



<b>Date Policy Agreed by Governors:</b>		<b>Date Policy to be Reviewed:</b>	
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## Design and Technology Policy

### Aim

The aim of this policy is to provide a clear statement of the principles and practice underpinning the Design and Technology curriculum at Hallgate Primary School. It provides a framework that enables all adults working in school to be clear about our intention and consistent in the way we deliver our Design and Technology curriculum to our pupils. It reflects both the aspirations and practice of staff and governors for the pupils at Hallgate.

### Intent

At Hallgate Primary School, our vision and values are at the core of everything we do; they underpin our teaching and learning and create an environment which supports our children to become successful learners, confident individuals and responsible citizens. We ensure that our pupils enjoy an existing and challenging curriculum, which equips them with the skills needed for a successful future.

### **Successful Learners**

At Hallgate Primary School we take responsibility for ensuring that our children are equipped with the essential skills that they need to be successful learners and we are committed to ensuring that all children make good progress from their starting points in core areas of the curriculum.

We place a strong emphasis on developing pupils as 'Super Learners'; encouraging a positive attitude to learning which equips children with the confidence and resilience they need to be good learners.

Our six core skills are : Concentrate, Don't give up, Co-operate, Have a go, Keep improving, and Enjoy learning.

We aim to develop a love of learning which encourages curiosity, engagement and enjoyment. We place a strong emphasis on developing skills for life and encourage learning for a purpose, enabling children to make links between different areas of the curriculum and apply their learning in a meaningful way. We pride ourselves on offering pupils a broad, balanced and vibrant curriculum with exciting and stimulating learning opportunities in all areas of the curriculum.

### **Confident Individuals**



Our aim is to enable all pupils to become confident individuals who face new challenges with ease and see themselves as successful learners and valued individuals.

We want pupils to be able to have a go, make mistakes and keep improving within a learning environment, where they feel safe, secure, supported, valued and calm. This is facilitated at Hallgate Primary School through promoting a strong values ethos, clear behaviour expectations, a well organised learning environment and quality first teaching in the classrooms.

Quality First Teaching includes:

- Staff having high expectations of themselves and all children.
- Teachers are expected to impart knowledge accurately and with enthusiasm.
- They are expected to take into account prior knowledge and experiences and to build on this in a systematic way.
- Highly focused lessons with clear learning objectives.
- High demands of child engagement with their own learning.
- High levels of interaction for all children.
- Appropriate use of teacher questioning, modelling and explaining.
- Emphasis on learning through dialogue and exploration.
- An expectation that children will develop resilience and accept responsibility for their own learning and independence.
- Regular use of praise and encouragement to motivate children.

We are committed to providing pupils with a wide range of opportunities which broaden their skills and develop their confidence. The chance to see, hear, participate in a range of experiences enrich the quality of pupils' lives and develop skills such as cooperation, creativity, innovation, problem solving, self-expression, leadership and independence.

### **Responsible Citizens**

Integral to the Hallgate Curriculum is a commitment to developing well rounded, responsible citizens who care about each other, their school, their community and their world.

This is done through the promotion of Hallgate Values, British Values and an emphasis on Spiritual, Moral, Social and Cultural Development throughout the curriculum. Children are taught what it means to be responsible citizens and are given opportunities to put this into practice.

### **Subject Curriculum Intent (Design and Technology)**

At Hallgate Primary School we intend to build a Design and Technology curriculum which is inspiring, rigorous, and practical. We want our children to use creativity and



imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum. It is our aim to create strong cross curricular links with other subjects, such as Mathematics, Science, Computing, and Art. We want Design and Technology to prepare our children, to give them the opportunities, responsibilities, and experiences they need to be successful in later life.

### **Implementation of our Curriculum**

Design and Technology is a crucial part of school life and learning and it is for this reason that as a school we are dedicated to the teaching and delivery of a high-quality Design and Technology curriculum. This is implemented through:

- A well thought out, whole school, yearly overview of the DT curriculum which allows for progression across year groups in all areas of DT (textiles, mechanisms, structures, food and electrical systems)
- Well planned and resourced projects providing children with a hands-on and enriching experience
- A progression of skills being taught ensuring that children are aware of health and safety issues related to the tasks undertaken
- Teachers being given ownership and flexibility to plan for Design and Technology; often teaching Design and Technology as a block of lessons to allow the time needed for the children to be critical, inventive and reflective on their work.
- Each project from Year 1 to Year 6 addressing the principles of designing, making, and evaluating and incorporating relevant technical knowledge and understanding in relevant contexts.

### **Early Years Foundation Stage**

During the EYFS pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities, as outlined in the Long Term Planning document. They have the opportunities to learn to:

- Use different media and materials to express their own ideas
- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose
- Make plans and construct with a purpose in mind using a variety of resources
- Develop skills to use simple tools and techniques appropriately, effectively and safely
- Select appropriate resources for a product and adapt their work where necessary
- Cook and prepare food adhering to good health and hygiene routines

These developing skills link with the Early Learning Goals, and feed into the skills needed as the children move into Key Stage 1.

### **Learning Environment**

Pupils learn well in a calm, positive, well ordered, well managed and stimulating environment where expectations are clear. All environments have to be planned to give children the best learning potential, including:



- Appropriate and flexible grouping of pupils -
- A variety of ways of working including individual, paired, group work and whole class.
- Well organised resources which enable maximum independence for pupils and the ability.
- Explicit consideration given to health and safety measures. Children are taught how to safely use a range of equipment, as outlined on the CLEAPSS Primary website.

