St Cuthbert's Primary School Design Technology Policy

Vision:

In our family school, we strive to be the best for today, for tomorrow, for ourselves, for each other, the wider world and for God.

As a Christian family we nurture an understanding that we are all of equal value and infinite worth.

In the safety of our unique family we will flourish and grow towards being Global Citizens and Courageous Advocates.

('You are now citizens together with God's people and members of the family of God'. Ephesians 2:19)

Mission statement:

Learning to love, loving to learn in the family of Christ.

('Encourage one another and build each other up'- 1 Thessalonians 5:11)

Our Intent

Design and Technology prepares children to take part in the development of today's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become independent and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems.

Through the study of Design and Technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past Design and Technology, its uses and its impacts. Design and Technology helps all children to become discriminating and informed consumers and potential innovators.

At St Cuthbert's C of E Primary School, the aims of Design and Technology are:

- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- to enable children to talk about how things work, and to draw and model their ideas;
- to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- to explore attitudes towards the 'made' world and how we live and work within it;
- to develop an understanding of technological processes, products, and their manufacture, and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making.

Our Implementation - Teaching and Learning

At St Cuthbert's C of E Primary School, we use a variety of teaching and learning styles in Design and Technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. 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/group activities. Within 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. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including computing.

In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- setting common tasks that are open-ended and can have a variety of results;
- setting tasks of increasing difficulty where not all children complete all tasks;
- grouping children by ability and setting different tasks for each group;
- providing a range of challenges through the provision of different resources;
- utilising additional adults to support the work of individual children or small groups.

Design and Technology Curriculum Planning

Design and Technology is a foundation subject in the National Curriculum. Our school is following PlanBee curriculum documents and KLIPS provided by Lancashire County Council The curriculum has been adapted to ensure the DT coverage skills required are met. We carry out the curriculum planning in design and technology in three phases: long-term, medium-term and short-term. The long-term plan maps out the units covered in each term during the key stage. The Design and Technology co-ordinator works this out in conjunction with teaching colleagues in each year group.

Our medium-term plans, which we have adopted and adapted from the national scheme, give details of each unit of work for each term. They identify learning objectives and outcomes for each unit, resources required and risk assessments and ensure an appropriate balance and distribution of work across each term, year group and Key Stage. They are adapted as necessary by the year group teachers according to circumstance.

Class teachers complete a plan for each Design and Technology lesson. These list the specific learning objectives for each lesson and detail how the lessons are to be taught. The class teacher keeps these individual plans, and the class teacher and co-ordinator will discuss them on an informal basis.

We plan the activities in Design and Technology so that they build upon the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

The Early Years Foundation Stage

We encourage the development of skills, knowledge and understanding that help Reception children make sense of their world as an integral part of the school's work. As the Reception classes are part of the Early Years Foundation Stage we relate the development of the children's Knowledge and Understanding of the World to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in Design and Technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control.

We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

Contribution of Design and Technology to Teaching in Other Curriculum Areas

English

Design and Technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. Discussion, drama and role-play are important ways that we now employ for the children to develop an understanding that people have different views about Design and Technology. The children explain their designs orally or on paper and later, the evaluation of their products require children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

Mathematics

Many of the Design and Technology units provide the opportunity to use their mathematical skills in real-life situations and contexts. The main areas of mathematics covered in these units are:-

- real-life problems
- measure • shape and space
- handling data

Science

Many units provide opportunities for children to use and develop scientific knowledge and understanding. There are opportunities for pupils to use their knowledge and understanding through:

- working with a range of materials, eg: a range of fabrics and a range of different types of paper and card.
- working with electrical circuits and switches.
- working with food products related to healthy eating.

Computing

We use Computing to support Design and Technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw-and paint programs to model ideas and make repeating patterns. They use the internet to source a range of information and gain access to images of people, technological images and environments. The children also use Computing to collect information and to present their designs through draw-and-paint programs.

Art and Design

Many units provide opportunities for pupils to use and develop creative skills, knowledge and understanding. Opportunities exist for pupils to use their creative knowledge, skills and understanding through:

- the use of pattern, texture and colour.
- experimenting with visual elements such as pattern and shape.
- investigation of products from a range of cultures
- safe use of materials and tools.

Personal, Social and Health Education (PSHE) and Citizenship

Design and Technology contributes to the teaching of personal, social and health education and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

Spiritual, Moral, Social and Cultural Development

The teaching of Design and Technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences inn Design and Technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, including the contribution that people from other cultures have made to the design and technology industry. They learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

Equal opportunities

It is the responsibility of all teachers at St Cuthbert's C of E Primary School to ensure that all pupils, irrespective of age, faith, gender, sexual orientation, race and disability are given full access to the Design and Technology curriculum and make the greatest progress possible, in accordance with recent legislation. We promote British values set out by the Governments 2011 Prevent Strategy. Value of: democracy, rule of law, individual liberty, mutual respect and tolerance of those from different faiths and beliefs. Please refer to the schools Equalities Policy.

Teaching Art and Design to children with SEND

We teach Art and Design to all children, whatever their ability, in accordance with the school curriculum policy of providing a broad and balanced education to

all children. Provision is made for children with Special Needs and Disabilities within the context of the classroom. Teachers provide differentiated learning opportunities matched to the needs of the children with learning difficulties, and our work in Art and Design takes into account the targets set for individual children in their Individual Provision Maps (IEPs). Please refer to the school's Special Educational Needs and Disabilities (SEND) policy.

Assessment and Recording

Teachers assess children's work in Design and Technology by making assessments as they observe them working during lessons. Teachers collect examples of the children's' work and forward them to the coordinator for inclusion in the Design and Technology portfolio. This evidence may be paper-based or electronic.

Teachers track the progress made by children using Key Learning Indicators of Progression (KLIPs). At the end of each unit work we make a judgement against the Key Learning Indicators of Performance (KLIPs). This method of recording also enables the teacher to make an assessment of progress for each child, as part of the child's report to parents. We track the children's progress each term on Target Tracker. The subject leader monitors attainment throughout each Key Stage in order to evaluate the teaching and learning of Design and Technology.

The Design and Technology subject leader keeps evidence of the selection of children's work at different ability levels, forwarded by class teachers, in a portfolio. This demonstrates what the expected level of achievement is in Design and Technology throughout each year in the school. Teachers meet regularly to review individual evidence of children's work.

Resources

Our school has a wide range of resources to support the teaching of Design and Technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the Design and Technology school store. Audits will be carried out regularly to monitor the resources, any shortfalls should be reported to the coordinator who will arrange for replenishment. This room is not accessible to children without adult supervision. The store and junior library contains a selection of Design and Technology books.

Health and Safety

The general teaching requirements for health and safety apply in this subject. Children are taught how to follow proper procedures for using tools and equipment along with food safety and hygiene.

Monitoring and Review

The monitoring of the standards of children's work and of the quality of teaching in Design and Technology is the responsibility of the Design and Technology co-ordinator. The work of the co-ordinator 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 Design and Technology co-ordinator gives the Headteacher/Governors an annual report in which he evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. The Design and Technology co-ordinator has allocated non-contact time in order to review evidence of the children's work and monitor and evaluate the quality of Design and Technology teaching across school.