



# Emmanuel Holcombe C of E Primary

## Design and Technology Policy

### Vision Statement

Jesus came to give us life in all its fullness. Our vision is that through faith, family and friendship, each of us can grow in love and learning, being tolerant, having resilience and developing enquiring minds, so that we can all experience the abundance Jesus came to give us.

### Mission statement

In our small, friendly school, everyone respects and cares for one another  
In our community, church, home and school we work together to grown in faith and friendship  
In our learning we encourage each individual to reach their potential to grow through skills, knowledge and understanding

Policy written: June 2020

Policy written by: H Sanderson

Review date: June 2021

## **Intent, Implementation and Impact**

### **Intent:**

At Emmanuel Holcombe Design and Technology is an important part of the curriculum. It is a hands on subject which enables children to explore real products, design and create their own products, combine scientific and mathematical skills, work creatively and collaboratively and provides opportunities for children to evaluate their work against a criteria and problem solve building their resilience. We intend to teach the children a skills based curriculum, with creativity flowing through everything they do.

### **Implementation:**

Throughout the Foundation Stage, Design and Technology is given a high focus, particularly through the use of continuous provision and carefully planned activities that follow the children's interests.

Throughout all key stages children use and explore a wide range of skills, methods, tools, products and materials working creatively, safely and precisely. The Emmanuel Holcombe Design and Technology curriculum is detailed and progressive.

Children also work with food at least once a year practising good hygiene and working safely. An outline of the planned food units they encounter can be found at the end of this document.

Please see the table in the next section for what the National Curriculum outlines for each Key Stage as well as a separate page for the Foundation Stage.

### **Impact:**

Children will become creative learners, who are adaptive and can draw on their resilience to solve problems they encounter as they evaluate their products and processes. Creativity and uniqueness will be celebrated and children will become astute at adapting and improving the products they have created and the processes they have used. As teachers, there will be an emphasis placed on problem solving and risk taking to support children in developing their resilience.

## **Teaching and Learning**

Fundamental skills and knowledge are taught to children during their time at Emmanuel Holcombe through a carefully planned programme. Teachers plot the objectives into their two year long term planners to ensure that all objectives are covered. All children develop skills in designing, making and evaluating, cooking and nutrition and working safely.

## **Assessment**

Assessment follows a variety of different methods. The teacher will informally assess throughout any design and technology lesson giving oral feedback, and instant methods of ways to improve. Progression and achievement is tracked against learning objectives. Photographs of final pieces will be uploaded to Seesaw

Pupils are also assessed using attainment descriptors, using a best-fit model for making a judgement about whether a pupil is 'emerging', 'expected' or 'exceeding.' Children are also encouraged to make judgements

about their learning, using 'I can' statements to self-assess. Evidence of the objectives can be recorded on Seesaw, in sketchbooks or as projects during theme days and weeks.

### Planning and Resources

Planning and resources for Design and Technology lessons are the responsibility of the class teacher. Class teachers have access to the progression documents and have constructed their long term planner using these. All Design and Technology resources are stored centrally.

### Organisation (e.g. blocks or weekly lesson)

Design and technology lessons are organised to enable the most effective provision for the children. Teachers are encouraged to teach design and technology lessons together as a block, as part of a topic or as part of a theme week.

### Design and Technology in EYFS, KS1 and KS2.

#### What the National Curriculum says:

Foundation Stage	Key stage 1	Key Stage 2
<p>Children in the Foundation Stage work toward to the Expressive Art and Design Early Learning Goal Statements:</p> <p><b>ELG 16 - Exploring and Using Media and Materials</b> Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> <p><b>ELG 17 - Being Imaginative</b> Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>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].</p> <p>When designing and making, pupils should be taught to:</p> <p>Design</p> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <p>Make</p> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> </ul>	<p>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].</p> <p>When designing and making, pupils should be taught to:</p> <p>Design</p> <ul style="list-style-type: none"> <li>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</li> <li>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul> <p>Make</p> <ul style="list-style-type: none"> <li>select from and use a wider range of tools and equipment</li> </ul>

	<ul style="list-style-type: none"> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p>Evaluate</p> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul> <p>Technical knowledge</p> <ul style="list-style-type: none"> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> </ul> <p>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>	<p>to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <ul style="list-style-type: none"> <li>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</li> </ul> <p>Evaluate</p> <ul style="list-style-type: none"> <li>investigate and analyse a range of existing products</li> <li>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>understand how key events and individuals in design and technology have helped shape the world</li> </ul> <p>Technical knowledge</p> <ul style="list-style-type: none"> <li>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>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.</li> </ul>
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### Equal Opportunities

The design and technology curriculum adheres to the Emmanuel Holcombe Equal Opportunities Policy. The design and technology curriculum takes into account issues of difference: gender, race and ethnicity, and class. Design and Technology from across the world is taught, observed, celebrate and used as influences for the children's work.

## **Inclusion**

We recognise that there is a wide range of capability across the student body. Tasks and activities are designed to allow students to engage at their own level. This is done by:

- Setting open-ended tasks
- Incorporating gradual increases in the progression of skills across the curriculum
- Taking ability into account when grouping children for activities –either setting mixed ability groups or assigning different tasks to different groups.
- Providing resources of different complexity

## **Role of the Subject Leader**

The role of the languages co-ordinator is:

- Order and maintain design and technology resources.
- Ensure staff display a positive and enthusiastic approach to the teaching of design and technology in school.
- Review the design and technology policy, curriculum progression document and action plan annually and inform staff of any changes.
- Complete evidence scrutiny to ensure all objectives are being covered.
- To support staff if needed

## **Parents**

Parents are encouraged to be a part of their child's design and technology education. Work will be shared at parent's evenings, in class assemblies and through theme weeks. Experiences will be shared and celebrated via tapestry, seesaw and twitter. Parents and carers are invited and encouraged to attend all of these assemblies and theme weeks throughout a child's time at Emmanuel Holcombe.