Design and Technology

Policy

Acre Rigg Infant School

Last reviewed in	September 2024
Next review due	September 2025





Design Technology Policy

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.

Aims

The National Curriculum for design and technology aims to ensure that all pupils:

- 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 highquality 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.

Subject Content at Key Stage 1

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.

Planning and Coverage Across the School

In Foundation Stage children work within the EYFS for Expressive Arts and Design and Knowledge of the World as set out in the Curriculum Guidance for the Foundation Stage. Children should have daily access to a creative area, as set out in the teacher's Continuous Provision Plan. In addition to this is it important to remember that design and technology focused activities are to be planned to allow children to learn new skills and techniques.

In Key Stage 1, Design Technology should be taught at opposite times to Art and Design within the school year. Children's work is planned following the National Curriculum guidelines. Teachers should create planning following the topic based schemes of work for their year group, completed by the Design Technology Coordinator. This ensures coverage of objectives across year groups and the Key Stage and ensures that children's experiences, knowledge, skills and understanding of the subject progress appropriately. ICT packages and applications should be used when appropriate to enhance learning and support continuous provision.

Children will be given the opportunity to use design technology alongside planned units for special purposes, for example to create greetings cards for special occasions, however this should not take the place of actual focused lessons.

Schemes of Work

Using long term plans completed by the teacher's working in each Year group, a scheme of work has been created by the Design Technology coordinator to provide an overview of teaching and learning for each unit. This is to ensure an appropriate balance and distribution of skill development across the Key Stage, so that within each year group children will experience units relating to construction materials, textiles and ingredients. It is important to provide children with experiences from each element to ensure broad and balanced provision. Teachers are to liaise with the Design Technology Coordinator when amendments to existing schemes or new schemes need producing.

Progression, Assessment and Record Keeping

Following training, the Design Technology coordinator created an assessment document for the subject based on the Assessment Guidance for Art and Design provided by the NSEAD. This new document uses a similar idea and layout, however focuses on 3 distinct progress objectives for Design Technology to ensure consistency across planning, teaching and assessment. The progress objectives are: 1. Generating Ideas: The skills of designing and developing ideas 2. Making: The skills of making 3. Evaluating: The skills of judgement and evaluation. Like the National Curriculum aims, these progress objectives arise from the key ideas that are at the heart of teaching and learning in Design Technology.

Progression in Design Technology happens over time as children gain increasing confidence in developing and using skills and gaining deeper knowledge and understanding. Children who consistently make more progress than their peers are to be supported, not by moving them on to different experiences, but by providing further opportunities to deepen and extend their skills and knowledge within the context of the current unit of work.

Assessment at Acre Rigg Infant School takes account of all aspects of children's learning and achievement. It includes what children make, how they make it, what skills they acquire and what they know about the tools and materials they use.

Classrooms

<u>Display</u>

All children should have the opportunity to display their work. This should be done imaginatively within classrooms and should show more than the children's final pieces. This could take the form of photographs alongside final pieces, but ideally should show a range of work including pieces exploring techniques and skills to highlight the learning that has taken place during the unit.

Set up

All classrooms should have a well stocked designated creative area for children to use independently within the wet-side of classrooms. This area could be used in a directed way during which teachers plan an activity (planning of continuous/enhanced provision) for the children to complete or it could be used as a child initiated area providing children are taught to use the area in a purposeful way.

Health and Safety

Children should be taught to use tools and equipment safely and correctly. Supervision should be given where necessary.

Rights Respecting

Children have the right to an education which helps to use and develop their talents. Design technology is a subject which embraces individuality and personal expression and encourages children to develop confidence to be themselves. Children have the right to learn about things and share what they think using means such as talk and drawing. Design technology allows children to learn about and experiment with different skills and techniques and talk about their learning and preferences. In addition to this children are given the opportunity to learn about and make healthy foods as all children have the right to a healthy diet.

The Role of the Design Technology Coordinator.

The coordinator monitors planning and the delivery of units by collecting regular evidence from teachers. Subject schemes of work are written by the coordinator and will be updated as required when discussed with staff if changes to topics occur. The coordinator will support staff as necessary and will aim to up skill staff if this is requested either personally or by arranging appropriate courses.

Key Aims for the Subject.

- All teachers plan and deliver series of lessons that provide children with experiences and enable them to learn new skills, knowledge and understanding in a progressive way.
- Design technology is no longer final model orientated and the focus is now on the learning that is taking place. This is to be highlighted through classroom displays and in the evidence provided by teachers.