



HARROWBARROW SCHOOL

Curriculum Intent Statement: DT

Curriculum Intent

At Harrowbarrow School, we see that every child can achieve in design and technology and that **every child is a designer**. We value design and technology as an important part of the children's entitlement to a broad and balanced curriculum, which encourages children to follow their passions and interests, whatever they are. We understand that our world is ever changing and will be even more different as our pupils reach adulthood. Our aim within design and technology is to create future designers who can participate successfully in an increasingly technological world. Most importantly, our designers will consider the benefits of ethically and sustainably sourced materials and techniques in their designs, to benefit the future of our planet.

Children at Harrowbarrow School will:

- Develop creative, technical and imaginative thinking,
- Talk about how things work and develop their technical knowledge,
- Apply a growing body of knowledge, understanding and skills in order to design and make prototypes and products for a wide range of users,
- Select appropriate tools and techniques when making a product, whilst following safe procedures,
- Develop an understanding of technological processes and products, their manufacture and their contribution to our society,
- Gain enjoyment, satisfaction and purpose in designing and making things,
- Critique, evaluate and test their ideas and products, and the work of others,
- Understand and apply the principles of nutrition and to learn how to cook,
- Understand how key events and individuals in design and technology have helped shape the world.

Implementation

Design and technology is taught as part of a termly topic, focusing on knowledge and skills stated in the Early Years Foundation Stage and the National Curriculum. When teaching design and technology, teachers should follow the children's interests to ensure their learning is engaging, broad and balanced. At Harrowbarrow, we provide a variety of opportunities for design and technology learning to take place inside and outside the classroom.

Our provision of design and technology may include, but will not be limited to, the following opportunities;

- Food technology and nutrition
- Gardening and growing produce
- Textiles
- Woodwork

Impact

Within design and technology, we strive to prepare children to take part in the development of tomorrow's rapidly changing world. We aim to encourage children to become creative problem-solvers, both as individuals and as part of a team. Through the study of design and technology, children combine practical skills with an understanding of aesthetic, social and environmental issues, as well as of functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impact. Our design and technology curriculum is high quality, well thought out

and is planned to demonstrate progression. We focus on progression of knowledge and skills and discreet vocabulary progression also form part of the units of work.

We measure the impact of our curriculum through the following methods:

- Assessing children’s understanding of topic linked vocabulary before and after the unit is taught.
- Displays of children’s practical learning.
- Interviewing the pupils about their learning.

Design Technology End of Year Targets

Progression from Year 1 to Year 6

By the end of Year 1 children should be able to:
Use own ideas to make something.
Describe how something works.
Cut food safely.
Make a product which moves.
Make their model stronger.
Explain to someone else how they want to make their product.
Choose appropriate resources and tools.
Make a simple plan before making.

By the end of Year 2 children should be able to:
Think of an idea and plan what to do next.
Choose tools and materials and explain why they have chosen them.
Join materials and components in different ways.
Explain what went well with their work.
Explain why they have chosen specific textiles.
Measure materials to use in a model or structure.
Describe the ingredients they are using.

By the end of Year 3 children should be able to:
Prove that their design meets some set criteria.
Follow a step-by-step plan, choosing the right equipment and materials.
Design a product and make sure that it looks attractive.
Choose a textile for both its suitability and its appearance.
Select the most appropriate tools and techniques for a given task.
Make a product which uses both electrical and mechanical components.
Work accurately to measure, make cuts and make holes.
Describe how food ingredients come together.

By the end of Year 4 children should be able to:
Use ideas from other people when they are designing.
Produce a plan and explain it.
Evaluate and suggest improvements for their designs.
Evaluate products for both their purpose and appearance.
Explain how they have improved their original design.
Present a product in an interesting way.
Measure accurately.
Persevere and adapt their work when their original ideas do not work.

Know how to be both hygienic and safe when using food.

By the end of Year 5 children should be able to:

Come up with a range of ideas after collecting information from different sources.

Produce a detailed, step-by-step plan.

Suggest alternative plans; outlining the positive features and draw backs.

Explain how a product will appeal to a specific audience.

Evaluate appearance and function against original criteria.

Use a range of tools and equipment competently.

Make a prototype before making a final version.

Show that they can be both hygienic and safe in the kitchen.

By the end of Year 6 children should be able to:

Use market research to inform their plans and ideas.

Follow and refine their plans.

Justify their plans in a convincing way.

Show that they consider culture and society in their plans and designs.

Show that they can test and evaluate their products.

Explain how products should be stored and give reasons.

Work within a budget.

Evaluate own product against clear criteria.