 

Intent, Implementation and Impact Statement for

Design Technology

# INTENT

Design and technology is a creative and practical subject. It allows pupils to think creatively when solving problems both as individuals and alongside others. At Fowey School, we encourage pupils 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 learning to other curriculum areas such as maths, English, science, computing and art. Pupils are given opportunities to reflect upon and evaluate past and present well-known design technology pieces, their uses and overall effectiveness. Using the design and making process as well as learning from well- known designers and engineers, pupils are encouraged to be ambitious when innovating their own designs.

# IMPLEMENTATION

Through a variety of creative and practical activities, inspired by Kapow Primary, we teach the knowledge, understanding and skills needed to engage in an interactive process of design and making. Pupils work in a range of relevant contexts (for example home, school, leisure, culture, enterprise, industry and the wider environment). Through the evaluation of past and present design and technology, pupils develop and critical understanding of its impact on daily life and the wider world.

When designing and making, the pupils are taught to:

## Ask

*Getting to the root of the problem.*

* Through discussion of the following questions a clear understanding is reached of the problem that needs to be solved.
* Who is impacted by the problem? What results are we trying to achieve? Are there any constraints or limitations?

## Imagine

*What ways can I solve this problem? What existing products are there already?*

* Generate a range of ideas to solve the problem from multiple sources
* Use research to discover how existing products have solved the problem area
* To find out how others have solved both related and unrelated problems can lead to innovative solutions.

## Plan

*What will I include in my design? What is the design criteria?*

* Select the best ideas to explore further
* Generate design drawings and sketches
* Develop designs for a prototype and consider where the design may fail and things how could be made most efficiently.

## Create

*How will I make the product? What materials will I use? What tools will I need? Do I know how to use the tools safely?*

* Bring ideas to life by building a prototype
* Use appropriate tools for the issue trying to be resolved.

## Test

*Does it work? Is it effective?*

* Gain feedback and insight from putting the prototype to use
* Ensure the prototype is tested many times and results are recorded
* Collect accurate feedback to inform evaluation.

## Evaluate

*What are the strengths? What are the weaknesses? How could I improve it?*

* Use the test results to identify improvements
* Showing an understanding and evidence of what the improvements could be.

# IMPACT

In 2022, 90% of Year 6 pupils met the expected standard.

## Subject Leader monitoring has shown...

* + Teachers plan lessons that meet the needs of all learners
  + Teachers are secure in their subject knowledge
  + Pupils talk with a passion about Design and Technology
  + Evidence of cross curricular links especially in Computing and Maths
  + Pupils take pride in their work during Design and Technology leading to successful outcomes
  + Pupils of all abilities feel success in Design and Technology lessons
  + Pupils are engaged in a wide range of Design and Technology activities
  + Pupils are completing appropriate work in books, linked to the LO and desired outcomes.

## Impact of DT at Fowey School is carefully tracked and measured by…

* + Pupil conferencing focused on Design and Technology
  + Ongoing observation of the teaching of Design and Technology across all year groups
  + Regular monitoring of pupils’ Gold Books – successes and feedback shared with teachers
  + Learning walks to monitor the quality of teaching
  + Ongoing monitoring of short term and midterm planning
  + The quality of pupil outcomes at the end of a Design and Technology project through pupil evaluation
  + Termly teacher assessment of pupils’ attainment in Design and Technology using Insight
  + Continuous formative assessment during the teaching of Design and Technology.

 

By the time pupils leave our school they will have:

* Developed the creative, technical and practical expertise needed to perform everyday tasks confidently.
* Built and applied a repertoire of knowledge, understanding and skills in order to design and make high- quality prototypes and products for a wide range of users having critiqued, evaluated and tested their ideas and products as well as the work of others.
* Acquired an understanding of and be able to apply the principles of nutrition and how to cook. Pupils will have designed and made a range of products.

Pupils will have learned how to take calculated risks in their designs; becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they will leave us having developed a critical understanding of this subject’s significance and its impact on daily life and the wider world.

As a result of our Design and technology curriculum, pupils will leave Fowey as competent designers and innovators. Pupils gain a firm foundation of knowledge and skills to see them equipped to take on further learning in secondary school.