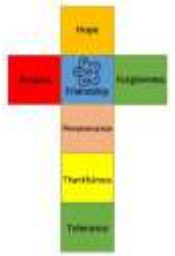




Policy for Design and Technology



Our School Vision is to work as a community within the school's Christian ethos. We learn about world faiths alongside our Christian Values to work towards creating an Outstanding school where all can flourish. Through the provision of a broad and balanced curriculum we encourage every child to develop lively, creative and enquiring minds enabling them to become confident individuals who reach their full potential and succeed in Modern Britain.

Our school works in partnership with the church and the wider community to give a caring and nurturing environment. Together we enable and equip each child to "I have come that they may have life, and have it to the full" (The Gospel of John – Chapter 10, verse 10).

We will realise our Vision through the following aims:

- demonstrating, as a Church school, our Christian values in action
- consistently high standards of teaching
- providing a happy, healthy and secure environment where all are respected, valued and encouraged to contribute
- excellent leadership and governance
- encouraging a love of learning by participating in experiences full of opportunity and creativity
- pursuing excellence in every aspect of school life, supporting one another and celebrating the achievements of all
- a partnership of pupils, teachers, parents, governors and the local community
- targets are challenging and achievable.

Introduction

Design and Technology prepares children to deal with tomorrow's rapidly changing world. It encourages children to become independent, creative problem-solvers and thinkers as individuals and as part of a team, making positive changes to their quality of life. It enables them to identify needs and opportunities and to respond to them by developing a range of ideas and by 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 astute and informed future consumers and potential innovators.

Intent

It is the intent of Barmby Moor and Garton on the Wolds CE Primary Schools for Design and Technology to be an inspiring subject, taught in all year groups through at least one topic per term, which includes one topic relating to food every two years. Design and Technology projects are often made cross curricular, linking to other subjects taught. Our Enterprise Week in the Summer term also enables pupils to experience a purposeful design project. At our school, Design and Technology should enable pupils to use their imagination whilst solving real and relevant problems within a variety of contexts.

Implementation

The teaching of Design and Technology follows the National Curriculum through the use of the Design and Technology Association's 'Projects On A Page' planning. Children design products with a purpose for an identified user. Food

technology, with a focus on healthy eating, enables children to develop an understanding of where food comes from, the importance of a varied and healthy diet and how to prepare this.

Impact

Assessment of children's learning in Design and Technology is carried out using the Design & Technology Association's assessment grids, accompanied by an ongoing monitoring of children's understanding, knowledge and skills by the class teacher throughout lessons. This assessment is then used to inform differentiation, support and challenge as required.

Design and Technology is also monitored by the subject leader throughout the year in the form of Design and Technology portfolio monitoring, lesson observations and pupil interviews to discuss their learning and understanding and establish the impact of the teaching taking place.

Design and Technology in the 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.

Strategies for the teaching of Design and Technology

What is included in the study of Design and Technology?

The fundamental skills, knowledge and concepts of the subject are:

- Design
- Make
- Evaluate
- Gain technical knowledge
- Cooking and nutrition

The National Curriculum prescribes that the breadth of study must ensure that pupils are taught knowledge, skills and understanding through a variety of creative and practical activities that enable them 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.

Cross-curricular links

The long-term planning of the Design and Technology curriculum incorporates cross-curricular links with other subjects, allowing for supportive learning. Particular emphasis is put on links to Mathematics and Science.

Strategies for the delivery of Design and Technology

The timetable and teaching groups

The Design and Technology curriculum is organised on a subject basis wherein:

- Foundation Stage children access design learning through the Early Learning Goals, specifically *Expressive arts and design: Exploring and using media and materials* and *Being imaginative*
- A rolling programme in subsequent classes as required (dependent on single or mixed-year organisation)
- In Key Stage 1 and 2 it is timetabled for one afternoon session per week and is taught as a half-term block in rotation with Art and design
- The time available is allocated equally between the two subjects so that approximately one hour per week (on average) is spent on Design & technology

Staffing

Design and Technology is allocated a subject co-ordinator whose role is to:

- Ensure progression and continuity in Design and Technology throughout the school, through monitoring and evaluation
- Support colleagues in their development of project planning and the implementation of the scheme of work
- Co-ordinate assessment, making sure it is available to all relevant parties, and support colleagues in the reporting of progress in the subject
- Keep up to date with developments in Design and Technology education and disseminate information to colleagues as appropriate
- Take responsibility for the purchase and organisation of central resources for Design and Technology

Design and technology is taught by class teachers whose role is to:

- Liaise with the Subject co-ordinator
- Create short-term plans from DATA MTPs for delivery of the subject
- Direct teaching assistants allocated to the subject
- Assess, record and report achievement in Design and technology

