Glen Hills Primary School

Design Technology

Statement of Intent

"Design is a funny word. Some people think design means how it looks. But of course, if you look deeper, it's really how it works."

Steve Jobs

"Technology makes possibilities. Design makes solutions."

John Maeda

Intent

At Glen Hills Primary School, we aim to provide all children with a curriculum which prepares them for life beyond primary education. 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. Design Technology is an inspiring, rigorous and practical subject. It can be found in many of the object's children use each day and is a part of children's immediate experiences. Design Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team and help develop their perseverance and resilience.

At Glen Hills the Design Technology curriculum combines skills, knowledge, concepts and values to enable children to tackle real problems. It can improve analysis, problem solving, practical capability and evaluation skills. We aim to, wherever possible, link work to other disciplines such as mathematics, science, engineering and art. The children are encouraged to become innovators and risk-takers.

Implementation

All teaching of DT follows the design, make and evaluate cycle. The design process should be rooted in real life, relevant contexts to give meaning to learning. They are given the opportunity to research current designers, how their products are manufactured, understand tools and techniques used in different industries and how to apply cooking skills in all cooking. While making, children are given choice and a range of tools to choose freely from. To evaluate, children are able to evaluate their own products against a design criterion. Each of these steps should be rooted in technical knowledge and vocabulary. The children at Glen Hills work responsibly and with regard to how others around them are working. They have respect for other people's views and different designs; being positive about everyone's achievements. The children understand that they have personal freedoms with the creativity of their designs and they are always encouraged to use their resilience and perseverence.

Early Years Foundation Stage:

During the EYFS, pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities. They have the opportunities to learn to:

- Use different media and materials to express their own ideas.
- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose.
- Make plans and construct with a purpose in mind using a variety of resources.
- Develop skills to use simple tools and techniques appropriately, effectively and safely.
- Select appropriate resources for a product and adapt their work where necessary.
- Cook and prepare food adhering to good health and hygiene routines.

KS1:

Design:

- Design should be rooted in real life, relevant contexts to give meaning to the learning.
- Planned through appropriate formats: drawing, templates and talking.

Make:

- Children should be given a range of tools for their project to choose from.
- Children should use a wide range of materials and components; textiles, construction equipment and ingredients.

Evaluate:

- Evaluate existing products.
- Evaluate their own product against design criteria.

KS2:

Design:

- Rooted in real life, relevant contexts to give meaning to learning.
- Researched designs based on functional, appealing products with purpose.
- Planned by appropriate methods; annotated sketches, prototypes and pattern pieces.

Make:

- Children can select from a wider range of tools than KS1.
- Children should use from and select a wider range of materials and components, textiles, construction equipment and ingredients.

Evaluate:

- Evaluations should be in comparison to existing products.
- Children should evaluate against a design criterion.

- Children should understand how events and individuals have helped shape design and technology globally.

Key skills and key knowledge for DT have been mapped across the school to ensure progression between year groups. This also ensures that there is a context for the children's work in Design Technology; that they learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study. Alongside this, a subject specific staff meeting has helped teachers become more aware of the progression of DT throughout the whole school which has helped any areas of DT, or teachers, that require further or ongoing support. This has also helped with ongoing re-development of the DT curriculum.

At Glen Hills there have been many extra-curricular DT activities that have taken place and have engaged and inspired the pupils. A whole school homework 'The Great Glen Hills Bake Off' where the winners of each year group were able to make their final design. There are regular after school cooking clubs run by teachers and parent volunteers; parents have been willing to contribute to the cost of ingredients for these clubs. Mrs Lowry, the school's head cook has run a cooking club using the government's Food for Life scheme. Craft clubs for different year groups run after school or at lunchtime's again run by teachers or parent volunteers. A STEM activity was organised with Glen Hills and Rolls Royce Aerospace, where a team of engineers and a small group of GDS year 5's were able to take part in a workshop to rebuild models of a turbine engine, found out about the company and had a challenge to design the best paper aeroplane.

Impact

- Children will have clear enjoyment and confidence in design and technology that they will then apply to other areas of the curriculum.
- Children will ultimately know more, remember more and understand more about Design Technology, demonstrating this progression of skills, knowledge and understanding when using tools or skills in other areas of the curriculum and in opportunities out of school.
- The majority of children in each year group will be working at or above age related expectations.
- As designers, children will develop skills and attributes they can use beyond school and into adulthood.