

Colgate Primary School Design and Technology Policy

OUR VISION: Working together to be our best

Approved by:	Curriculum and Progress Committee	Date: 29 June 2022
Last reviewed on:	2018	
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Intent

Growth: At Colgate, our children have opportunities to solve real and relevant problems in order to become innovative and resourceful learners. We want them to become confident in using and applying a range of tools, techniques and resources and to critically evaluate their journey as well as their final product.

Community: Our learners have the opportunity to engage in purposeful projects as individuals and as part of a team.

Diversity: Through Design and Technology, our children are encouraged to be inquisitive about design technology from the past, present and future. They appreciate and aspire to the work of designers from different backgrounds.

Introduction

Design and Technology has a valuable role to play in the creative development of our pupils. It is a 'hands on' subject which provides children with the experience of evaluating, designing and making products of a high standard. It allows children to examine their environment, question the world and to think about how and why things work the way they do.

Aims and Objectives

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering,

computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop 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.

The National Curriculum for Design and Technology aims to ensure all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world;
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users;
- critique, evaluate and test their ideas and products and the work of others;
- understand and apply the principles of nutrition and learn how to cook.

Teaching and Learning

Our principal aim is to promote enjoyment and to develop the children's knowledge, skills and understanding in design and technology. We ensure that the children have opportunities to study the work of different designers and that they are taught to apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. For every unit, pupils will be taught to design, make and evaluate whilst developing their technical knowledge. When evaluating their own work, they will refer back to the specific design criteria that shaped the design of their project.

Design and technology teaching takes place through a mixture of whole class teaching and both individual and group activities. Teachers draw attention to good examples of individual performance as models for other children. Our children are given the opportunity within lessons to work individually 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. Pupils are encouraged to explore a wide range of materials and resources, including ICT where appropriate. We use design and technology experiences from different times, places and cultures to illustrate the diversity of our world. We ensure that we teach subject specific vocabulary as part of every unit of work.

We recognise that our pupils bring a variety of skills and experience to their learning in design and technology so we support them by:

- setting tasks that are open-ended and invite a range of responses, as well as allowing individual needs to be met through the use of differentiated tasks where appropriate.
- using additional adults to support the learning of individual children or small groups.

<u>Planning</u>

At Colgate, where possible, we link the teaching of design and technology to our broad questions, which frame our teaching for each term. Although we do provide opportunities to link the teaching of design and technology to other subject areas, when there are no purposeful links to be made, we focus on the skills needing to be taught for that year group or class and plan a unit of work accordingly. Our long-term plan maps out the themes covered in each term during the key stages over the course of a one, two or three year cycle, depending on each class. Our medium-term plans give further detail of each unit of work for each term and are created using the skills and knowledge progression grids. These plans define what we will teach and ensure an appropriate balance of work across each term. The activities that we plan build upon the prior learning of the children and our

pupils will be able to develop key concepts, skills and knowledge throughout the key stages. While we give all children the opportunity to develop their skills, knowledge and understanding, our skills and knowledge progression grids ensure that there is increasing challenge for the children as they move up through the school. We also ensure that our children study a diverse range of designers.

The Foundation Stage

Our children in Reception are given daily opportunities to develop their skills in design and technology through access to a range of activities in our continuous provision. We relate the creative development of the children to the Expressive Art and Design and Understanding the World sections of the EYFS, which underpins the curriculum planning for children from birth to five years. Our children are encouraged to explore construction, woodwork tools, junk modelling, drawing, design and building with loose parts as part of their experience. They are shown how to handle equipment safely and with increasing control. We support the children with making connections between the different areas of learning in order to deepen their understanding. Our free flow environment and use of in the moment planning provides rich opportunities for our children to explore their interests and develop their creativity and skills, with the support of adults where needed.

Contribution of design and technology to teaching in other curriculum areas

Computing

Design and technology has close links with computing and there are increasing opportunities to design and develop their work using the computer. The internet can be used to investigate and retrieve information about famous designers and their work.

English

Design and technology contributes to the teaching of English in our school by encouraging children to ask and answer questions about the starting points for their work. 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 opinions and clarify their design ideas.

Maths

Design and technology supports the teaching of Maths at Colgate by providing opportunities to develop the children's understanding of shape, space and pattern through work in two and three dimensions.

<u>PSHE</u>

Design and technology contributes towards the teaching of PSHE as it enables children to discuss how they feel about their own work and the methods and approaches used by others. It supports their social development through the way that we teach them to work with each other.

Equal opportunities and inclusion

Through our teaching of design and technology, we provide learning opportunities that enable all children to make progress. We achieve this by setting suitable challenges and by responding to each child's individual needs. We consider a range of factors such as classroom organisation, resources and differentiation to enable children to learn more effectively. This ensures that our teaching is

matched to the child's needs. Our pupils have access to the full range of activities involved in learning about design and technology. Where children are to participate in activities outside the classroom for example, a visit to a museum, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

Assessment

Informal ongoing assessments are carried out by class teachers through observations during lessons and conversations with pupils. Work carried out in learning journals and uploaded to SeeSaw provides examples of pupil's understanding through the use of designs, annotations, photos, labelled diagrams and evaluations. We encourage the children to assess their own work and the work of their peers.

Resources

Resources are organised and stored in a central area. Teachers also have selected resources in their classrooms.

Monitoring

The monitoring of the standards of children's work in this subject is the responsibility of the design and technology subject lead. 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. The subject leader reviews evidence of the children's learning in design and technology across the school through learning walks, discussions with pupils and looking at samples of work.

HEAD TEACHER: R. Winn

CHAIR OF CURRICULUM AND PROGRESS COMMITTEE: Mr T. Abbott

<u>DATE:</u> 29 June 2022

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