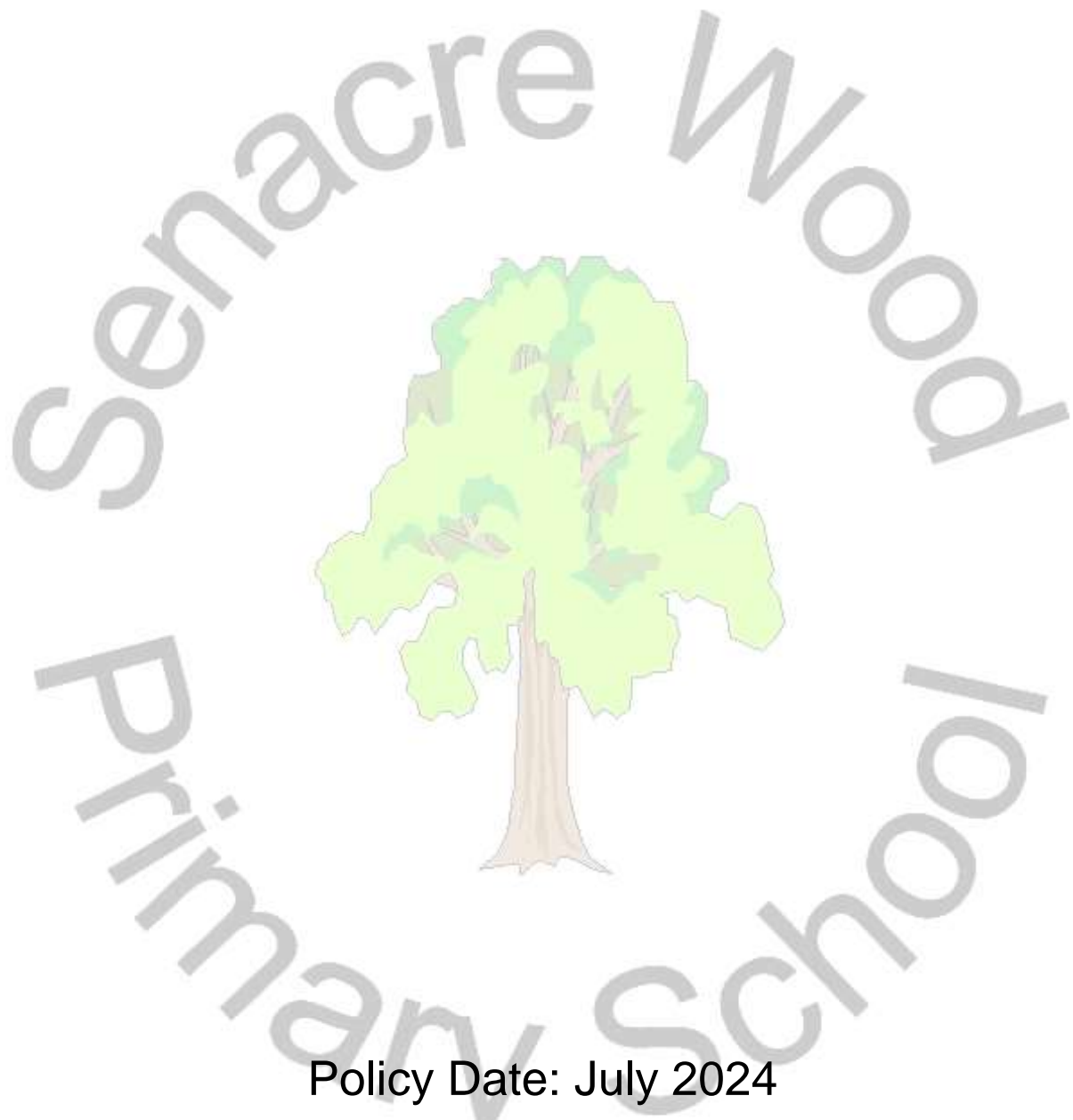# Design and Technology Policy

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Senacre Wood Primary School Design and Technology Policy

INTRODUCTION

The National Curriculum states that:

"Design and technology should be 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. Through the teaching of D.T, the pupils will acquire a broad range of subject knowledge and draw upon skills in mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the research and 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."

At Senacre Wood Primary School, we are committed to providing a broad design and technology education because we recognise that it provides pupils with a breadth of knowledge and problem solving skills that will support them in their future. We strive for all our pupils to be resilient and independent designers.

INTENT

At Senacre Wood Primary, we follow the aims of the National Curriculum 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.*

National Curriculum 2014

Using the national curriculum for design and technology, we aim to ensure that all pupils:

- Apply their creativity and problem solving skills during lessons.
- Build on prior knowledge when designing, creating and evaluating their design and technology learning.
- Make links between design and technology and other subjects, such as mathematics, science and art/ use their mathematical, scientific and artistic skills throughout design and technology lessons.
- Use vocabulary related to design and technology, in order to communicate, explain and ask questions.
- Feel confident to take risks, and make mistakes in their learning.

IMPLEMENTATION

At Senacre Wood Primary School, the National Curriculum aims and skills have been mapped out for each year group. These skills have been carefully selected to ensure that pupils are being taught a variety of design and technology skills, whilst drawing upon previous knowledge.

It is important for all design and technology units to cover all the key areas within the curriculum: design, make, technical knowledge, evaluate. These areas are taught in different units which cover different strands of design and technology, including structures, textiles, mechanisms, electrical systems and cooking and nutrition. These must be explored practically, as well as in verbal and written forms.

