



Preesall Fleetwood's Charity CE School Design Technology Policy

Our School Vision Statement

'You are the light of the world. A school built on a hill cannot be hidden.'
Matthew 5:14 (adapted)

We will do our best, be kind, share ourselves with our community and shine from our hill, out into the world. At Fleetwood's Charity, we create a happy caring environment based on Christian Values, where we value every child and encourage them to strive for their highest standards of achievement. We ensure that our young people go into the world as confident, independent, responsible citizens with a love for learning.

Our Vision Statement pays homage to our belief that there is something potentially wonderful in each individual, and that this is something to be proud of and share with others.

DT Policy

Introduction

At Preesall Fleetwood's Charity Primary, heads and hands work together. Children have to think about specific purposes and uses for their products, demanding critical thinking skills and creativity, rather than simply following instructions to make something. We provide challenging and inspiring DT projects, that allow all pupils to access high quality learning.

Intent

Subject Aims

- To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- To 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
- To critique, evaluate and test their ideas and products and the work of others
- To understand and apply the principles of nutrition and learn how to cook.

Implementation

Teaching and Learning Style

Within our school, DT is taught by individual class teachers, and takes place mainly within the classroom. A variety of teaching methods are employed as appropriate, and DT regularly involves the children in practical work through small group activities/whole class activities; groups are encouraged to listen to each other's ideas and treat them with respect. Children are encouraged to apply their knowledge and understanding when developing ideas, planning and making products and evaluating them. We try to link all learning to the real-world to allow the children to learn skills that they know will be useful in life. We do this by:

- Encouraging imaginative thinking in pupils and to enable them to talk about what they have designed, made or created
- Encouraging children to take part in group work when designing and making
- Developing creativity and innovation through designing and making
- Encouraging children to select the appropriate tools and techniques when making a product and encourage them to follow safety procedures

Curriculum

All classes (apart from the Foundation Stage) are following the Lancashire cross curricular planning units. These incorporate all the key learning and skills from the DT National Curriculum.

EYFS

In early years DT is explored through many experiences such as, discussing how different things work, investigating and using a variety of construction materials, developing making skills and handling appropriate tools and construction materials safely and with increasing control and confidence.

KS1

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]. When designing and making, pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Cooking and nutrition

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from

KS2

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].

When designing and making, pupils should be taught to:

Design

- 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
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- 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

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- 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

Cooking and nutrition

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Health and Safety

Teachers must ensure that health and safety guidelines are observed in this subject, by teaching children how to use tools and equipment safely. We encourage the children to consider their own safety and the safety of others at all times. Where appropriate, children are taught food hygiene procedures.

Cross-curricular links

English – DT supports the teaching of English in our school by encouraging children to discuss and describe what they have done. Children are also encouraged to evaluate their work and discuss ways to improve.

Maths - DT gives children the opportunity to learn about shape and space through 2D and 3D work. Children learn about the importance of accuracy when designing and creating models.

Computing - Children use software on the laptops and iPads to support their learning wherever suitable and possible. Projector screens in classrooms are also used to share ideas and images of work.

PSHE - Children develop self-confidence by having opportunities to discuss their feelings towards work. They learn how society is made up of people from different cultures, and they start to develop tolerance and respect for others by studying how cultures express themselves through DT.

Spiritual, moral, social and cultural development - The teaching of DT offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our focus on group work allows children to work together, and gives them the chance to discuss their idea and feelings about their own work and the work of others. Through their collaborative and co-operative work, the children develop respect for the abilities of other children. They also develop a respect for the environment and for health and safety of themselves and others. A variety of experiences teaches them to appreciate that all people are of equal importance, and that the needs of an individual are not the same as the needs of a group.

Impact

Assessment for Learning, recording and reporting

We assess the children's work in DT through observations and questioning during lessons. Through the use of questioning teachers can challenge pupils and push add a greater depth to their learning. Supportive and constructive feedback is often verbal and is provided to all pupils. Children are encouraged to complete self-assessments and peer-assessments after finishing a project. Teacher's record the progress made by children against the learning objectives for their lesson and use this information to plan future work.

Role of the subject Leader

The DT subject leader is

The Subject Leader is responsible for improving standards of teaching and learning in Design Technology through:

- Monitoring and evaluating Design Technology
- Provision of high quality Design Technology through school
- Maintaining the availability of high quality resources
- Maintaining an overview of current trends and developments within the subject
- Identifying professional development needs of staff and planning CPD

The Subject Leader will meet with the link Governor twice a year and report to the Curriculum and Standards sub-committee as required.

Date of policy: 12/06/20

Date of review: 12/06/23

