

TANKERSLEY C of E (A) PRIMARY SCHOOL

DESIGN & TECHNOLOGY POLICY



“A love of learning in a Christian environment”

We aim high and have self-belief

We have community spirit

We are enterprising

We have enquiring minds

We are respectful

Updated September 2020

Next review September 2020

Policy for Design and Technology

Intent

Design and Technology is an inspiring, rigorous and practical subject through which pupils use their creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts. Pupils consider their own and others' needs, wants and values, they take risks, become resourceful, innovative, enterprising and capable citizens. They acquire a broad range of subject knowledge and draw on a range of disciplines including mathematics, science, engineering, computing and art. Through evaluating past and present design and technology, pupils develop a critical understanding of its impact on both 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.

As part of the school's drive to ensure all subjects are given equal status and to provide a broad and balanced curriculum the school has a 3 year subject overview as part of the Subject in the spotlight. This involves each subject lead writing an action plan for this subject area and monitoring their subject area through work scrutiny, developing a portfolio of subject progression and celebration in the subject as well as dedicated time for whole school display.

Aims and Objectives

Through the teaching of Design and technology at Tankersley, our aims are that all pupils will:

- ✓ Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technical 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.

Implementation

In the Early Years Foundation Stage, the appropriate skills, knowledge and understanding for Design and technology are developed through a wide range of both planned and self-initiated opportunities for learning. Within the prime area 'Physical Development', through developing control and coordination regarding both their gross and fine motor skills, pupils learn how to handle a range of implements. Pupils also learn about the effects of a healthy life style on their bodies including the importance of making healthy choices in relation to food. Through the specific area 'Mathematics', pupils learn about shape, space and measures so that they can talk about size, weight, capacity, position and direction. They explore the characteristics of everyday objects and shapes using mathematical language to describe them. In the specific area 'Understanding the World', pupils observe the world around them, find out about places, learn about cause effect, and the different types of technology that exist and what they are useful for. Further skills are developed through the

specific area 'Expressive Arts and Design' whereby pupils are encouraged to experiment with, find out the properties of, modify and manipulate media and materials, use their imaginations in their creations and develop both curious and questioning disposition.

In KS1 & KS2, pupils undertake three Design and technology topics each year, which are linked where possible to other areas of the curriculum. These topics cover the required range of designing, making, evaluating and technical knowledge specified in the new curriculum, with all topics based on. The following topics are taught in the specified Year Groups:

- ✓ Year 1: Vile Victorians (Christmas cards and levers)
Ready, Steady, Grow (Make a beanstalk for Jack at night)
Going Wild (Planters)
- ✓ Year 2: Fabulous Festivals and Celebrations (Hand puppets)
The Great Fire of London (Tudor House- free standing)
An Island Home (Vehicles)
- ✓ Year 3: Savage Stone Age (Jewellery- pewter casting)
Smashing Saxons (Catapult)
Groovy Greeks (Greek lyre)
- ✓ Year 4: Terrible Tudors (Embossing metals)
Awesome Egyptians (Hieroglyphic clock)
Vicious Vikings (Viking Longboat)
- ✓ Year 5: Enchanting Elizabethans (Mechanical cams automaton)
Memorable Miners (Davey lamp)
Momentous Mayans (Motorised buggy)
- ✓ Year 6: Rampaging Romans (Roman horse drawn chariot)
Perilous Plague (Plague Cure Packaging- graphic design nets)
Woeful WW2 (Air raid shelters)

In addition to this, pupils undertake 'Cooking and Nutrition' mini-topics each year which are linked to the topic area being studied. The following mini-topics are taught in the specified Year Groups:

- ✓ Year 1: Ready, Steady, Grow (Fruit Kebabs)
- ✓ Year 2: Harmonious Habitats (Tortillas)
Fabulous Festivals and Celebrations (Pumpkin Soup)
- Year 3: Groovy Greeks (Tzatziki)
- Year 4: Vicious Vikings (Meat & vegetable stew)
- ✓ Year 5: Momentous Mayans (Mexican Inspired dish)
- ✓ Year 6: Woeful WW2 (Milk based desserts)

Cross-Curricular Links

Examples of links with the whole curriculum include:

- ✓ **English**: Speaking and Listening: Discussing stages of work and presenting.
Reading: Research and following instructions.
Writing: Questionnaires, planning and evaluation.
- ✓ **Maths**: Measuring, calculating, estimating, 2D and 3D shapes and pattern.
- ✓ **Computing**: Research and using software in the designing and making process.
- ✓ **Science**: Healthy diet, hygiene and materials and their qualities.
- ✓ **History**: Past developments in technology and their application.
- ✓ **Geography**: Technological developments and applications in other countries.
- ✓ **R.E., P.H.S.E. & Citizenship, S.E.A.L**:
Responsibility, working with others, appreciation of the skills of others and improving people's lives through technology. Safety issues and the conservation of materials.
- ✓ **Art and Design**:
Close links especially in textiles and mouldable materials. Also, drawing skills, focus on finished appearance, and development of skills in using equipment common to both subjects, for example, scissors.
- ✓ **Music**: Musical instruments.
- ✓ **P.E**: Healthy lifestyles including hygiene and making appropriate food choices.

Resources

Equipment such as tools, kits and consumable resources are located in either classrooms or shared resource areas. Many resources, particularly for junk modelling, are brought in from home by pupils.

Useful videos for KS2 topics, particularly those relating to materials and products, are located in Class 6's stock cupboard.

Impact, Assessment, Recording and Reporting

The whole design and technology process (including designing, making, evaluating and technical knowledge) underpins the assessment of pupils and not just the end result. Pupils' learning is assessed at the end of each term using the process of a 'best fit' model. Staff keep their own notes in order to update individual yearly records and report to parents/carers.

Equal Opportunities

All pupils have access to the Design and technology curriculum regardless of gender or race. Opportunities are taken wherever possible to promote positive gender and racial images, for example, by learning about products designed and made by both genders and different cultures. The open-ended nature of Design and technology enables pupils of all abilities to

participate at their own level and for particularly talented pupils to reach their full potential. If any child found access difficult, for example, due to a physical disability, advice would be sought from appropriate sources in order to overcome this.

Developing and Monitoring the Curriculum

Both the monitoring of planning and the monitoring of pupils' work is undertaken by the Key Stage teams and the Design and Technology Subject Leader.

Health & Safety

Key Stage 1

With guidance and supervision from the teachers or other adults, pupils are expected to have a simple knowledge and understand of health and safety as consumers and when working with materials and components, including:

- ✓ Considering the hazards and risks in their activities
- ✓ Following simple instructions to control risks to themselves.

Key Stage 2

With guidance and supervision from the teacher or other adults, pupils' knowledge and understanding of health and safety issues as designers, makers and consumers should be further developed to include:

- ✓ Recognising hazards to themselves and to others in a range of products, activities and environments
- ✓ Assessing risks to themselves and others
- ✓ Taking action to control these risks.

Food safety

The following guidelines will be adhered to:

- ✓ There should be no long-term storage of food
- ✓ Food to be sent home should be kept in clean containers
- ✓ Aprons should be worn and long hair tied back
- ✓ Hands should be washed before handling food
- ✓ Pupils should not work at cooker unattended. They should be assisted or supervised when removing hot materials from the cooking area
- ✓ Work surfaces should be thoroughly cleaned and dried before and after food preparation.
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