The Intent, Implementation and Impact of our Curriculum – Design and Technology

The 2014 National Curriculum for Design and Technology aims to ensure that all children:

- 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.

Intent

At our school we intend that children should master Design and Technology to such an extent that they can go on to have careers within Design and Technology and make use of design and technology effectively in their everyday lives. Our children will be taught Design and Technology in a way that ensures progression of skills, and follows a sequence to build on previous learning.

We strive to inspire pupils 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. They gain an understanding of existing products and systems and are given opportunities to respond with innovative, appealing solutions, working independently and collaboratively to generate and develop ideas. The evaluation of past and present Design and Technology encourages pupils to develop a critical understanding of how products impact on daily life and the wider world.

Our children will gain experience and skills of a wide range of the formal elements and concepts of Design and Technology in a way that will enhance their learning opportunities, enabling them to use design and technology process across a range of subjects to be creative and solve problems, ensuring they make progress.

Our objectives in the teaching of design and technology are:

- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making things;
- to enable children to talk about how things work, and to draw and model their ideas;
- to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- to explore attitudes towards the made world and how we live and work within it;
- to develop an understanding of technological processes and products, their manufacture and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making things for a purpose;
- to develop the cross-curricular use of design and technology in other subjects.

Implementation:

The teaching and implementation of the Design Technology Curriculum at Holy Trinity Primary School is based on the National Curriculum. We have a two-year rolling cycle and follow 'Kapow Primary' scheme of work. Kapow Primary supports the national curriculum expectations and is designed to show development and progression of skills across the key stages. Throughout the school year, class teachers may provide extra opportunities to further develop D&T skills, for example, during a subject-specific focused week. Class teachers are usually responsible for teaching Design and Technology, although there will be times when professionals will be involved in the teaching of the topic.

At Holy Trinity, we pride ourselves on our strong relationships with parents and carers. Wherever possible, children showcase their learning. Our children have a sense of pride and achievement in their real, relevant and appealing products.

Children will be given opportunities to work within the three principal areas of development.

- Investigation, disassembly and evaluative activities
- Focused practical tasks
- Design and make assignments

The key areas of learning focused upon through Kapow Primary are:

- Mechanisms
- Electrical systems
- Cooking
- Textiles
- Digital world
- Nutrition

Through these key areas the children have opportunities to create, explore, apply and problem solve.

Impact

The impact of Kapow Primary's scheme can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. Furthermore, each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit.

After the implementation of Kapow Primary Design and technology, pupils should leave 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 Kapow Primary Design and technology scheme of work

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.