementation.**

Through focused teaching, children are taught to:

**Design**

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer-aided design

**Make**

- select from and use a wider range of tools and equipment to perform practical tasks (for example,

cutting, shaping, joining and finishing) accurately

- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

### **Evaluate**

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

- understand how key events and individuals in design and technology have helped shape the world

### **Technical knowledge**

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products
- understand and use electrical systems in their products
- apply their understanding of computing to program, monitor and control their products

### **3. Impact.**

- Children will have clear enjoyment and confidence in Design and Technology that they will then apply to other areas of the curriculum.
- Children will ultimately know more, remember more and understand more about Design Technology, demonstrating this knowledge when using tools or skills in other areas of the curriculum and in opportunities out of school.
- The large majority of children will achieve age related expectations in Design Technology by the end of each year.
- As designers, children will develop skills and attributes they can use beyond school and into adulthood.
- Children will understand how Design and Technology has changed over time and the importance and impact in 'real life'.

### **Design and Technology Curriculum Planning.**

Design and Technology at Gwladys Street is taught as part of the Topic curriculum and teaching is supported by the 'Projects on a Page' Scheme. The Design and Technology skills from the National Curriculum and Early Years Foundation Stage and are entwined within these topics. The nature of Design and Technology as a subject intrinsically draws upon knowledge and skills in other subject areas. To support their design and making, we fit Design and Technology into the topics covered in each year group. Children will be encouraged to design, make and evaluate with increased independence. Design and Technology will be made relevant by using interesting starting points they can relate to as well as responding to real needs to ensure projects are meaningful. Design and Technology will be taught in each year group through the planning and teaching of Topic.

### **Curriculum Links.**

Design Technology also provides children with opportunities for cross curricular links in other subject areas such as Science, Math's and Technology providing STEM opportunities. Design Technology allows children to be creative, solve problems using mathematical enquiry, learn about materials and processes, make things with different materials and learn about the effects of products on the environment and on people. Design Technology allows for children to apply their knowledge from other subject areas, bringing learning to life and motivating children within these other curriculum areas. Computing is an integral part of Design Technology. It supports pupils with the design process and children can use software to enhance their skills in designing and making.

Children can use draw and paint programs to model their ideas. Children can also use technology to collect information and carry out research in specific tasks as part of the design and research process. Through Design Technology, pupils learn to take risks, become resourceful, innovative and enterprising whilst developing a understanding of the wider world.

#### **4. In the Early Years Foundation Stage.**

4.1 The Design and Technology curriculum within the Early Years forms part of the learning acquired for 'knowledge and understanding of the world'. Throughout this strand of the EYFS framework, children are encouraged to explore, observe, solve problems, think critically, make decisions and discuss why they have made these decisions. Typical learning experiences, which children will have throughout this part of their learning include; constructing, structure and joins, using a range of tools, cooking techniques, exploration and discussion. Children in the Foundation Stage access Design and Technology activities throughout continuous provision and are encouraged to use their learning experiences with a purpose in mind using a variety of resources. Children are encouraged to be independent in their learning, staff encourage this through carefully planned child, and adult led activities, which allow children to access a wide range of resources both indoors and outdoors. Children are regularly encouraged to reflect on their learning, which closely links with the evaluating skills expected in Key Stage One and Two.

#### **5. Design Technology and Inclusion.**

5.1 At our school, we teach Design Technology to all children whatever their ability and individual needs. Design Technology is part of our whole school curriculum to provide a broad and balanced education to all children. Through the teaching of Design Technology, we are able to provide many learning opportunities, which enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this.

5.2 When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors - classroom organisation, the teaching materials, teaching styles and levels of support - so that action can be taken to enable the child to learn more effectively. Assessment using the National Curriculum and the foundation subject 'I can statements' for Design Technology allows us to consider each child's attainment and progress against expected levels. We can then ensure that teaching is carefully adapted to the child's needs.

5.3 Intervention through School Action and School Action Plus will lead to the creation of an Individual Education Plan (IEP) for children with special educational needs. The IEP may include, as appropriate, specific targets relating to musical activities.

5.4 We enable all pupils to have full access to the full range of activities, involved in the designing, making and evaluating process of Design Technology. Where children are to participate in activities or visits outside the classroom, we carry out a risk assessment prior to the visit, to ensure that the visit is safe and appropriate for all pupils.

## **6. Assessment.**

6.1 Assessment is an integral part of the National Curriculum and in relation to Design and Technology, teachers should assess pupil's achievements and their knowledge through the topics covered in each year group.

Assessment of Design and Technology should look at the child's ability to design, make, evaluate and their use of technical language.

The Design Technology teacher assessments are based upon a series of 'I can' statements in line with the National Curriculum and objectives taken from the 'Projects on a Page' document. Assessments are completed termly and in line with other foundation subjects and follow a colour coded system which teachers highlight using their own teacher judgement and observations from D&T lessons- working below age related expectations (Red), working towards age related expectations (yellow) and working at the age related expectation (green). In addition, each topic starts with a pre assessment where children discuss what prior knowledge they already have about the topic and what they would like to find out. This is then repeated at the end of a topic in a post assessment where children have a chance to apply the new knowledge they have learnt. Assessment in Design Technology can also be based upon accumulated evidence gathered from topic work and any programmes or projects that are supported externally.

## **7. Resources.**

7.1 Children at Gwladys Street have access to a wide range of resources in order to support the teaching and learning of Design Technology. A central store of resources are readily available in the Design and Technology area, which is a part of the resource room based in KS2 building. Resources for cookery are stored in the staff room. EYFS also has continued access to various resources both in the indoor and outdoor provision to support their knowledge and understanding of the world around them. The subject leader will maintain and audit these resources once a term. Specific items should be requested from the subject leader with plenty of notice of the new topic. It is the class teachers' responsibility to ensure kits, tools and equipment are returned to the cupboard they were found in a complete state or notify the subject leader of any deficiency.

## **8. Health and Safety.**

8.1 The health and safety of all children at Gwladys Street is paramount at all times. Children will be taught how to care for and handle equipment safely and with respect in line with Gwladys Street's Health and Safety policy. As a school, we follow the advice from CLEAPPS, an organisation that supports practical work in science, D&T and Art. Teachers will also refer to the Design and Technology risk assessment in which hazards and risks relating to Design and Technology are laid out comprehensively. Each class will have their own copy of the risk assessment. These risk assessments are updated regularly and in accordance with advice as directed by CLEAPPS. The class teacher must deliver training for Teaching Assistants and other adults, in use of certain tools, prior to the lesson and all should understand safe practices. When working with food, teachers and support staff should ensure areas are kept extremely clean and children are aware of simple personal hygiene rules. Tools, which present a safety hazard, such as a glue gun or a craft knife, need to be secured away from general tools. Children need to be trained and directed on how to use tools properly and in line with the Health and Safety Policy.

## **9. Monitoring.**

9.1 The monitoring of the standards of children's work and of the quality of teaching in Design Technology is the responsibility of the subject leader. The work of the subject leader also involves supporting colleagues in their teaching, being informed about current developments in Design Technology and providing online and external support. The subject leader reviews and evaluates the action plan, assessment and effectiveness of teaching and use of 'projects on a page' regularly. The subject leader also monitors and updates resources regularly and orders new resources when appropriate to do so.

**Mrs J. Quantick**

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