Wootton-by-Woodstock CE Primary School

Policy Agreed: November 2019
Person Responsible: Victoria Lawrence
To be reviewed: November 2022

Policy for Design and Technology 2019

DEFINITION

Design and Technology is a foundation subject of the National Curriculum and is an element of the Knowledge and Understanding of the World section of the Foundation Stage Curriculum. It is an inspiring, practical, problem-solving process involving physical, intellectual and spiritual effort. Using creativity and imagination pupils solve real and relevant problems within a veriety of contexts. Pupils acquire a broad range of knowledge drawing on other curricular areas. They learn how to take risks, be resourceful, innovative and enterprising capable citizens. Through evaluation pupils gain a critical understanding of the impact of technology on the world . Design and Technology provides a process which draws upon and provides purpose for other studies and, because it is concerned with real things, it provides at first-hand, a recognisable context for a variety of learning and thinking to take place.

INTENT

To:

1. Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
2. Build and apply a repertoire of knowledge, understanding and skills in order to design and make high quality prototypes, products and systems.
3. Critique, evaluate and test ideas and products as well as the work of others
4. Understand nutrition and learn how to cook.
5. Become self-sufficient, self-confident and independent when solving problems creatively
6. To increase iunderstanding of other curricular areas through the exploration of design and technology

IMPLEMENTATION

Teaching and Learning

Children are taught to:

- design and make selecting from tools, materials ingredients and components
- model and communicate ideas and plans
- disassemble, evaluate against design criteria
- build structures
- explore mechanisms and electrical systems
- use computing to program and control
- understand where food comes from
- understand principles of healthy eating
- prepare and cook savoury dishes
- understand how to source fresh ingredients

- understand how key technological events and individuals have shaped the world
- use and apply knowledge in new contexts

Units of work are linked with focus topics in long term planning . EYFS children are introduced to Design and Technology through the area of learning within the Early Years Curriculum known as "Knowledge and Understanding of the World."

Tasks may arise naturally from children's ongoing lines of enquiry, desire to produce a particular item, or from structured taught lessons. Lessons may be taught either:
within blocked units of work
or at relevant points within other topics.

Children throughout the school are given opportunities to become involved in design and technological activities as individuals, in pairs or as groups. With guidance from adults they draw on their own knowledge and experience and that of their peers and, through new experience, gain further knowledge from which to move forward. Learning is accumulative and collaborative. Concepts, skills and knowledge are acquired gradually. Progression occurs through child capability within structured planning.

Design and technology is cross-curricular and will provide opportunity to develop other subject areas. Activities include graphic media, textiles, construction kits, food, mouldables, materials and their components, structures, mechanisms and control.
Development of technical vocabulary is encouraged.

Children become familiar with tools and materials, develop skills and knowledge appropriate to the task in hand and are encouraged to apply that knowledge in unfamiliar situations.

By the end of Year 6 pupils should be able to represent design plans through annotated drawings, lists of the required materials, components, tools, fixings and finishes required to make a product and include step by step instructions. They should be able to make verbal and written evaluations based on specific success criteria.

Progression, Differentiation and Personalisation
The school has a set of skills progression criteria which assist in planning and supporting children through their work. Although skills, methodologies and design is explicitly taught, capability in technology is neither linear nor age related. Children develop different areas of expertise and progress at different rates at different times. Children may work below or above their chronological age related expectations. They are encouraged to design and make their own plans and models, following their own interests in connection with the theme of study. Assessments are made against the curriculum statements in Target Tracker. From here teachers can ascertain the levl of progress pupils are making.

ICT
The use of ICT is embedded in all areas of learning. Children access computers, cameras, tablets, videos, and tools to assist with their work in planning, designing and making.

SEND
It is part of the school curriculum policy to provide a broad and balanced education to all children. We provide learning opportunities and support that are matched to the needs of children with learning difficulties. See SEND policy.

Assessment
Children's achievements are assessed by themselves, with peers and with teachers. Assessments are recorded through standardised marking procedures and teachers' own records of assessment.

SMSC
The teaching of Design and Technology deepens awareness and understanding in SMSC:
Spiritual: 'Connecting' with great technologists and inventors of the past, appreciating and building on what has gone before
Moral: Responsibilities associated with new technologies
Social: Supports the social development of our children through the way we expect them to work with each other in lessons, and wider social responsibility when working with technologies
Cultural: Developing understanding of multi-cultural awareness, sensitivity and respect for those from cultures different to their own through studying designs from those other cultures.

Resources
A resource list and D/T books are kept on the staff room shelf and in the resource area. Tools and materials are kept in the class rooms.

Monitoring and Evaluation
The school monitors and evaluates on a continuous basis through:

- Lesson observations and the quality of teaching
- Work sampling
- The quality and effectiveness of long, medium and short term planning
- The quality and consistency of assessing and learning
- The quality of resources to support learning
- Feedback from pupils, parents, governors and external agencies

Equality
All children have equal access and the right to experience, enjoy and express themselves in opportunities in Design and Technology.
Children join us from a wide variety of pre-school experience and therefore we approach them and their prior knowledge on an individual basis. We reflect and promote a child's key rights irrespective of irrespective of religion or belief, race, nationality, ethnicity, gender, sexual orientation, age, ability or disability, opinion or family background.
See Equality Policy.

Health and Safety
We encourage safe and sensible storage and safe and economical use of resources. Children and adults must keep a clean and safe working area and use and care for tools and equipment appropriately. Children are taught to recognise hazards, assess risks and take action to control them. Children are involved fully in recognising health hazards and assessing risks.

Professional Development
Adults are given opportunity to attend INSET and take part in other relevant projects which allow professional development to take place.