

Design Technology Policy

September 2022

Approved by the Governing Body Strategy Group 22/09/22

This Policy is due for renewal in Term 1 2024-25

DESIGN TECHNOLOGY POLICY

OF

GODINTON PRIMARY SCHOOL

The word parent in this policy refers to parents and carers.

SECTION ONE: INTENT

INTENT (as displayed on our school website)

At Godinton Primary School, we believe that our Design and Technology curriculum prepares children to deal with tomorrow's rapidly changing world and allows them to develop their creativity through designing, making and evaluating. Practical skills are combined progressively with knowledge about particular materials, tools or mechanisms to turn innovative ideas into imaginative models or products. This might be designing a pulley system to make a medieval cathedral, creating a model of a London landmark or exploring different bridge structures. Children are taught to select and use appropriate tools safely and effectively as part of their work and are actively encouraged to think about important issues such as sustainability and enterprise. Food technology also forms a core part of our DT curriculum and develops progressive skills from making simple items for a picnic to creating chocolate bars or making bread.

Within our DT curriculum, our children become independent, creative problem solvers and thinkers as individuals and within part of a team. They are able to reflect on and evaluate present and past design and technology, its uses and its impacts in our world. Through positive engagement in this subject we may see future engineers, architects and product designers gain their first spark of interest and excitement in this area.

As part of our Guiding Stars curriculum, Art, Design Technology and Music are the leading light subjects for 'Creative Thinking'.

Within these curriculum areas, the children learn how to manipulate sound, media and materials to respond to different stimuli in interesting and innovative ways and they capture ideas in visual or audio form. The children learn how to make prototypes to test ideas. They come up with new solutions and are not afraid to adopt a trial and error approach, thinking outside the box and evaluating success and looking for ways to improve. The children enjoy collaborating in order to make the best of everybody's ideas and discover how famous artists, architects and musicians paved the way with new ideas and discoveries.

SECTION TWO - TEACHING AND LEARNING STYLE

- 2.1 The school uses a variety of teaching and learning styles in Design and Technology lessons. The principal aim is to develop children's knowledge, skills and understanding in Design and Technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole-class teaching and individual/group and paired activities. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including computing.
- 2.2 In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:
- setting common tasks that are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty where not all children complete all tasks;
- grouping children by ability and setting different tasks for each group;
- providing a range of challenges through the provision of different resources;
- using additional adults to support the work of individual children or small groups.

SECTION THREE: CURRICULUM STRUCTURE AND PLANNING

3.1 Our Curriculum implementation is below. This information is also provided on our school website:

IMPLEMENTATION

Across the school, each year group is allocated three areas of Design and Technology to explore. Each unit of work is taught over a series of lessons usually lasting 6-8 weeks however, we recognise the practical nature of this subject and therefore allow for flexibility in when these lessons are taught. After initial lessons, classes may group DT lessons together for a period of 3-4 hours to allow for quality practical time to make their product.

Our Design and Technology curriculum in KS1 focuses on Cooking & Nutrition, Mechanisms and Levers and Building Structures. In KS2 our curriculum focuses on Cooking & Nutrition, Understanding and Using Electrical Systems, Mechanisms for strengthening and stiffening linked to structures and mechanical systems. During our curriculum design, we have ensured that the knowledge and skill level required to be successful in a particular topic builds upon the previous year's curriculum. We recognise that to be successful in Design and Technology, children need to develop specific skills and therefore our DT skills have

also been carefully chosen that there is clear progression from year to year.

During Design and Technology lessons children will have the opportunity to evaluate real-life products, develop and practise new techniques, design their own products to meet a 'specification', and then evaluate their work and the work of others. During a child's Design and Technology journey, where relevant, children will have opportunities to learn about the work of famous designers and their influence on products today. In Design and Technology lessons, children will develop confidence in handling and using the tools required to make their products and will become confident in selecting the correct tool to complete the task in hand. Alongside this document, we also have a Progression of Design and Technologhy Key Skills document which staff use during planning sessions.

- **3.2** A long term Design and Technology plan is in place to ensure coverage across both key stages. The long-term plan maps the Design and Technology topics studied in each term during each key stage. Topics have a particular theme to enable children to develop specific skills.
- 3.3 Class teachers then complete flipchart planning to provide greater detail as to the learning objective for each lesson and the main content. They will also take into account: how to engage the children in the lesson, resources required, how children will be organised, how the children will if appropriate, differentiation (if appropriate), use of IT to support learning (if appropriate), and particular vocabulary (if appropriate), as well as how adults may be used to support learning. This planning is linked to other areas of the curriculum where possible, making it part of our creative curriculum.

SECTION FOUR - FOUNDATION STAGE

4.1 EYFS

The EYFS framework is structured very differently to the National Curriculum and it is organised across seven areas of learning rather than subject areas. Design and Technology appears under the specific area of Expressive Arts and Design and the prime area of Physical Development.

