Firs Primary School

**Design and Technology Policy**

Reviewed February 2020

**The Purpose of the Design and Technology Policy**

This policy outlines the teaching and learning of design and technology. All children will have the opportunity to undertake design and technology throughout their time at Firs Primary School. The teaching of design and technology is planned to ensure a progression of knowledge and skills across the foundation and primary phases.

**Aims (Intent)**

At Firs Primary School we ensure thorough coverage of the National Curriculum objectives for design and technology, providing opportunities for children to develop their knowledge and skills in the areas of design, making, evaluating, technical knowledge and cooking and nutrition. Our aims are that:

* Through a variety of creative and practical activities, pupils are taught the knowledge, understanding and skills needed to engage in an iiterative process of designing and making. They work in a range of relevant contexts. Children develop skills in designing, evaluating, making and technical knowledge.
* Children will also learn a crucial life skill through learning about nutrition and food. Pupils will be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity.

In addition, we aim to provide further opportunities for personal, spiritual, moral, social and cultural development through the teaching of design and technology by:

* Ensuring that children develop a greater awareness of current environmental issues through the study of the impact of modern methods of food production on the environment
* A specific emphasis on the development of vocabulary and oracy relevant to design and technology and in wider contexts, through the incorporation of discussion and vocabulary-based tasks in D&T lessons.
* Building cultural capital for our pupils by developing cross curricular links with other subjects, for instance Art and Design and History, exposing them to the best that has been said and done in the field of design and technology e.g. the opportunity to study the work of great architects and engineers including Isambard Kingdom Brunel and Cornelius Drebbel.
* Providing extra-curricular opportunities to enable children to further build upon their interests and talents in the area of design and technology e.g. children have the opportunity to take part in a STEAM club ‘Destination Imagination’ in which children have the opportunity to work scientifically, building on the skills learned in DT, outside of the classroom, working with other children and in different settings.

**Implementation**

Progression Guidance from the school’s academy (DDAT) has been used in conjunction with the school’s own EYFS progression guidance document to ensure that skills and knowledge in design and technology are built systematically on what children have learned in the previous key stage. Learning is revisited throughout each phase ensuring a secure foundation of skills and knowledge is in place, to prepare children for the transition to Key Stage 3.

A design and technology knowledge and skills map has been created (see appendix), which identifies the key learning and vocabulary to be taught within each topic across the school. This enables teachers to identify prior learning required for each topic and supports their planning for children working below or towards age related expectations. For each topic, staff are provided with a topic book outlining the key skills, knowledge and vocabulary – this supports teachers to recognise and build upon cross curricular links.

Design and Technology is taught for at least six half terms in every two-year topic cycle. It is taught this way in order to ensure that children benefit from meaningful cross-curricular links, which provide a context and purpose for their learning. Within the designated half termly topics, design and technology is taught as frequently as is necessary to deliver the objectives of the National Curriculum in each phase.

Lessons are adapted to meet the needs of pupils with special educational needs and/or disabilities (SEND) or those with English as an additional language (EAL) through a variety of methods, for example the use of visual communication software (Communication in Print), word banks, differentiated equipment and materials, pre-teaching, additional adult support or focused small group work.

Children who require interventions to support their learning in other areas of the curriculum will have these at different times each week to ensure that they never frequently miss the same subject lesson. They are never withdrawn from class during teaching inputs.

**Assessment and Recording of Work**

Teachers use formative assessment throughout lessons (e.g. observations and assessment) and adapt teaching accordingly to address any misconceptions that may arise. Also, at the end of the topic, teachers complete a summative assessment based on whether children have demonstrated through their work that they have met the national curriculum objectives and progression guidance for their phase. This helps the subject leader to monitor progress and attainment in design and technology across the school.

Children in the Early Years Foundation Stage (Reception and Nursery) are assessed using the Early Years Development Matters guidance and at the end of the reception years against the Early Learning Goals. EYFS objectives within the areas of communication and language development, physical development, personal, social, and emotional development, mathematics, understanding the world and expressive arts and design all contribute to laying the foundations for effective learning in design and technology throughout the primary phase.

A variety of methods are used to record work in design and technology, including pictures, structured worksheets, sketches, diagrams, flow charts, model making, written explanations, photographs, school displays and the occasional video recording. Work may be recorded in individual topic books, or in whole class topic books. Design and technology is a largely practical subject and there is no expectation that work is recorded for every lesson. Evidence shows that instant verbal feedback is the most effective form of feedback and this is prioritised in design and technology lessons, although work carried out in books should be marked in acknowledgement.

**Resources**

Some resources for the teaching of design and technology are held in a central store, these include equipment used for teaching food technology, mechanical and electrical products and computer programming.

Phase teams also have their own annual budget which allows them to purchase any additional materials and equipment they may need to deliver the national curriculum objectives.

**Safety in Design and Technology**

The safety of the children is the responsibility of the class teacher. The children are made aware of the safe use and correct procedure involved when using tools and equipment in a learning environment and how to follow proper procedures for food safety and hygiene. The children are made aware of the need to be careful and to understand that their actions can affect others. The children build up a range of skills when using equipment to reduce unnecessary risk.

* Rotary cutters are to be used with a safety ruler
* Craft knives are used only by 5/6 under direct supervision of an adult
* Glue guns are used (low temperature) under supervision.

All staff, including helpers, are made aware of food safety procedures when working with food to minimise any risks. The children wear protective clothing if necessary.

**Monitoring and Review**

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader. The work of the subject leader also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The design and technology subject writes an annual report in which she/he evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. The design and technology subject leader has specially-allocated, regular management time in order to review evidence of the children's work and undertake lesson observations of design and technology teaching across the school.

The application of this DT policy will be monitored by the curriculum leaders and reviewed and agreed by Governors Spring 2021.

**Appendix: Design and Technology Knowledge and Skills Map**

















