

EYNESBURY CHURCH OF ENGLAND PRIMARY SCHOOL

Design & Technology Guidance



Our Whole School Curriculum Vision Intent Statement

At Eynesbury Church of England Primary School, our curriculum has been designed to ensure every child can 'live life in all its fullness' by offering stimulating and awe inspiring learning experiences with Christian values at its heart. We aim to deliver a curriculum that provides our children with rich knowledge and skills. It gives them the opportunities to develop into well-rounded individuals ready for each stage in their learning journey. Our pupils leave Eynesbury as respectful, good citizens with good memories, a thirst for learning and life and all it has to offer.

Eynesbury Church of England Primary School
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Introduction:

Design and Technology prepares children to deal with our rapidly changing world. It encourages children to become independent, creative problem solvers, as individuals and as part of a team. 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 industry. This allows them to reflect on and evaluate past and present technology; its uses and impacts.

Curriculum Intent

At Eynesbury C of E Primary School, we value Design & Technology (DT) as an important part of the children's entitlement to a broad and balanced curriculum. DT provides the children with the opportunities to develop and extend skills and an opportunity to discover new and exciting things. We follow the Kapow Scheme of Work

DT work at our school forms part of our termly topics and is offered to all children from Year 1 to Year 6. DT projects are often made cross curricular and teachers ensure that the learning is relevant to the children and their lives. For example, when learning about stitching, children may be able to make an advent calendar or when learning about healthy eating, the children would take the opportunity to create recipes, cook and try new foods.

The national curriculum for Design and Technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise need 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.

Curriculum Implementation

The teaching and implementation of the Geography Curriculum at Eynesbury C of E Primary School is based on the National Curriculum and supported by the 'Projects on a Page' Scheme of work, ensuring a well-structured approach to this subject.

The DT curriculum will be implemented by teachers, based on the key objectives set out in the National Curriculum for Years 1 - 6, as follows:

- Products are to be made for a purpose.
- Individuality should be ensured in children's design and construction of products.
- Delivery of the two strands: Designing and Making and Cooking and Nutrition.
- More emphasis to be given on creating 'innovative' products in KS2.
- Teaching the importance of making on-going changes and improvements during making stages.
- Looking into seasonality of ingredients and how they are grown, caught or reared.
- The introduction of computing and coding of products in KS2.
- Researching key events and individual designers in the History of Technology in KS2.

Early Years

DT is taught in reception as an important part of the topic work covered during the year. We relate the design technology aspects of the children's work to the objectives set out in the Early Years curriculum which underpin the planning for children aged three to five. DT would be covered through 'Expressive Arts & Design' in Early Years, which is a 'Specific Area' of learning. Children use their imagination to construct and create using a variety of media and materials and are encouraged to evaluate their work and that of others.

During the EYFS pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities. They have the opportunities to learn to:

- Use different media and materials to express their own ideas.
- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose.
- Make plans and construct with a purpose in mind using a variety of resources.
- Develop skills to use simple tools and techniques appropriately, effectively and safely.
- Select appropriate resources for a product and adapt their work where necessary.
- Cook and prepare food adhering to good health and hygiene routines.

Key stage 1 & 2

Children design products with a purpose in mind and an intended user of the products. Food technology is implemented across the school with children developing an understanding of where food comes from, the importance of a varied and healthy diet and how to prepare this.

Design and technology is a crucial part of school life and learning and it is for this reason that as a school we are dedicated to the teaching and delivery of a high quality Design and Technology curriculum through well planned and resourced projects and experiences. For example, each year group has a garden plot and takes ownership and responsibility for cultivating crops or plants within their plot. While a range of skills will be taught ensuring that children are aware of health and safety issues related to the tasks undertaken.

Pupils design and make products that solve real and relevant problems within a variety of contexts. It has good cross - curricular links and draws upon subject knowledge and skills within Mathematics, Science, History, Computing and Art. Children learn to take risks, be reflective, innovative, enterprising and resilient. Through the evaluation of past and present technology they can reflect upon the impact of Design Technology on everyday life and the wider world.

