9/1/2022

Hillstone Primary School

Design and Technology Policy 2022

Intent:

Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. At Hillstone Primary School 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 aim to, wherever possible, link Design and Technology work to class topics. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

Implementation:

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children design and create products that consider function and purpose and which are relevant to a range of users. Children will design and make a range of products. A good quality finish will be expected in all design and activities made appropriate to the age and ability of the child.
When designing and making, the children are taught to:

Design:
• use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals/groups.
• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer-aided design.

Make:
• select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing, as well as chopping and slicing) accurately.
• select from and use a wide range of materials, ingredients and components, including construction materials, textiles and ingredients, according to their functional properties, aesthetic qualities and, where appropriate, taste.

Evaluate:
• investigate and analyse a range of existing products.
• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
• understand how key events and individuals in design and technology have helped shape the world.

Technical knowledge:
• apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
• understand and use mechanical systems in their products.
• understand and use electrical systems in their products.
• apply their understanding of computing to program, monitor and control their products
• Understand some of the ways that food can be processed and the effect of different cooking practices (including baking and grilling).

Key skills and key knowledge for D and T have been mapped across the school to ensure progression between year groups. The context for the children's work in Design and Technology is also well considered and children learn about real life products and consider a real purpose for their design.. Design and

technology lessons are often taught as a block to allow children to become fully absorbed in the design process.

Impact

Through their experience of Design and Technology at Hillstone children will learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. By evaluating past and present design and technology, they will develop a critical understanding of its impact on daily life and the wider world. The skills developed through Design and Technology will allow children to make an essential contribution to the creativity, culture, wealth and well-being of the nation.

We ensure the 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 products for a wide range of users and critique, evaluate and test their ideas and products and the work of others
• develop crucial life skills by understanding and applying the principles of a healthy and balanced diet and by learning how to cook a range of predominantly savoury dishes.

Early Years

Children in the Early Years at Hillstone enjoy developing their early designing and making skills through a wide variety of adult and child initiated activities. This approach encourages children to be creative and curious thinkers and allows them to develop many of the problem solving and skills essential to later learning in D and T. Through practical and play based activities children will learn how to plan and make decisions about how to approach a task, explore a wide range of materials when constructing and learn how to cut and join materials and objects safely and effectively. Children will also be encouraged to develop good hygienic practises when handling food and to be safe when preparing and cooking ingredients. Pupils will be supported in reviewing their activities and changing strategy when needed.

Planning And Our Creative Curriculum

At Hillstone Primary School work is based around a topic. Each topic incorporates a range of subjects including science, history, geography, art, ICT and PE, as well as many opportunities to link literacy and numeracy. Topic maps can be found on the Staff Share file in Hillstone Curriculum. D and T projects are linked to class topics or a special event (e.g. World Book Day).

There is a programme of study for Design & Technology in place from Year 1 through to Year 6 that is taught through our creative curriculum planning. Children in the Early Years develop their early designing and making skills through activities related to objectives in the EYFS framework.
Teachers from EYFS to Year 6 will ensure full coverage of DT skills appropriate to their year group through the D&T projects planned.

Children with SEND
We teach D and T to all children, whatever their need, in accordance with the school curriculum policy of providing a broad and balanced education to all children.

Delivery

- The children should experience planning, practical and evaluation activities on a regular basis throughout each topic. Children should be encouraged to view evaluation as a continuous process and adapt and refine their designs as they work.

- The D&T curriculum is arranged to develop skills and ensure children make progress year on year.
- D&T projects are organised ensuring progress and breadth.
- There should be regular opportunities for children to showcase their work and discuss how their products were made and how they work.

Record Keeping, Assessment and Reporting

Formative assessment is used to guide the progress of individual pupils in Design and Technology. It involves identifying each child's progress in each aspect of the curriculum, determining what each child has learned and what should therefore be the next step in their learning. Formative assessment is mostly carried out informally by the teachers in the course of their teaching and should be based on the identified assessment opportunities.
At Hillstone Primary a Design and Technology skills passport is used from Year 1-6 to help teachers make judgements when assessing their class at the end of a project. Teachers record their assessments using Balance and identify which children are working at the "expected" level or above or below.

Monitoring

The D and T subject leader is responsible for the standard of children's work and for the quality of teaching in D and T. The work of the subject leader also involves supporting colleagues in the teaching of D and T, being informed about current developments in the subject and providing a strategic lead and direction for the subject in the school. The D and T subject leader is responsible for giving the head teacher an annual summary report which evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. Teaching and learning for D and T is monitored via A3 evidence pages, skills passports and photographs. Each term every teacher is asked to create an evidence page using photographs and examples of children's work. These are then collated in the D and T evidence folder for that academic year. These evidence folders provide the basis of the D and T subject leader's monitoring. They also provide useful support for teachers when delivering D and T as they can be used for ideas and guidance, especially if a teacher is new or has not taught a year group before.

Cooking @ Hillstone

At Hillstone we believe that children should be given the opportunity to develop healthy eating habits and gain vital life skills by learning how to prepare, cook and taste a wide variety of healthy ingredients and dishes. Through D and T children will be designing, making and evaluating their own healthy dishes. A food focused project is planned for every year group from Year 1-6. In the EYFS children are able to explore food focused activities regularly throughout the year.

In addition to the D and T projects children at Hillstone are able to access opportunities for cooking and tasting healthy ingredients as our school Chef leads enrichment activities at various points in the year. These activities are intended to enhance the children's experiences of healthy eating and cooking skills and are carried out in addition to their D and T food focused projects.

The Hillstone allotment is often used as the source of fresh ingredients for our cooking activities. Through growing their own produce and then using it as part of their designs children gain an invaluable understanding of seasonality and where our food comes from.

Health and Safety

Risk assessments for D and T activities can be found on the Staff Share file within the Design and Technology folder. These cover risks associated with using tools, kitchen utensils, sewing equipment and food hygiene. Teachers are expected to consider the risks associated with their planned project before undertaking any practical activities.

Date reviewed: September 2022
Date of next review: September 2023