PLANNING

At Senacre Wood Primary School, teachers plan their design and technology to link with other enquiry subjects and 'big questions' (please see big question overview). Prior learning is explored through retrieval activities to ensure key knowledge is being retained. The national curriculum and skills progression form the basis of planning, guiding teachers what skills and knowledge need to be taught in each year group.

For some year groups, additional design and technology experiences are offered during STEM week (science, technology, engineering and maths), depending on the theme of STEM week, and the subjects being covered that week. The skills being taught are stated on individual cover pages, which are presented in the pupils Whole School Experience text books.

LESSONS AND ENVIRONMENT

Where possible, all classes teach design and technology across at least two of the school terms, however, some year groups teach three design and technology units. These can vary from morning/ afternoon sessions, or whole days covering the subject, such as in STEM week.

The following are included in design and technology lessons:

- Clear pupil speak 'I can' learning objectives with differentiation for all abilities used within the success criteria provided.
- Planned activities that encourage the development of skills, as well as retrieval activities to recall previous learning.
- Inclusive classrooms for all learners.
- It is clear that pupils understand what they are learning and how it links to previous knowledge.
- Opportunities are given to assess, feedback and move pupils' learning forward throughout a lesson.
- A range of questioning techniques used by class teachers, teaching assistants and support staff used throughout the lesson.
- Pupils are involved in accurate self and peer assessment both verbally and in written work.
- Opportunities for group, pair and individual work are given.

All KS1 and KS2 classes have a Seesaw folder to document any design and technology learning. For EYFS, any design and technology specific skills may also be tagged as 'Creating with Materials'. DT folders will be accessed either throughout the lesson, or afterwards. Alongside this, it is crucial that pupils have access to a range of materials and resources that will enhance and deepen their design and technology knowledge.

MARKING AND FEEDBACK

All children are entitled to regular and comprehensive feedback on their learning to enable them to become reflective learners and help them close the gap between current and expected performance. In design and technology, feedback should be completed during every lesson. This should include live marking within the lesson and could be completed as a whole class, in a small group or on a 1:1 basis. On occasions, peer assessment is used as a feedback tool.

Alongside this, design and technology learning can be uploaded to Seesaw whereby teachers can comment and extend pupils with their learning.

ASSESSMENT

Assessment is an integral part of teaching and learning and is a continuous process. To support this, teachers have an assessment grid, specific to the areas that they teach in their year group. The assessment grids track the pupil's progress and understanding across a range of assessment criteria objectives. This is updated alongside design and technology units, and is informed by practical work, observations of pupils' discussions (these are recorded on pink and green slips) as well as work in pupils' books and evidence uploaded onto Seesaw. Completed assessment grids can then be used to identify next steps and therefore inform planning.

DESIGN AND TECHNOLOGY IN EARLY YEARS FOUNDATION STAGE

EYFS planning is based on the Development Matters statements and the Early Learning Goals (ELG). EYFS staff, continually observe and assess children against these. Design and technology is intertwined with the Characteristics of Effective Learning and the 'creating with materials' ELG.

Teachers ensure that the children learn through a mixture of child initiated play and adult led activities, inside and outside of the classroom. The children will always be able to access a range of resources that will build on and challenge their design and technology knowledge; this is called continuous provision. Design and technology continuous provision is also led by the pupil's interests.

Alongside this, teachers will plan adult led activities to ensure all children are meeting the aims with the Early Learning Goals. Planned activities may feature during STEM week, as well as four other design and technology projects, linking to the enquiry of the term.

EQUAL OPPORTUNITIES AND INCLUSION OF ALL LEARNERS

Although the learning objectives are statutory, we acknowledge that when taking account of these, some objectives may take longer to achieve than others, depending on children's varying abilities. All children have equal access to the design and technology curriculum. Positive attitudes towards design and technology are encouraged, so that all children, regardless of race, gender, ability or special needs (including those for whom English is a second language) develop an enjoyment and confidence with design and technology.

We understand that some vocabulary specific to design and technology may need pre- teaching to some learners, as this will strengthen their understanding during design and technology lessons. At Senacre Wood Primary school, we value practical experiences, as they are a very effective educational tool and are essential for pupils with special educational needs.

IMPACT

At Senacre Wood Primary School, we aim for all learners to enjoy and have confidence in design and technology, with skills that can be applied to other areas of the curriculum. Our curriculum is broad and balanced, with clear intent and as well as a strong rationale for content selection. We measure the impact of our design and technology curriculum in a variety of ways. We use pupil voice to establish pupils' understanding of key concepts, as well as vocabulary and skills to assess their knowledge of practical techniques. Pupils' responses to the big question also provides evidence of knowledge gained throughout the enquiry.

ROLE OF THE DESIGN AND TECHNOLOGY SUBJECT LEADER

It is the role of the subject leader, along with SLT, to ensure the subject is monitored using a range of methods which inform the development of design and technology teaching and learning. Following monitoring,

outcomes are shared, with colleagues and relevant stakeholders, in a timely manner and areas for improvement are swiftly and effectively acted upon.

It is also the role of the design and technology subject leader to:

- To lead in the development of design and technology throughout the school.
- To monitor the planning, teaching and learning of design and technology throughout the school.
- To monitor the design and technology evidence being uploaded onto Seesaw.
- To help raise standards in design and technology.
- To provide teachers with support in the teaching of design and technology.
- To moderate teachers' assessment.
- To monitor and maintain high quality resources.
- To keep up to date with new developments in the area of design and technology, including relevant CPD and training.