Design and Technology Statement of Practice

Vision

Design and Technology at Wolverham Primary School is an inspiring, rigorous and practical subject where children learn to think creatively to solve problems. As Design Technologists, we develop our natural curiosity alongside extending our understanding and skills base. We encourage children to use their creativity and imagination, 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.
We have developed a well-planned and sequenced Design and Technology Curriculum which allows children to develop their skills and knowledge and build on what they have learnt within the previous year group.
We aim to, wherever possible, link work to other subjects such as mathematics, science, computing and art. The children also have opportunities to reflect upon and evaluate past and present designs, its uses and its effectiveness and are encouraged to become innovators and risk-takers.
Children will learn about a range of inventors and will also learn some basic cooking skills. They will be able to discuss the meaning of a balanced diet and will be able to explain the benefits of maintaining healthy eating habits.

Intent

We teach the learning objectives set out within the National Curriculum for EYFS, Key Stage 1 and Key Stage 2 and our pupils will meet the end of key stage attainment targets also outlined in the National Curriculum. However, our intent is always to transform this extensive list of knowledge into exciting and engaging Design Technology lessons.

As part of the Plan Bee Primary Design Technology scheme, each unit covers five or six lessons. We split the teaching of Design and Technology over the three terms. Within each unit, children are taught the three main stages of the design process: design, make and evaluate while each stage is underpinned by technical knowledge, encompassing, contextual, historical and technical understanding.

The six key areas in which the children revisit throughout are: Cooking and Nutrition which has its own areas of specific learning: skills and techniques with food, diet and seasonality and where food comes from. Textiles, Mechanisms, Structures and Electrical Systems (KS2 only, taught through the computing curriculum) and Digital world (KS2 only, taught through the computing curriculum).

Teachers have access to the Design and Technology resources which are stored in the year 5 classroom. Lessons are conducted in the classrooms and the children's work, documented ideas, and finished designs will be stored in floor books.

The Plan Bee units of work provide teacher notes, to support the staff with their own subject knowledge. This enables us to teach an effective Design Technology curriculum.

Implementation

<u>Memory Joggers</u>

Children are given a memory jogger to use as a visual aid throughout each unit of study. The memory joggers have **what the children should already know** (linking to the theme or unit from previous years and units), clear **knowledge end points**, key vocabulary and the **skills** they will explore and develop, all to support them whilst learning this a unit.

The memory jogger is stuck into the floor book and shared at the start of a lesson. Again, these are referred to at the start of a lesson. Teachers share and use the information on the memory joggers with pupils in every lesson and will then create a low stakes quiz for the end of each unit. Throughout the unit, recapping and checking of children's understanding of the key knowledge ensures this remains a focus.

Vocabulary

The vocabulary is progressively sequenced across year groups in order for the children to develop using language that will help them to explain significant and complex events that have taken place as well as understand the key concepts. For every unit, key words or phrases are also chosen that are specifically linked to the study.

Retrieval Strategies

In order for the children's substantive knowledge to be embedded in their long term memory, a variety of retrieval activities are incorporated into every lesson. Flashbacks are used at the start of each lesson that will revise previous learning from other year groups as well as units taught that year. Staff then use this to support with any misconceptions or address at the start of the next lesson. These also help children make links across year groups and enable the them to identify where they are transferring previously taught knowledge and skills.

Staff also use the floor book as a retrieval tool. During each lesson, they make reference to the floor book and show the children work they have previously completed and then how the new learning links to this.

Impact

At Wolverham, the children are aware that what they are learning is purposeful and helping them to become broadminded and kind individuals in order for them to be successful in later life. As a result, children celebrate diversity and differences instead of segregation and exclusion; they recognise that they should treat others how they want to be treated; linking their studies to similar issues that are going on in the world today so that they know how they should approach or feel about it. Children have a sound understanding of what they have learned and why it is important.

Assessment of Learning

During a unit, retrieval strategies are used for teachers to continually assess children's knowledge and understanding of subject matter and their ability to put it into context.

They are used as regular check-ins for the children to define their design and technology vocabulary and make links to prior learning.

End of unit evaluations

From Year 1 to Year 6 children evaluate their work through discussions or written evaluations. The evaluations will encourage the children to be reflective of their practice and carefully consider what they would change in the future. The teacher would make notes as to anything they found difficult and use this for future teaching.

Marking and Feedback

Independent work is monitored throughout the lesson and feedback provided in a 'live' manner. For example, if the children are asked to independently answer questions, feedback and answers will be provided to the whole class. Often, whole class discussions take place during this time as the children are taught to be broadminded and think like inventors, which involves considering opposing viewpoints and alternative interpretations.

Children know that expectations of handwriting, spelling and presentation remain just as high in design and technology lessons as in any other subject.