DT and Inclusion

At our school, we teach DT to all children, regardless of ability and individual need. This is in accordance with the school's curriculum policy of providing a broad and balanced education to all children. Through our DT teaching, we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and if necessary, those learning English as an additional language, and we take all reasonable steps to achieve this.

Curriculum Impact

At the end of each key stage, the children's learning will be assessed against the age-related expectation bands that are based on the 2014 National Curriculum statements for DT. At Eynesbury, we use summative assessment to determine children's understanding and inform teachers planning. This is reviewed on a termly basis by the subject leader, who also carries out learning walks and lesson observations.

At the end of each unit, the key knowledge, skills and understanding will be assessed by the class teacher. Teachers will assess the children in terms of objectives met. A comment is made by staff in end of year reports to parents.

Assessment will be undertaken using the following methods:-

- observation of pupils
- talking with pupils
- marking written work
- self-assessment
- peer assessment
- the evaluation of discussion

Children in Foundation Stage are assessed within Expressive Arts and Design and their progress is tracked termly. Age related expectation levels are reported to parents at the end of the reception year.

As a result of DT teaching we hope that:

- Children will have clear enjoyment and confidence in design and technology that they will then apply to other areas of the curriculum.
- Children will ultimately know more, remember more and understand more about Design Technology, demonstrating this knowledge when using tools or skills in other areas of the curriculum and in opportunities out of school.
- The large majority of children will achieve age related expectations in Design Technology.
- As designers, children will develop skills and attributes they can use beyond school and into adulthood.

DT curriculum planning

Our long-term and medium-term plans map out the themes covered each term for each key stage. These plans define what we will teach and ensure an appropriate balance and distribution of work across each term. Knowledge organisers are used to support the learning and teaching in DT. We use the 'Projects on a Page' Scheme to support our planning.

Spiritual, moral, social and cultural development

There are opportunities within the study of DT to learn about other cultures and other parts of the world and how their way of life influences the structures they may create. There is the chance to think about the moral responsibility to reduce, reuse and recycle to protect our world. Teachers use every chance to link learning across all subject areas and make it relevant to the lives and interests of the children.

Ensuring continuity and progression in learning

Whilst knowing more is an integral part of continuity and progression it is nevertheless just one element of it and merely sequencing subject content will not ensure on its own that our pupils develop the necessary skills and knowledge in DT. To ensure continuity and progression for all pupils the curriculum is carefully organised EYFS - Year 6 to ensure that our pupil's knowledge and understanding of DT develops because:

- Expected subject outcomes in terms of developing as a young technologist increase in complexity and level of challenge as detailed above and are used as the starting point for all planning of content delivery and learning and teaching enquiries;
- There is increasing breadth and scale of study through the curriculum;
- The curriculum becomes progressively more complex developing from discrete facts and bodies of information to conceptual awareness and generalised knowledge about more abstract ideas;
- The mastery and application of DT tools and skills occurs in more precise and complex contexts.

Roles and Responsibilities

The subject is led by the DT Co-ordinator who has time is set aside to review standards and monitor curriculum provision and ensure training and resources are up to date.

Health and Safety

Any equipment used as part of a DT lesson should be done so with adult supervision and a clear understanding of the expectations by the children. Good hygiene practice should be taught during cooking lessons.

Resources

We have a range of text books linked to DT in the school library. We have access to laptops and interactive boards to help children research important inventors and inventions. We also have a wide range of DT resources and materials for children to complete relevant projects in their year groups. People with an interest, or expertise, in a particular topic or area of DT could be invited into school to work with the children. These might be parents, grandparents, other family members, neighbours or representatives of the local community.

Monitoring

Monitoring by the DT Co-Ordinator, the Headteacher and Senior Leadership Team takes place through triangulation of data, book scrutinies and lesson observations.

Review: as appropriate