### **Behaviour Expectations**

All staff at Hallgate Primary School follow our Behaviour Policy. Individual class teachers explain and discuss the school's expectations with their class. We expect all of our pupils to comply with these expectations in order to promote the best learning opportunities for everyone. To ensure this, we implement:

- Use of the 'Power of 3' to ensure consistent expectations within the classroom and around the school.
- Clear classroom display, and regular referral to, our behaviour expectations and Hallgate Values.
- Consistent use of positive reinforcement and rewards.
- Consistent and fair use of warnings and sanctions, in line with our Behaviour Policy.

### **Planning**

#### **EYFS and Pre-school**

Children in the EYFS and Pre-school will undertake investigative and skills based tasks during independent working time. Design and Technology opportunities will be available to them on a daily basis and they will be encouraged to undertake focused practical tasks through directed and self-initiated stimuli. They will be provided with resources based on topics within the focus of the classroom and will be encouraged to design and develop ideas independently. Children in the Foundation Stage work on a range of creative themes and tasks, and their work in Creative Development links closely to other areas of the Foundation Stage Profile, especially Physical Development. Tasks and activities are aimed at developing pupils' motor skills using a range of different tools and materials. They are also supported in developing an independent approach to their work, selecting what they need to tackle a range of tasks.

#### **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 1 children will undertake one unit of work per term, at least. They will also have opportunities during Design and Technology lessons to develop their own ideas and generate designs independently. Progression of Design and Technology skills will be monitored by staff formally and informally with references to expectations from the National Curriculum. Planning will follow Medium term planning linked to National Curriculum guidelines.

### **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 toAll resources for specific topics are stored centrally in the KS2 cupboard.

There is a stock of frequently used resources.

Resources are organised in labelled boxes or trays.

All staff are responsible for ensuring that resources are stored correctly.

All staff are responsible for informing the Subject Leader when extra resources are needed, when there are breakages and when consumables are running low.

The Subject Leader is responsible for carrying out an annual audit of resources and updating and replenishing resources when needed.



### 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.

### **Cooking and nutrition**

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to:

#### **Key stage 1**

- Use the basic principles of a healthy and varied diet to prepare dishes.
- Understand where food comes from.

#### **Key stage 2**



- Understand and apply the principles of a healthy and varied diet.
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

### **Wider curriculum opportunities**

- Opportunities for cross curricular learning are encouraged, including all STEM subjects, English and a wide range of foundation subjects such as Maths and Art.
- Design and Technology displays around the school celebrate pupils' work and evidence progress.

### **Resources**

- All resources for specific topics are stored centrally in the KS2 cupboard.
- There is a stock of frequently used resources.
- Resources are organised in labelled boxes or trays.
- All staff are responsible for ensuring that resources are stored correctly.
- All staff are responsible for informing the Subject Leader when extra resources are needed, when there are breakages and when consumables are running low.
- The Subject Leader is responsible for carrying out an annual audit of resources and updating and replenishing resources when needed.

### **Health and Safety**

- The safe use of equipment and safe practice is an integral part of Design and Technology teaching.
- The safe use of equipment is to be promoted at all times.
- Risk Assessments must be included on plans to cater for potential dangers and disabled pupils when appropriate.
- The school uses the CLEAPSS Primary website and teaching staff have been trained appropriately on the use of the available resources.
- While planning Design and Technology units, teachers reference the CLEAPSS resources and guidance to ensure a safe working environment for the children and appropriate use of tools and materials.

### **Impact of our Curriculum**

Children will have clear enjoyment and confidence in Design and Technology that they will then apply to other areas of the curriculum. Through carefully planned and implemented learning activities the pupils develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. They gain a firm foundation of knowledge and skills to see them equipped to take on further learning in the next phase of their education. Pupil's skills and knowledge are assessed ongoingly by the class teacher, throughout lessons and a summative assessment is completed termly. This informs the Design and Technology coordinator of any further areas for curriculum development, pupil support and/or training requirements for staff. EYFS pupils' progress and attainment tells us



whether each individual child is below expected, at expected or above expected attainment for their age.

### **Assessment**

Design and Technology is assessed against objectives on Otrack, which link to the Progression of Skills (see separate document).

### **Formative assessment**

Formative Assessment is used to inform planning, teaching and learning - including differentiation. The assessment of pupils' work is on-going to ensure that understanding is being achieved and that progress is being made. Written or verbal feedback is given to the pupil in line with school Marking and Feedback policy, to help guide their progress. Following each unit, pupils are assessed against the aforementioned Otrack objectives as outlined in the Progression of Skills.

### **Monitoring and Evaluation**

Monitoring for Design and Technology is carried out in line with the school Curriculum Policy. The Subject Leader is responsible for keeping up to date with developments in Design and Technology and organising CPD as required. Best practice for Design and Technology is identified and shared amongst practitioners as part of whole staff meetings and phase meetings.

The Subject Leader, supported by the Curriculum Leader, is responsible for monitoring and evaluating standards in Design and Technology across the school and providing an annual report to the Headteacher and Governors to inform the School SEF, using evidence gathered from: books, data, displays, learning walks, observations, planning and pupil voice.

### **Equality Duty**

In our school we aim to ensure equal opportunity for all regardless of gender, age, ability, religion, race or cultural/ethnic background. Equality at Hallgate School is about enabling all pupils to achieve their maximum potential as individuals and as members of society, and of ensuring equality of opportunity and treatment for all pupils, members of our staff and school community. Our school ethos is to actively promote a warm, caring community where all are valued.

This policy will be reviewed at least annually and necessary improvement will be made following review.

**Date for review - September 2024**