Vaughan Primary School

Design and Technology Policy

Date of Policy: Spring 2023
Date of Review: Summer 2025

Next Review: To be reviewed bi annually

Review Date	Changes made
Spring 2023	Assessment Policy

The contribution of Design and Technology to the Primary Curriculum

At Vaughan Primary School, we provide opportunities for all pupils to develop their problem-solving skills and team work skills, while developing a variety of ideas, which lead to the making and evaluating of products. Through the study of Design and Technology pupils combine practical skills with an understanding of aesthetic, social and environmental issues. Using creativity and imagination pupils acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Through this curriculum pupils develop a critical understanding of how Design and Technology helps us in our daily lives and how it contributes to the creativity, culture, wealth and well-being of the nation.

Aims and Objectives

Our Design and Technology curriculum is based on the National Curriculum for Design and Technology which 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 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

Teaching and Learning

The Design and Technology curriculum is defined by the programmes of study in the National Curriculum. The content of the National Curriculum is implemented through the Projects on a Page Scheme of Work from the Design and Technology Association. All units are progressive and are designed to build on prior learning and experiences. The skills that are developed throughout the school include: designing, making, evaluating, developing technical knowledge and cooking nutrition.

The teaching of Design and Technology is based on developing these skills in relation to:

- Mechanisms
- Structures
- Food
- Textiles
- Mechanical systems
- Electrical systems

KS1 skills development focuses on:

Year 1	Mechanisms- sliders and levers	Structures- freestanding	Food- fruit and vegetables
Year 2	Textiles – templates and joining techniques	Mechanisms – wheels and Axis	Food- fruit and vegetables

KS2 skills development focuses on:

Year 3	Textiles- 2D shapes to 3D products	Mechanisms- pneumatics	Food- healthy and varied diet
Year 4	Structure- shell structures	Electrical systems- circuits	Food- healthy and varied diet
Year 5	Structures- frame	Electrical systems- monitoring and control	Food- seasonal/cultural

Year 6	Textiles- computer aided design	Mechanisms- cams	Food- seasonal/cultural

Assessment

Pupils progress is assessed informally and continuously during the lessons by the teacher, evaluating progress against the National Curriculum. We consider it important that progression is measured and ensured through skill development. The pupils will be encouraged to make personal assessments and peer assessments of their work through evaluating activities and identifying what they need to improve.

1. Assessment Approaches

At Vaughan we see assessment as an integral part of teaching and learning, and it is inextricably linked to our curriculum.

4.1 In-school formative assessment

Assessment for Learning (AfL) provides opportunities to elicit real-time evidence of what students are learning and involves both teacher and learners in ongoing dialogue, reflection on learning and decision-making. This formative assessment process is central to classroom practice. Teachers gather evidence of where the learners stand in their learning. They use this evidence to make the necessary instructional adjustments by providing constructive or quality feedback that moves learning forward. Teachers are expected to use this formative assessment to update our assessment tracker, Arbor, as they are teaching. Effective in-school formative assessment is the day-to-day assessment which is carried out by teachers and is key to effective classroom practice. It enables:

1. **Teachers** to identify how pupils are performing on a continuing basis and to use this information to provide appropriate support or challenge, evaluate teaching and plan future lessons
2. **Pupils** to measure their knowledge and understanding against learning objectives, and identify areas in which they need to improve
3. **Parents** to gain a broad picture of where their child's strengths and weaknesses lie, and what they need to do to improve

A range of day-to-day formative assessments will be used including, for example:

1. Rich questioning
2. Written and verbal feedback of children's work
3. Observations
4. Pupil self-assessments and peer assessments

5. Peer marking
6. Pupil conferences

4.2 In-school summative assessment

Effective in-school summative assessment enables:

1. **Senior Leadership Team** to monitor the performance of pupil cohorts, identify where interventions may be required, and work with teachers to ensure pupils are supported to make progress and attain personal learning goals
2. **Teachers** to evaluate learning at the end of a unit or period and the impact of their own teaching
3. **Pupils** to understand how well they have learned and understood a topic or course of work taught over a period of time. It should be used to provide feedback on how they can improve
4. **Parents** to stay informed about the achievement, progress and wider outcomes of their child across a period

Pupils at Vaughan are assessed periodically and progress and attainment data is recorded on the assessment system 'Arbor'. These assessments are carried out three times a year in December, March and July. Teacher Judgements on Arbor for the Wider Curriculum will relate to the National Curriculum age related expectations and will state whether a child is working, Pre Key Stage, Below age related expectation; At the Expected Standard, or at Greater Depth. These assessments are used to monitor the performance of individuals, groups and cohorts; to identify where interventions may be required; and to work with teachers to ensure that children are supported to achieve at least sufficient progress and expected attainment.

A range of in-school summative assessments will be used including, for example,

1. Short end of topic or unit tests or tasks
2. Reviews of progress against individual targets for pupils with SEN
3. Teacher judgements on Arbor relating to the National Curriculum age related expectations

Cross curricular planning

We believe Design and Technology provides a natural opportunity for pupils to practice and improve basic skills such as speaking and listening. It also enables pupils to apply and transfer knowledge and skills from Art, Science, Computing, Maths and English. Computing will be used wherever possible to enhance research and understanding for improving quality and finishing techniques.

Safety in Design and Technology

The pupils are made aware of the safe use and correct techniques, as specified in the Scheme of Work, when using tools and equipment in a learning environment and how to follow proper procedures for food safety and hygiene. The pupils build up a range of skills when using equipment to reduce unnecessary risk.

Resources

Most resources are located in the Design and Technology storage container, while some are in year group store cupboards. Resources are regularly monitored by the Design and Technology Subject Leader.

The Subject Leaders's role

- Lead the development of Design and Technology in the School.
- Provide support and guidance for staff.
- Keep up to date with national and local developments in Design and Technology.
- Be responsible for monitoring and evaluating the subject at school.
- Be responsible for ordering and the storage of tools and materials.