NPSB Design and Technology Menu

Why do we prioritise Design and Technology at NPSB?

"Design Creates Culture. Culture shapes values. Values determine the future." (Robert L Peters). Through Design and Technology (DT) pupils are inspired to be creative and use their imagination to design and make products that solve real and relevant problems in a variety of contexts. This process allows pupils to consider their own and others' needs, wants and values and draw upon other disciplines, such as maths, science, art and computing. DT encourages pupils to take risks and develops them into innovative, resourceful and capable citizens who understand the impact design and technology has had on daily life and the wider world. These are important skills for all people to carry with them throughout life. Our DT curriculum aims to:

- develop a life-long love of DT that will allow pupils to access a range of opportunities in their lives.
- learn about our responsibility to the Global Family.
- develop pupils who are keen to take responsibility for their own learning using a virtues-led approach.
- give children the building blocks that they need to become well-rounded individuals.
- give children a creative outlet that allows them to communicate with others in a variety of ways.
- build on children's understanding and appreciation of our diverse world.
- help to break down the barriers that they may face in life and to minimise and eliminate the gap for disadvantaged pupils.

Knowledge and Skills of DT:

Research, design, make and evaluate

Technical Knowledge

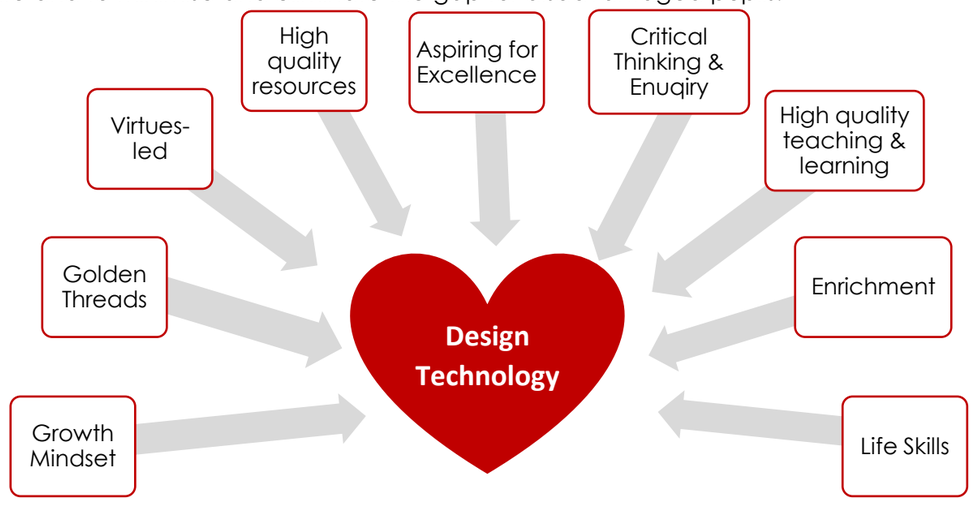
Compare and analyse

Critique and test their ideas and products and the work of others

Understand and apply the principals of nutrition

Knowledge & understanding of great designers.

Critical thinking and problem solving



Virtues Links

Creativity in applying new skills and knowledge to pieces of work or new concepts.

Resilience and **determination** to keep trying and persevering to develop our skills, knowledge and ideas.

Humility and **respect** when reflecting on our own and others' work.

Striving for **excellence** and using **diligence** in all learning and outcomes by always trying our very best.

Golden Threads:

GT1 – Love & Forgiveness vs Enmity & Hate **GT2** – Peace & Collaboration vs Conflict & War **GT3** – Trust in 'the Divine' / 'God'

Well-Structured	**A**mbitious & Inclusive	**L**ife-Long Learners	**K**nowing more & remembering more	**S**ubject knowledge and skills
• KAPOW scheme: well-sequenced progression of knowledge and skills document. • Key skills and knowledge are progressively built on. • Vocabulary progression. • Lesson expectation document that outlines effective ways to teach Design Technology (DT) • Purposefully planned units of work to link and build on learning.	• Ambitious DT Scheme used – KAPOW. • Higher-order questioning • Children selecting their own level of challenge. • Scaffolds to support learning. • Inclusive enrichment opportunities. For example, cross-curricular STEM projects which are led through a DT project.	• Golden Thread enquiry questions eg How has collaboration developed technology and design over the years? Do you think these advancements in designs have always been peaceful or caused conflict? • Lessons linked to virtues • Leaders of learning • Creating global citizens – understanding our responsibility to our global family. • Enrichment opportunities that foster a love of DT eg STEM week, DT club	• *'The Big Picture'* to capture the end goal of each unit and link current learning to previously taught knowledge and skills. • *'Can You Still…?'* is an opportunity to retrieve and practise previously learned knowledge and skills. • STEM Week, as part of British Science Week, incorporates the revisiting and application of previously taught knowledge and skills and is centred around a DT project.	• High-quality teaching and learning • All staff involved in high-quality professional development and training. • KAPOW scheme: supportive of teachers' subject knowledge and skills. • High-quality questioning • Opportunities to revisit previously taught knowledge and skills. • Cross-curricular links (eg Maths, Science, Computing and English) • Key knowledge and skills are explicitly taught.