

Design & **Technology Policy Thakeham Primary School**

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Signed

Acting Headteacher: Other State Documents Kate Documents

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Intent

It is our aim that design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils are challenged to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. It is our intention for children to be inspired by engineers, designers, chefs and architects to enable these designs. They should acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils are given opportunities 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. At Thakeham, we believe high-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Aims

Through reaching Design and Technology children are given opportunities to:

- develop their thinking, designing and making skills
- acquire the knowledge and understanding, within each child's ability, that will be required to complete the making of their product
- learn the safe and effective use of a range of tools, materials and components
- develop their understanding of the ways in which people have designed products in the past and present to meet their needs
- develop their creativity and innovation through designing and making
- develop their understanding of technological processes, their management and their contribution to society.

Implementation

Early Years Foundation Stage

In the foundation stage, design and technology comes under the learning area of Expressive Arts and Design, specifically creating with materials. Through Expressive Arts and Design activities, the children explore, develop, construct, evaluate and adapt their ideas purposefully using a range of media and tools. This learning forms the foundations for later work in Design and Technology. Children also have daily opportunities to explore Design and Technology. We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

KS1 and KS2

The teaching of Design and Technology at Thakeham Primary School will enable children to learning through a practical, creative and cross-curricular approach. We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.

Key elements in the design & technology process include:

- Design
- Make
- Evaluate
- Technical knowledge
- Cooking & Nutrition

Across key stage 1 and 2, we teach one DT block each term across a two year rolling programme. Each unit starts with an investigative lesson where the children evaluate a product against a set criteria. A series of lessons will then allow the children to research, design, problem solve, practice relevant skills, make, evaluate and present a product as a solution to a problem. These DT projects include structures, textiles, mechanical systems, electrical systems and cooking and nutrition. Wherever possible a cross-curricular approach is used.

Teaching and Learning

Our Teaching and Learning Policy identifies the aims, principles and strategies for promoting effective classroom practice and we believe that these apply to Design and Technology, as well as every other curriculum subject area. Therefore, it is expected that all teachers will plan and devote time for regular and high quality Design and Technology experiences for the children in their class. Design and Technology lessons will engage the children in a broad range of designing and making activities which involve a variety of methods of communication, e.g. speaking, designing, drawing, assembling, making, writing and using information and communication technology.

Differentiation

We differentiate through:

- Dialogue.
- Giving extra time to some groups.
- Setting up one task that has a variety of levels associated with it.
- Asking different level questions to match ability.
- Giving different tasks to different groups.
- Scaffolding written recording to the appropriate level using writing frames.
- Varying the level of adult support given to groups.

Cross Curricular Links

At Thakeham Primary school, there are numerous links to other curriculum areas. Wherever appropriate, projects will link with curriculum topics. Design and Technology has strong links with mathematics, science, engineering, computing and art. Through topic links it can inspire writing within English of stories, instruction and recounts. Children use key skills such as curiosity, collaboration, perseverance and reflection which matches the values of our Super Learning Heroes.

Impact

Our DT Curriculum is planned to demonstrate progression and build on and embed current skills. Our children will have developed their ability to problem solve, design, make and evaluate products to solve real and relevant problems within a variety of contexts. When transitioning to secondary school, we aspire that pupils will have gained knowledge and understanding of different skills and techniques required to problem-solve by designing and creating a variety of products using a safe approach. They will have an understanding of the cross curricular elements within the subject and the importance of skills learnt in other areas of the curriculum and how they aid the design and make process, as well as how these

techniques and skills will aid them in future life and learning and be prepared to access, the KS3 curriculum.

Assessment, Recording and Reporting

We measure the impact of our curriculum through the following methods:

- Pupil discussions and interviewing the pupils about their learning (pupil voice).
- Governor monitoring with our subject link governor.
- Annual reporting and tracking of standards across the curriculum.
- Photo evidence of the pupils' practical learning.
- Foundation Assessments at the end of a unit of work.

Reporting to parents take place through twice-yearly parent's evenings and each child receives an end of year report.

Inclusion & Equalities (please refer also to the School's SEND/MAP/Equalities Policy)

We are committed to providing equal opportunities for everyone. We value the diversity of individuals within the school and beyond. Learning to live and work together, and respect each other is expected throughout the school in line with our Equalities policy and Staff Code of Conduct.

Inclusive practice in Design and Technology should enable all children to participate and achieve their best possible standard; whatever their ability, and irrespective of gender, ethnic, social or cultural background, home language or any other aspect that could affect their participation in, or progress in their learning.

Children who are recognised as having a flair and talent will, where possible, be provided with enrichment opportunities in line with our More Able Pupil Policy.

Monitoring

Monitoring and evaluation is carried out on a number of levels e.g. Class teacher, Curriculum Leader, Headteacher, Governors, Advisors and Ofsted/HMI all with the central aim of enhancing teaching and learning.

Monitoring may be through a range of methods including,

- assessment of pupils' work
- scrutiny of planning
- lesson observation
- Pupil Conferencing
- Staff discussion and feedback

Resource Management

Funding for Design and Technology will be within the school budget plan for each financial year. There is a central Design and Technology budget to cover the purchase of equipment such as tools, construction kits, consumable materials, books and other resource materials. It is the responsibility of each class teacher to identify specific resource needs in relation to their class project and liaise with the Design and Technology Leader. Equipment and materials have been organised in the Stock Room in the Food Technology Room. This will be maintained by the Design and Technology Leader and support staff as required, although all staff are responsible for ensuring resources are put away carefully after use.

We have a well-equipped Food Technology room with fixed and height adjustable sinks and hobs. There is a fridge freezer, oven, and significant work space. A Clevertouch screen and laptop are available to support teaching and learning. Any food preparation/cooking should be carried out in this room (rather than the classrooms) under adult supervision and in line with relevant risk assessments. Key support staff (Teaching Assistants) hold a Level 2 Certificate in Food Safety.

Hygiene and Safety

It is important that children are taught essential life skills to enable them to participate confidently and safely in designing and making in society. Teachers have a duty to introduce children to a wide variety of production processes and the correct tools for the task. Children must design considering health and safety issues and consequences and operate in a safe and hygienic manner when designing and making products. There are risk assessments in place for activities where tools or materials warrant extra control measures, above and beyond usual classroom practice. The Food Safety Policy and Health & Safety Policy should also be read in conjunction with this policy.