



# DESIGN AND TECHNOLOGY POLICY 2025

Subject Leader  
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## **Intent**

We believe the teaching of Design and Technology (D&T) is an important part of the development of children. It encourages children to work as individuals or as part of a team, when they have to consider their own and others' needs, wants and values. It is a practical subject in which the children can use their imagination to design and make products that solve real and relevant problems in a variety of contexts. Pupils learn how to take risks becoming resourceful and innovative. The children find creating these things exciting, inventive, and great fun. Children learn about the world around them and how technology has brought about change.

### **The Design and Technology curriculum includes:**

- *'Iterative' designing and making process*
- *Pupils to create products using a wide range of materials*
- *Evaluation of own ideas and products*
- *Investigating and analysing existing products*
- *Using design criteria in KS1*
- *Use of annotated sketches, cross-sectional and exploded diagrams in KS2*
- *Key events and individuals in D&T in KS2*
- *Applying computing in KS2 products*
- *Cooking and nutrition compulsory for both key stages – principles of healthy diet; where food comes from; seasonality and how food is grown and processed.*
- *Cultural capital – through the careers focus we look at the ways in which design and technology have contributed to the world in which we live.*

### **Teaching Design and Technology to Children with SEMH and SEND**

The benefits of Design and Technology can have a profound effect on learners, not only through developing knowledge of the subject through practice but, in addition, the cultivation of self-confidence that the nurturing of creativity can bring. There can be challenges for learners with physical and sensory issues, as well as for those with self-regulating behaviours. We always consider the practical layout of the room and seating. We consider how our learners with a physical disability have the appropriate space to work. Learners who struggle with fine motor skills have a broader resource base. Learners with more sensory needs have access to adapted visual or auditory aids. Some learners' struggle to work as part of a group and they can benefit from working more individually. We build in

plenty of discussion time where all learners feel safe to voice their ideas. We explain how experimentation is an opportunity to develop ideas and that there is not one correct way to do this. We provide a variety of model examples to support learners and develop their skills and confidence. As a further part of planning, we strive to test a practical task before a lesson, as this can pinpoint techniques that may need to be adapted. Sharing these findings as part of modelling a task to learners is a valuable learning opportunity for them. There may be circumstances when pre-teaching can be planned to ensure a learner or group has access to new vocabulary, information or resources before the lesson takes place. This helps those who may struggle to engage, in that they are prepared for the lesson experience.

### **Implementation**

At Golden Hill the staff cover Design and Technology units in ways which benefit the class during the summer term but also throughout the year with many cross curricular links, including:

English – instructions, recounts, explanations, evaluations.

Maths – measuring, number, area, shape.

PSHE – responsibility, health and diets, respect for the work of others.

Art – considering the visual quality of any design and the ability to express oneself.

Forest School Outdoor Learning - we use our rural setting to enhance our curriculum where possible. Engaging pupils in outdoor learning brings the curriculum to life in meaningful ways.

Options - cooking – food preparation and cooking, and gardening - where the children enjoy planting, growing, picking and fruit and vegetables.

### **EYFS**

The EYFS curriculum for Design and Technology is embedded within the Expressive Arts and Design area of learning, specifically through the Early Learning Goal 'Creating with Materials'. It also draws on skills from Physical Development and Understanding the World, focusing on safe exploration, creativity, and problem-solving. Key activities include exploring a wide range of materials, using different tools, making simple models, and using imagination to create and share their work.

### **Key stage 1**

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:

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 characteristics

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.

## **Key stage 2**

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be 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 and exploded 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 [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products

At Golden Hill we use a mixture of whole class teaching and individual/group activities within our lessons. Children have the opportunity both to work on their own and to collaborate with others. They are encouraged to listen to and comment on the work of their friends.

### **Assessment**

Formative assessment in Design and Technology occurs throughout the learning process through dialogue and conversation. We value pupils' creative and individual responses in the subject, so we give open-ended feedback and use effective questioning techniques.

Progress can be demonstrated strongly through the use of Seesaw and big books to record ideas, reflections, and development of technical skills. Each child is unique, and each their work should be unique, enabling pupils to develop independence and creativity.

### **Recording of work**

Children's work is either photographed and uploaded on to Seesaw or copied into the class big book.

### **ICT**

ICT (Information and Communication Technology) enhances Design and Technology by providing tools for idea generation, creative expression, production, and research, allowing for digital art, 3D modelling, and virtual reality experiences alongside traditional media.

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### **Resources**

The Design and Technology store cupboard is stocked with supplies to deliver work skills across the curriculum as well as during the units of work. Staff are requested to advise what they will need and the order is placed to meet requests.

### **Impact:**

The impact for our children is that they are equipped with skills and knowledge to continue exploring and enjoying Design and Technology as they return to their mainstream school. During the lesson, children's work is assessed through discussion, with the teacher giving guidance and advice. The children are encouraged to continually self - assess. Work in progress and completed work is shared with peers and regularly displayed, showing the children how their creative choices are important by sharing with peers, other classes, parents and visitors.

### **Display**

The children's work is displayed on the Design and Technology display boards following the completed units of work.

### **Responses to Children's Work**

At Golden Hill, we recognise the importance of responding to children's work. When children learn and apply a new skill this is praised orally and then shared with other staff members in class, peers and SLT. Photographs are taken and uploaded onto Seesaw to share the children's successes with their families. Completed work and models are displayed to celebrate the children's achievements.