

Design and Technology
Intent, Implementation and Impact
Cotherstone Primary School

Intent

Our DT curriculum intent is to develop pupils who are confident and innovative designers, with a wide variety of design skills that they can use across the curriculum and for their own enjoyment. We develop our children to be creative critical thinkers underpinned by strong basic skills.

At Cotherstone Primary School we recognise prior learning and build on it with memorable learning experiences with targeted support where necessary. We believe children learn best by having opportunities to revisit previous learning. Learning is sequenced to build knowledge, skills and vocabulary. We teach DT every term to ensure that the children can fully immerse themselves and have opportunities to reflect and build on prior knowledge and skills.

The knowledge and skills required to achieve in this subject are set out in the DT progression of knowledge and skills document. This document has been developed so that each member of teaching staff has access to the document as a supportive tool when planning in order to review previous learning; ensure a coherent curriculum that outlines essential knowledge and skill development; and as an accurate assessment tool.

The progression of knowledge and skills document is broken down into the different areas of the Design and Technology process; design, make and evaluate. It is then broken into the 5 areas of DT which allows staff to teach the key knowledge and skills for each of these areas.

At Cotherstone Primary School, we want our pupils to:

- 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

Cultural Capital:

Cultural capital is 'the essential knowledge that pupils need to be educated citizens, introducing them to the best that has been thought and said and helping to engender an appreciation of human creativity and achievement.' Ofsted 2019.

We link our DT curriculum to real life experiences and famous engineering experts through STEM and communicating ideas and developing prototypes using CAD.

Implementation

We develop children's knowledge, skills and understanding in design and technology by ensuring that the act of investigating and making something includes researching, exploring and developing ideas, and evaluating and developing work. 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 or group activities. Within DT 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 as we believe in Equality and opportunity for all, and respect of diversity, inclusivity and team work. Pupils have the opportunity to use a wide range of materials and resources, including ICT through Computer Aided Design.

Our long-term plan followed to ensure coverage of units of work, followed in line with the guidelines set out in the NC this is planned over a 2-year cycle due to our mixed age year groups.

We have chosen to link our Design and Technology curriculum to our topics across the school. This allows for the children to design and make products which help them to learn about the achievements throughout history. Our whole-school topics allow for children to learn about the local area.

On cycle A the whole school is involved in the 'Farmvention' project which links all STEM subjects.

DT will be taught during one half of each term. The progression of knowledge and skills are built upon to ensure children will develop as citizens which can contribute to the well-being of the nation. Children will

be taught technical knowledge throughout each unit which they will evaluate.

Impact

The impact of our DT curriculum is that children build knowledge and skills, make connections between this and prior learning and use this to explore and create. Our DT curriculum allows us to support the social development of our children through the way they work together during lessons. Children are expected to discuss their ideas and feelings about their own work and the work of others. Through this collaborative work the children develop respect for the abilities of other children and are able to celebrate the achievements of themselves and others. They also develop a respect for the environment, for their own health and safety and for that of others. Our Design and Technology curriculum contributes to our PHSCE curriculum as children develop a sense of responsibility in following safe procedures and they learn about the importance of a healthy diet. Their DT work also encourages them to be responsible and to set their own personal targets to create a finished product.

Computing enhances the teaching of Design and Technology, wherever appropriate, in all key stages. Children use software to enhance their skills in designing and making things. Children are given the opportunity to use ICT to control mechanisms and to get them to move in different ways. The children also use ICT to collect information and to present their designs through a range of design and presentation software.