



Neatishead and Salhouse Federation

D & T Policy

To be reviewed annually	Neatishead & Salhouse Federation Primary Schools
Last reviewed	Feb 2018
Due for review	Feb 2019

Neatishead and Salhouse Federation

Design and Technology Policy

1. Introduction:

At Neatishead and Federation, the Design and Technology curriculum is based on the September 2014 National Curriculum for Key Stages 1 & 2 and the Early Years 2012 framework in Reception classes and Fledglings.

2. Values:

Our Christian core values of respect, responsibility, perseverance, courage, compassion and trust are embedded in all we do.

We seek to share and enjoy our learning making it as much fun and as relevant as possible providing a joined up learning experience for children through an inspiring curriculum which takes account of children's interests.

Every child is valued as an individual; we aim to nurture enthusiastic, independent, resilient and confident children who will develop life-long learning skills.

We support the emotional, physical and cognitive development of every child in a nurturing environment adopting the THRIVE approach and encouraging them to be creative, unique, open-minded, respectful of themselves and of others in our school, our local community and the wider world.

We take our responsibility to prepare children for life in modern Britain seriously and ensure that the fundamental British Values are introduced, discussed and lived out through the ethos and work of our school.

3. Aims:

To ensure all pupils by the end of Key Stage 2:

- 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.

4. Pedagogy and Curriculum

Early Years:

Children will begin to develop an awareness of Design and Technology through activities linked to 'Expressive Arts and Design' and 'Understanding the World' as outlined in the Early Years Foundation Stage Curriculum.

Key Stage 1:

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

Key Stage 2:

When designing and making, pupils should be taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- 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

5. Assessment for Learning:

Formative Assessment

Formative assessment is a crucial element in children's learning. It is intrinsic to Assessment for Learning - the improving of learning through assessment.

Within Design and Technology teachers will:

- Set learning goals for the children.
- Discuss these goals with the children so they understand what they are aiming for.
- Take the learning goals from the knowledge, skills and understanding laid out in the National Curriculum D&T guidance.
- Use open-ended, interesting questions and scaffold their learning to help them succeed.
- Give frequent feedback to children about how they are doing and how they can improve.
- Actively involve all children in their own learning through, for instance, discussion and debate with peers and teacher; assessing, reviewing and reflecting on their own performance.
- Use on-going informal assessment (based on observation; discussion; questioning; written and creative work) to adjust teaching and progress the children's learning.
- Notice that speaking and listening are central to formative assessment.

Summative Assessment

Pupils are assessed at the end of KS1 and KS2 against the following criteria:

KS1 criteria:

- Able to design a purposeful, functional and appealing product
- Selects materials, tools and methods to make a product
- Evaluates own and others products against design criteria
- Demonstrates technical knowledge and specific vocabulary
- Applies knowledge of healthy diet to prepare a dish

KS2 Criteria

- Research, develop, and communicate design criteria
- Select tools and use accurately to produce a product
- Select materials appropriately using knowledge of properties
- Investigate and analyse existing products
- Evaluate key events and individual designs that change the shape of the world

- Apply technical knowledge related to structure, mechanics, electrics and computing
- Demonstrate knowledge of food related to origin, season and health benefits
- Prepare a savoury dish using two or more techniques

Progression

Pupils across all years complete an identical activity annually. Teachers analyse pupils' responses looking for evidence of progression across year groups and using analysis to inform planning. (This approach to evidencing progression will be adopted at Neatishead during 2017-2018 and at Salhouse 2018-2019)

6. Environments for Learning:

Creative ways will be found to enhance school spaces to support the teaching and learning of D & T. The library will be appropriately resourced. Visits, visitors and resources will be used to support learning. Cross curricular themes will be used to support the teaching and learning of D&T.

7. Pupil and Family Support:

Inclusion

In order to provide all pupils with relevant and appropriate work at each stage:

- We set suitable learning challenges
- Respond to pupils' diverse needs
- Endeavour to overcome potential barriers to learning

Learning is planned and adapted to enable children to broaden, deepen and accelerate their understanding and development of skills and knowledge.

Children are challenged to think at depth and deepen their learning. Our D&T curriculum is inclusive and promotes a growth mind set in all our children.

Extra support and interventions are provided for children as necessary and in line with our SEND policy.

Home Learning

Regular 'Parent Plans' are shared with parents and carers by each class teacher with guidance on home learning activities which will support learning.

Reporting

Regular Structured Conversations/Parents' Consultations are scheduled when pupils' progress and attainment are discussed and targets set. A formal written report is issued at the end of the academic year.

Health and safety

Whilst planning for the curriculum, teachers will give consideration to any relevant risks. If appropriate, these will be highlighted on planning and the appropriate documents completed to meet with health and safety regulations.

8. Roles and Responsibilities:

Leading

The teaching team in each school work collaboratively to lead and develop the D&T curriculum.

Monitoring

The headteacher, senior leadership team and governors monitor the effectiveness of the D&T curriculum.