Firs Primary School

Design and Technology

Intent

♦ Through a variety of creative and practical activities, pupils are taught the knowledge, understanding and skills needed to engage in the iterative process of designing and making. They should work in a range of relevant contexts throughout their project to develop their critical thinking, problem solving as well as their innovative and creative skills. Children will develop skills in designing, evaluating, making and technical knowledge.

♦ In addition, children will 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.

How do we tailor learning to meet the needs of our pupils?

• Vocabulary: For each design and technology unit, key vocabulary is identified and is split in to three sections: tier 1, tier 2 and tier 3. These are then displayed on topic walls and children are encouraged to use them in context throughout the lessons.

• We aim to build cultural capital by exposing children to the best that has been thought, written, said and done. We will do this by exploring key inventions and inventors that made a significant impact to society.

• Developing acceptance, tolerance and ideas of equality by learning about key figures in the subject to reflect genders and diverse ethnicities and cultures.

• Opportunities to develop oracy: Children are given opportunities to discuss their ideas and reflect on their projects. Teachers encourage children to enquire and ask questions about materials and solve problems that arise.

Extra curricular activites: We run a baking club which allows children to follow recipes, measure ingredients and explore different flavours. We also run a sewing and knitting club for children to develop their love of textiles. They practice basic sewing techniques as well as making their own design choices.

Implementation

How do you ensure that the sequence of learning supports children to embed and retain learning? How does EYFS feed into KS1, and how does KS1 underpin the KS2 curriculum, how does KS2 prepare children for the next phase of their education?

To ensure staff are equipped with the knowledge required to teach the subject well, staff questionnaires reflect which identifies which areas staff may need support with which will then be offered to them. In addition, there is an open dialogue within teams to encourage CPD. Our progression grids give clear guidelines on what should be taught.

Core skills and knowledge: Design and technology's national curriculum aims are cyclical. Therefore, each area (making, designing, evaluating, technical knowledge, nutrition and cooking) are covered within each key stage. However, the skills that are previously taught are built on and developed when revisited. Topic on a page documents have been created to ensure progression and guide teachers on which aspect of the curriculum they are covering.

Timetabling and rationale:

Throughout our 2 year cycle, KS1, LKS2 and UKS2 will complete at least 6 projects. There are many opportunities for children to consolidate their learning through cross– curricular learning of PSHE, computing, science and art.

How do you adapt and tailor your curriculum from children's different starting points?

Monitoring progress: Teachers use formative assessment throughout lessons 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 meeting the curriculum objectives. When planning, teachers will identify which skills children will have covered in previous year groups. If teachers have children who were not at school for this learning, they will begin their topic with that learning to ensure children do not miss objectives.

How is learning recorded?

Learning can be recorded in whole class topic books or in topic books, depending on the nature of the lesson. This may be reflected through pictures and annotations to explain the learning during the lesson.

Impact

Monitoring: Design and Technology will be monitored through book looks, staff voice, pupil voice, lesson walkthroughs and data analysis. This may be complete by SLT, MLT or the Design and Technology lead.

Knowledge retention: As skills build on each other each year, Design and Technology begins each lesson with retrieval practice around previous learning. This may be practical to test if skills have been mastered before continuing. It may be question based to encourage children to retrieve key information about an area of design and technology. It may also be an activity to gauge children's design, evaluate or making skills.

What do we hope to see for our disadvantaged and SEND children? We hope that, through the engaging practical and real life application, our disadvantaged and SEND children are encouraged to develop skills that can support their independence throughout their life. Design and Technology offers children an opportunity to be successful and develop skills that can inspire children to explore various job opportunities.