

<p>Chapel Street Community Primary School Design &amp; Technology Policy Statement September 2021</p>
---

### Justification

In design and technology at Chapel Street Community Primary School, pupils are encouraged to use their creativity and imagination to make products that solve real and relevant problems within a variety of contexts. Our curriculum has been designed taking into account the diverse community within the school and aims to engage all pupils with the subject of design and technology. Pupils can acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Through design and technology pupils can learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. They can evaluate past and present design and technology, developing a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation and its relevance is celebrated at Chapel Street.

### Intent

1. To help pupils develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
2. To provide opportunities for children to work with a range of materials and components which can be changed and adapted to suit different purposes and then used to assemble useful products.
3. To enable children to generate ideas then communicate, clarify, develop, refine and evaluate them, identifying strengths and weaknesses.
4. To enable children to develop the skills of material and tool selection and acquire the techniques for their safe and effective use.
5. To enable children to develop the ability to investigate and evaluate simple products in order to determine how they work and how successfully they meet their intended purpose, and then apply the knowledge gained to new situations and fresh product development.
6. To enable pupils to build and apply their knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
7. To provide children with a knowledge and understanding of health and safety issues as designers, makers and consumers.
8. To enable children to understand and apply the principles of nutrition and learn how to cook.
9. To provide opportunities for independent, collaborative and inclusive learning.
10. To meet the needs of a diverse school community through a carefully designed, engaging curriculum.

### Implementation

1. Teachers will use a variety of creative and practical activities to teach pupils the knowledge, understanding and skills needed to engage in an iterative process of designing and making.
2. Children will be provided with opportunities to generate, develop, model and communicate their ideas through discussion, annotated sketches, templates, mock-ups, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
3. Teachers will follow our curriculum which provides children with a varied range of relevant and engaging assignments which allow them to design and make different products aimed at particular individuals and groups.
4. Children will be provided with access to a variety of materials and tools and a range of investigative tasks which allow for their exploration of different equipment, including how to use materials, techniques and tools safely, efficiently and effectively and to minimise hazards.

5. We will give children the time to explore and evaluate a range of existing products, teaching them how to determine quality, and evaluate their ideas and products against design criteria including their own design criteria and consider the views of others to improve their work.
6. Children will be taught appropriate language to describe equipment, materials, components and processes.
7. We will provide work which will give opportunities for children to design and make products and acquire knowledge and skills systematically and progressively.

### **Impact**

Through the variety of creative and practical activities children have access to during their time at Chapel Street, pupils will be confident in the knowledge, understanding and skills needed to enable them to engage in an iterative process of designing and making as they draw on other subjects such as mathematics, science, engineering, computing and art. Pupils will be confident to take risks, as they develop and become resourceful, innovative, enterprising and capable citizens and they will understand how key events and individuals in design and technology have helped shape the world. Our children will enjoy design and technology and engage in projects that have a clear purpose. The products that children create will be high quality, resulting from the range of materials, tools and equipment available to them alongside the clear process they follow to design and make.

### **Cross Curricular Links**

The school will teach design and technology through creating links with many other areas of the curriculum, identifying topics which appeal to children and cover a wide range of curriculum areas. We will identify opportunities to develop English skills during our design and technology lessons by using specific vocabulary and technical terms, discussing the children's own work and that of other designers and craftspeople and planning 'design and make' tasks collaboratively and through discussion. Mathematical skills will be developed through accurate measuring, gathering data and selling products. Opportunities to use Computing in ways that will enhance children's learning are indicated in several themes and links will also be made between design and technology and the children's learning in Art, Science, History, Geography and PSHE. Children will be encouraged to use their PSHE skills when discussing their own learning and evaluating the work of others whilst offering support and encouragement to each other.

### **Planning & Curriculum Content**

Design and technology at Chapel Street is taught using the Projects on a Page scheme. Units are taught in blocks of around six weeks within alternate half terms which enables our pupils to really engage with their projects. Learning objectives are taken from the National Curriculum 2014 requirements for design and technology. The long term planning framework is fixed, as are the medium term plans within it. Individual teachers develop short term plans which include direct teaching points, key questioning, skills application, Computing skills application and clear differentiation.

### **Recording & Assessment**

Assessment of the quality of children's work and rate of progress will be through teachers' careful observations and marking of children's output. The Subject Leader will regularly assess the quality of short term plans and judge them against medium term objectives. The Subject Leader will also examine a range of children's work to ensure delivery, high standards and progression. Formative assessments, carried out against the National Curriculum requirements, are carried out whilst the theme is being delivered. Teachers make assessments and notes for future planning at the end of each lesson and each unit of work. Children in the Foundation Stage will be assessed against the Early Learning Goals. Assessments will be on-going throughout the year in this phase and will be recorded on Insight. The Subject Leader will analyse this data at the end of each topic and summative assessments will be conducted at the end of the academic year to monitor standards across all year groups.

### **Resources**

The school will provide a wide range of appropriate resources for design and technology. Resources are located in clearly labelled boxes in the Key Stage 1 area. Both Key Stage areas have Interactive Smart boards for children to use and research areas resourced with a number of laptops. Other design and technology resources are located in both Key Stage resource areas, and in the art stock room. Resources in Key Stage areas are made readily accessible by teachers to children to enable them to make choices about the materials they use. In Nursery and Reception there are areas stocked with resources to enable them to develop their design and technology skills, which the children can access at any time during continuous provision.

These resources will be updated and enhanced through annual audits which will lead to the purchase of materials for particular themes.

### **Professional Development**

The school will ensure that teachers and subject leaders have access to regular continuing professional development that refreshes their own creativity and keeps them up to date with developments in design and technology. Areas for development will be identified through CPD meetings. Workshops linked to design and technology are planned to provide support in delivering the National Curriculum and providing staff with model lessons.

### **SEND and Equal Opportunities**

Our school aims to provide for children of all abilities and backgrounds with a curriculum which allows for appropriate differentiation. This may be by outcome, task, resources, support, interest or ability grouping as appropriate.

### **Children with English as an additional Language, including INAs**

We will ensure that children who have English as a second language will be given extra support in class, as necessary, either from teachers or their peers, to enable them to gain the knowledge, understanding and skills required.

### **Health and Safety**

Annual risk assessments will be carried out to ensure safe use of DT equipment such as glue guns, saws, craft knives and cookery equipment. Equipment of this kind will be kept in a locked cupboard. When children are using this equipment the health and safety issues will be fully explained to them. Visitors to the school will need to present a DBS check.

### **Review**

This document will be reviewed annually by the Subject Leader, staff and governors.