DESIGN AND TECHNOLOGY

Intent, Implementation and Impact

Intent

At Bishops Nympton Primary School our Design and Technology curriculum intent **take**s **into consideration:**

- **The ethos, vision, and values of our school.**

- **The specific areas of development for our school.**

- **Relevant national strategies.**

- **What we want the children to learn.**

The Design and Technology curriculum at Bishops Nympton Primary School aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. We aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements. Our Design and technology curriculum enables pupils to meet the end of key stage attainment targets in the National curriculum and the aims also align with those in the National curriculum. In the EYFS (Reception) opportunities will be provided for pupils' to work towards the Development matters statements and the Early Learning Goals.

Implementation

At Bishops Nympton Primary School the Kapow Design and Technology scheme of work is used to support the delivery of the Design and Technology curriculum across Years 1-6. Within the Early Years planning and delivery of Design and Technology is woven into the topics and themes outlined in the rolling programme (Rotation 1 and Rotation 2). Coverage and outcomes are planned and assessed against the Development Matters Statements and Early Learning Goals.

At Bishops Nympton Primary School the Design and Technology curriculum is delivered as a two-year rolling programme (for Years 1-6).   The two-year rolling programme ensures that the units cover each of the National curriculum attainment targets as well as each of the key strands:

- Design
- Make
- Evaluate
- Technical knowledge

Cooking and nutrition is given a particular focus in the National curriculum and we have made this one of the six key areas that pupils revisit throughout their time at Bishops Nympton Primary School. The six key areas of study within our Design and Technology curriculum are:

- Cooking and nutrition
- Mechanisms/ Mechanical systems
- Structures
- Textiles
- Electrical systems (KS2 only)
- Digital world (KS2 only)

Staff are able to reference a 'Progression of knowledge and skills' document, aligned to the scheme of work, which shows the skills that are taught within each year group and how these skills develop to ensure that attainment targets are securely met by the end of each key stage.

Through our Design and Technology curriculum, pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in the six key areas. Each of our key areas follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum.

Our curriculum is spiral, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning. Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiation is used to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required.

Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary. Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust Design and Technology curriculum. The Kapow Primary scheme of work includes multiple teacher videos to develop subject knowledge and support ongoing CPD.

Impact

The impact of the Design and Technology curriculum at Bishops Nympton Primary School can be constantly monitored through both formative and summative assessment opportunities. Each lesson is recorded with a learning objective identified, against which pupils can be assessed. Each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit.

Pupils should leave Bishops Nympton Primary school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society. The expected impact of following the Bishops Nympton Primary School Design and Technology curriculum is that children will:

★ Understand the functional and aesthetic properties of a range of materials and resources.

★ Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.

★ Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.

★ Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.

★ Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.

★ Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.

★ Self-evaluate and reflect on learning at different stages and identify areas to improve.

★ Meet the end of key stage expectations outlined in the National curriculum for Design and technology.

★ Meet the end of key stage expectations outlined in the National curriculum for Computing.