Teaching Assistants are used in Design and technology to assist:

- In the classroom, by preparing materials
- Supervising group activities under the guidance of the class teacher
- On outings and visits in support of the Design and Technology curriculum
- In providing other help such as demonstration of specialist skills

Strategies for ensuring progress and continuity

Planning

Planning for Design and Technology takes into consideration:

- The School Improvement Plan (SIP)
- The Long Term Plan
- The National Curriculum Assessment objectives and KS1, lower KS2 and upper KS2 expectation documents
- Cross-curricular links for supportive learning
- The need to ensure a balance of experiences for all pupils across the curriculum cycle
- The need to build in progression across the key stages (see Progression of Skills document)
- Equality of opportunity for all pupils

Pupil progression

Progression is achieved by:

- Planning work that builds in a progression in experiences and opportunities for learning as set out in DATA planning and the Progression of Skills document
- Setting clear lesson by lesson objectives and encouraging pupils to evaluate their own progress against these objectives
- Differentiating work to allow progression by all
- Giving positive and constructive feedback to individuals through discussion, marking and feedback

Differentiation and inclusion

Lesson planning takes into account the special needs of individual pupils and they receive support from the class teacher and/or teaching assistant to undertake exercises or projects appropriate to their level of ability and to take an effective and valuable role in mixed ability, cooperative group work.

Pupils with special needs include:

- Pupils with learning difficulties who may need support with reading and writing but who may have well developed practical skills in designing and making
- Pupils who have difficulties with practical tasks who may need more support and extra opportunities for practice
- Pupils with particular ability and flair for Design and technology who are extended through the use of additional or more demanding assignments and responsibilities

Design and Technology covers material areas traditionally seen as either a male or female preserve. At Barmby Moor Primary School, pupils are offered equal opportunity to design, make and evaluate products regardless of sex.

Homework is used to support Design and Technology through tasks such as:

- Research into designers, products and processes
- Finding and selecting examples for display, discussion and example

Strategies for recording and reporting

Pupil achievement is judged according to the progression of skills statements as set out by the Design and Technology Association (DATA). Assessment and achievement is recorded and reported as follows:

- As 'I can' statements to pupils using the year group expectation documents
- As teachers judgments of A, B, C (exceeding expectations, meeting expectations, not yet meeting expectations), submitted for each project to the subject co-ordinator
- As an annual statement of achievement and progress in Design and Technology written as part of the annual report to parents
- Through discussion at parents' evenings
- Through mounted displays throughout the school
- As a presentation and display of work in assemblies and at other public occasions
- As a photographic record when published on the school's website
- Reported in the papers when achievement is part of a particular initiative or of specific interest

Strategies for the management of resources

Funding

Design and Technology receives an annual allocation of funds to be spent on central resources for Design and Technology. Resources required for each term should be identified by the class teacher and/or subject co-ordinator from the long-term plan and ordered in approximately one term in advance, with the exception of perishable materials such as foodstuffs.

Where appropriate, resources will be requested from other sources such as parents, businesses and car boot sales, loaned from other schools or from local scrapstores. There is also opportunity for negotiation of some sharing of equipment and resources between Design and Technology, Science and Art.

Resource management

Classroom resources in Design and Technology include:

- A variety of regularly used tools and materials for cutting, shaping, joining and combining
- Paper, card, modelling and reclaimed materials
- Construction kits

Central resources in Design and Technology include:

- A wider range of less commonly used tools for cutting, shaping, joining, combining and finishing
- A range of resistant and flexible sheet and construction materials
- Mouldable materials
- Textiles
- Electrical and mechanical components
- Construction kits specific to the teaching of Design and Technology

Use is made of the Schools Library service to borrow Project Books and of other services to borrow hands on examples of artefacts.

Computing

Computing is a major resource used in Design and Technology for:

- Planning, designing and modelling using CAD
- Research
- Graphic design and desk top publishing

Visits and Visitors

Whilst visits to or by local manufacturers are utilised, visits to larger centres of manufacture and commerce are restricted by the rural location of the school and cost. Where appropriate, Design and Technology based visits will be made as a combined trip with other subject areas to achieve best value.

Health and Safety

Health and Safety is of particular importance in Design and Technology. Electrical equipment is checked on a regular basis by Authority staff and tested by teaching staff before use by pupils. Tools and equipment are stored in strong and secure units away from the class and materials are stored and stacked with consideration to weight and balance. Pupils are taught safe usage of equipment and materials as appropriate to each project. All staff are

made aware of the School Health and Safety policy and the procedures for dealing with accidents. Each teacher is required to keep a risk assessment with Design and Technology planning, which has to be highlighted and dated according to the work undertaken each term.

Updated September 2019