In our Reception classrooms, Design and Technology is taught through a cross-curricular approach by linking each area of learning to a termly topic or focus book. Our children are taught key skills and techniques such as joining, selecting and manipulating materials, and food preparation through engaging, interactive lessons that relate, not only to our termly topics and focus books, but also to the children's own interests and experiences. Children are given opportunities to develop their design and construction skills, imagination and use of tools and equipment through exciting play-based activities and 'enhancements' during child-initiated sessions. They are encouraged to work collaboratively to create shared models as well as individual pieces. Our children are provided with a wide range of materials and equipment to explore on a daily basis, most of which are readily available for

the children to choose and use independently in our 'creation station' and construction zone. Children are encouraged to construct on both small and large scales and our outdoor space is designed to support this, in addition to our internal classrooms. Children are able to develop their communication and language skills through talking about their creations and sharing these with others, to build confidence and raise self-esteem.

It is our aim that when children at Godinton Primary School finish their first year at school and move into Year 1, they will be able to:

- Use a range of small tools, including scissors, paintbrushes and cutlery.
- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and
- Share their creations, explaining the process they have used.

SECTION FIVE - CONTRIBUTION OF DESIGN TECHNOLOGY TO OTHER CURRICULUM AREAS

5.1 English

Design and Technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

5.2 Mathematics

Design and Technology teaching contributes to the teaching of mathematics in a variety of ways. Children will have the opportunity to put their measuring, addition and subtraction skills into practice to ensure that resources are cut accurately. Children will also learn to draw to scale and apply this scale to their projects.

5.3 Computing

We use IT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw-and-paint programs to model ideas and make repeating patterns. They can use the Internet for research purposes use to gain access to images of people and environments or to provide information about the work of famous architects.

5.4 Science

Design and Technology contributes to the teaching of Science particularly through the units focussing on cookery and nutrition. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

5.5 Spiritual, moral, social and cultural development

The teaching of Design and Technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

SECTION SIX — TEACHING DESIGN AND TECHNOLOGY TO CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

We teach Design and Technology to all children, whatever their ability. Design and Technology also forms part of our school curriculum policy to provide a broad and balanced education to all children. Teachers provide learning opportunities that are matched to the needs of children with learning difficulties. Work in Design and Technology takes into account any individual targets set.

SECTION SEVEN - ASSESSMENT AND RECORDING

- 7.1 Teachers assess children's work in Design and Technology by making assessments as they observe them working during lessons. They record the progress that children make by assessing the children's work against the learning objectives for their lessons and making notes where relevant the relevant flipchart.
- 7.2 End point assessments are used to identify children who have met, exceeded or who are working towards the key end points identified for the subject. Subject leaders also

keep copies of Foundation assessment sheets produced by the class teacher that may contain photos of pupil work (expected or exceeded) and/or pupil voice. The assessment sheets provide descriptors of expected and exceeding. The assessment sheets are used by subject leader in monitoring the coverage and standards of attainment in Design Technology.

- 7.3 At Godinton Primary, we issue three pupil reports per academic year. Effort in Design Technology is reported to parents three times per year with pupil attainment shared with parents in the Spring and Summer reports.
- 7.2 Children are encouraged to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- 7.3 The class teacher keeps evidence of the children's work in their Creative Adventure Books, including design steps and initial stages, as well as photos of completed projects.

SECTION EIGHT - RESOURCES

Our school has a wide range of resources to support the teaching of Design and Technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store. These resources are accessible to children only under adult supervision.

SECTION NINE - HEALTH AND SAFETY

The general teaching requirement for health and safety applies in this subject. We teach children how to follow proper procedures for food safety and hygiene. School risk assessments are in place for the use of certain types of equipment e.g. knives.

SECTION TEN - CHILDREN IN CARE

As for all our pupils, Godinton Primary School is committed to helping every Child in Care (CIC) to achieve the highest standards they can. To this end staff will ensure that in delivering the curriculum they set suitable learning challenges of CIC, respond to the diverse learning needs of CIC, and help to overcome the potential barriers to learning and assessment for CIC. The Design Technology coordinator will support staff in doing this within this subject.

SECTION ELEVEN - MONITORING AND REVIEW

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader.

The work of the subject leader also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.

12.2 The policy is reviewed every two years.

SECTION TWELVE - EQUAL OPPORTUNITIES

At Godinton Primary School, we are committed to ensuring equality of opportunity for all members of our school community irrespective of race, religion or belief, gender, gender reassignment, disability, sexual orientation, age, pregnancy or maternity, marriage and civil partnership or socio-economic background. We are determined to develop a culture of inclusion and diversity in which all those connected to the school feel proud of their identity and ability to participate fully in school life.

We tackle discrimination through the positive promotion of equality by challenging stereotypes and by creating an environment that champions respect for all. At Godinton Primary School, we believe that diversity is a strength that should be respected and celebrated by all those who learn, teach and visit us.

All school policies have an explicit aim of promoting equality and will be reviewed in terms of their contribution and effectiveness in achieving this aim.