Ellington Primary School

Design and Technology Policy Statement

Introduction

Design and Technology at Ellington Primary School is about empowering pupils and develops self-confidence. It is our aim to equip pupils to deal with tomorrow's rapidly changing world; to encourage pupils to become independent, creative problem solvers and thinkers as individuals and part of a team. The National Curriculum states, '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.'

Aims of Design and Technology at Ellington Primary School

At Ellington Primary School we hope to:

• develop the creative, technical and practical expertise needed 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

Objectives

To provide a wide range of experiences and tasks appropriate to the needs of the children, 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; understand how key events and individuals in design and technology have helped shape the world
• **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; 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

Subject Content

Our design and technology content is based on the National Curriculum. See Curriculum Overview (Appendix 1) and the content is mapped out on our Progression of Skills document for EYFS (Appendix 2)and Progression of Skills document for KS1 and KS2 (Appendix 3) .

Special Educational Needs and Higher Attainers

- Teaching needs to meet the needs of all children
- Children with special educational needs need to have differentiated activities which allow them to access the curriculum fully and make progress
- The planning should clearly indicate the objectives these children are working on
- Planning should be sufficiently differentiated to cover their needs
- Practical resources will be available to all children

Early Years Foundation Stage

Foundation Stage pupils are taught design and technology as an integral part of the Knowledge and Understanding the World work covered during the year. We relate the design and technology side of the children's work to the objectives set out in the Early Learning Goals (ELGs) which underpin the curriculum planning for children aged three to five. Design and Technology makes a significant contribution to the ELG objectives of developing a child's knowledge and understanding of the world through activities such as constructing, designing, using simple tools, selecting resources, making decisions, altering designs/constructions. Design and Technology vocabulary is also introduced and developed to enable children to discuss their ideas fully.

Planning

Design and Technology is taught through a topic approach alongside Geography, History and Art; links are also made with core subjects of English, Maths and Science wherever possible. Our Creative Curriculum is carefully planned to engage and excite all our learners, in order to provide the school with a high quality curriculum, it is the driving force for our planning. Our Curriculum Overview (Appendix 1) for each year group links to skills and themes covered which is highlighted in our Progression of Skills documents (Appendix 2 and 3).

Teaching and Organisation

Design and Technology is approached through a variety of teaching and learning styles. Our principal aim is to develop the children's knowledge, skills and understanding and we believe in whole-class teaching methods and combine these with enquiry-based research activities. We believe children learn best when:

- they are set common tasks that are open-ended and can have a variety of results
- they are set tasks of increasing difficulty where not all children complete all tasks
- they are provided with a range of challenges through the provision of different resources
- they are grouped by ability
- they can work independently and collaboratively

We recognise the fact that we have children of differing ability in all our classes, and so we 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 which are differentiated by task, expected outcome and/or support from peers or adults.

Teaching Assistants

Time should be set aside prior to the lesson to discuss with the teaching assistant the learning objectives, the activities and their role in the children's learning. Teaching Assistants should be used to support the learning of children throughout the whole of the design and technology session. During the lesson they can: support a child/group to ensure good understanding of objective being taught. Teaching Assistants need time at the end of the session to discuss the work of the child/children they have supported with the teacher.

Classrooms and Display

To reinforce, support and celebrate the children's learning, all classrooms should have a topic based display. Displays, wherever possible, should demonstrate cross-curricular links to reinforce learning in all curriculum areas.

Assessment

Formative assessment will collected throughout each design and technology project. Grades of WTS (working towards), EXS (expected), GDS (greater depth) will be given. Pupils in EYFS are monitored throughout the year using the Early Years Foundation Curriculum and against the ELG at the end of the year using the EYFS Profile.

Marking and Feedback

Good feedback should:

• Praise the child
• Celebrate success of children through rewards and celebration assemblies
• Explain what the child has done well and what they have achieved/learned
• Extend the learning that has already taken place through questioning
• Clarify any misconceptions
• Be a dialogue between the teacher and the child
• Provide an opportunity to assess a child's progress and inform assessment and planning

Role of Subject Leader

The subject leader is responsible for improving the standards of teaching and learning in design and technology through:

• Monitoring and evaluating pupil progress
• Analysing data
• Ensuring breadth and balance of the curriculum is achieved
• Taking the lead in policy development
• Supporting colleagues in their continued professional development (CPD)
• Purchasing and organising resources
• Reporting to governors and senior leadership team
• Providing guidance, support and training for parents and carers
• Keeping up to date with recent curriculum developments

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                                      Date of next review: Sept 2022