Design and Technology Intent

Whole School Curriculum Vision

Our rigorous, ambitious and relevant curriculum is designed to serve each child within our richly-diverse community, ensure the 'highest standards of learning for all' and prepare all children for a joyful life in the modern world.

Our commitment to the Christian faith and our six core values underpin our curriculum:

Friendship
Hope
Thankfulness
Forgiveness
Compassion
Endurance

Aspiration, Diversity and Inclusivity

Our values act as drivers for a curriculum which responds to, and embraces, an evolving community. Cranleigh welcomes more than 20 ethnicities, including a significant population of children from the Gypsy/Roma and Travellers of Irish Heritage communities, a greater than average number of children accessing the pupil premium grant, and a higher than average number of children with SEND.

The support we offer our community aims to overcome some low literacy skills, increase understanding in the power of education and ensure all minorities are celebrated. We adapt our provision accordingly, ensure we provide our children with the demanding work they both deserve and seek, and ensure all children are provided with enrichment opportunities to enable them to learn about the world around them.

Communication

We pride ourselves on our commitment to nurture and communicate effectively, and hold exceptionally high expectations of ourselves, each other and our community. Our children are empowered to use their literacy, oracy, and digital communication skills, with scaffolding and support, to purposefully share and articulate their learning with others.

Evaluation

Our reflection procedures which include subject leadership time, responsive professional learning, both summative and formal assessments, and half-termly pupil progress meetings enable us to refine our curriculum offer.

Purpose of Study

National Curriculum

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.

Development Matters

Expressive Arts and Design

The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range

of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.

Children in reception will be learning to:
Create collaboratively, sharing ideas, resources and skills; and return to and build on their previous learning, refining ideas and developing their ability to represent them.

Understanding the World
Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension.

Children in reception will be learning to:
Comment on images of familiar situations in the past; and recognise some environments that are different from the one in which they live.

The Importance of Design and Technology

"Design is not just what it looks like and feels like. Design is how it works." (Steve Jobs)
"The future belongs to young people with an education and the imagination to create." (Barack Obama)

At Cranleigh C of E Primary School, we believe in developing a critical understanding of Design and Technology, its impact on daily life and the wider world through evaluation of past and present products. Our aim is to deliver an inspiring D&T curriculum so that students have the right foundations and desire to succeed in the subject. Pupils will experience design and make projects that solve real and relevant problems within a variety of contexts, through which they will demonstrate creative, technical and practical expertise and develop pride in the quality of their finished products. Skills learnt will support them to become resourceful, innovative, enterprising and capable citizens who participate successfully in an increasingly technological world.

The Concepts

At Cranleigh C of E Primary School, the Design and Technology curriculum is designed to be inspiring, creative and practical by following the Cornerstones framework. We aim to provide children with an exciting, relevant and challenging curriculum with a variety of enrichment opportunities. Each project is based around a Design and Technology subject focus of structures, mechanisms, cooking and nutrition or textiles. The curriculum's electronic systems and IT monitoring and control elements are explicitly taught in our Science projects to ensure the links between the subjects are highlighted. Where possible, meaningful links to other areas of the curriculum are also made. The knowledge and skills based curriculum offered enables us to nurture them in becoming innovative designers and risk-takers.

Aspiration, Diversity and Inclusivity

Our aspiration in our curriculum at Cranleigh C of E Primary School is seen in our high expectations of all pupils, through the designs they create, the products they produce and the opportunity they are given to evaluate their work and that of their peers so that they can consistently improve their skills. We recognise the diverse community at our school and, as such, give pupils an opportunity to express their individual interests, thoughts and ideas through their design projects. These are supported through the availability of a wide range of quality resources and tools, which the children are supported in gaining confidence in using. The core knowledge and existing examples that pupils are exposed to come from a range of cultures, discussing how design principles have changed and developed over time and how they have stayed the same. We ensure our curriculum is inclusive for all pupils including those with a range of needs. First

and foremost, this is enabled through high quality teaching which includes explicit instruction, modelling, and the creation of an environment where they can succeed in exploring the design, make and evaluate process and the decisions that designers have to make.

Communication

Our Design and Technology curriculum follows the Cornerstones project-based framework. Through the projects, we teach the knowledge, understanding, skills and vocabulary needed to engage in an iterative process of designing and making, creating rich connections to the wider curriculum and actively encouraging the children to think about, and communicate their thoughts on important issues such as sustainability and enterprise. Children develop the ability to think imaginatively to solve problems both as individuals and collaboratively with their peers. Over the course of each term, the children will have the opportunity to design and make a structural, mechanical, electrical or textile activity and learn food-based skills. Children actively engage in communicating their ideas, thoughts and learning with their peers both verbally and in project books. We want all children to leave Cranleigh C of E Primary able to confidently discuss their own and others' designs using the vocabulary they have learned and based on the high-quality experiences to which they have been exposed.

Evaluation

We aim for all children within our richly-diverse community to leave Cranleigh C of E Primary as inspired, confident, creative designers. The children will have built and be able to apply a repertoire of knowledge, understanding and skills in order to design and take pride in making high-quality prototypes and purposeful products for a wide range of users and critique, evaluate and test their ideas and the work of others. We believe this will contribute significantly to our wider school aim of preparing children for a joyful life in the modern world.