Design and Technology at St Andrew's



Our D&T curriculum is inspiring, rigorous and practical. The children design and make products that draw upon other areas of the curriculum such as mathematics, science and art to then solve real and relevant problems. Using evaluation of past and present D&T, the children develop an understanding of how this area of learning impacts on daily life.

At the end of each key stage our pupils will know, be able to apply and understand the matters, skills and processes to be followed in each of the programmes of study covered.

BIG IDEAS

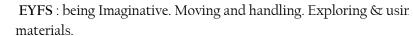
Design: design purposeful, functional, appealing products for themselves and other users based on a design criteria. Generate, develop, model and communicate their ideas through talking, drawing, mock-ups, annotated sketches in addition to using ICT.

Make: select from and use a range of tools and equipment to perform practical tasks (cutting, shaping, joining and finishing). Select from and use a wide range of materials and components, including construction materials, textiles and ingredients.

Evaluate: explore and evaluate a rage of existing products. Evaluate their ideas and products against a design criteria.

Technical knowledge: build structures, explore how they can be strengthened and more stable. Investigate and use mechanisms e.g levers, sliders, gears, pulleys. Understand and use electrical systems within their products e.g bulbs, buzzers and motors.

CONTENT & SEQUENCING





- Y1 & 2: Superheroes—moving superheros; Home and Away-design and make Masai beads. Great Fire of London-Textile faces. Traditional Tales-Weaving; Food. Castles-Moving drawbridge. Our Wonderful World-Food
- Y3 & 4: Fairground—Carousels (clay); clown masks & spinning mechanisms/ lights & electricity. Romans—Aquaducts. World Traveller—Food.. Amazing Americas (Rainforest) Batik design; Papier mache bugs. Pre-Historic Britain—Pendent jewellery design & fabric/sewing. The Greeks—Food & clay mask designs.
- Y5 & 6: Ancient Egyptians—Bread design & making. Invaders and Settlers—Shelter designs. Our Wondrous World—(Y5/6) Enterprise project designs; Y6:Props/legacy. Victorians—Dolls house design and making. Space—Buggy. Water Worlds—Reversible/single use plastic/prototype for new product; bricks.

LINKS WITH FNGLISH & MATHS

- Lessons are led by teachers, with learning focussed activity.
- High quality texts are used.
- Reports, recount and instruction writing.
- Measurement.
- Statistics.

RETRIEVAL PRACTICE

- Low stakes quizzes for long term memory.
- Can you still...? Activities systematically included in teaching sequences.
- Cross year group links made explicitly to refer to prior learning.
- Important D&T concepts and vocabulary e.g prototype, cross-section design and computer aided design.

PROGRESS

- Units of work are carefully sequenced so prior knowledge and concepts are built upon from previous year groups and units.
- Our cross curriculum is the progression model.
- End of unit written evaluations.

SUPPORT

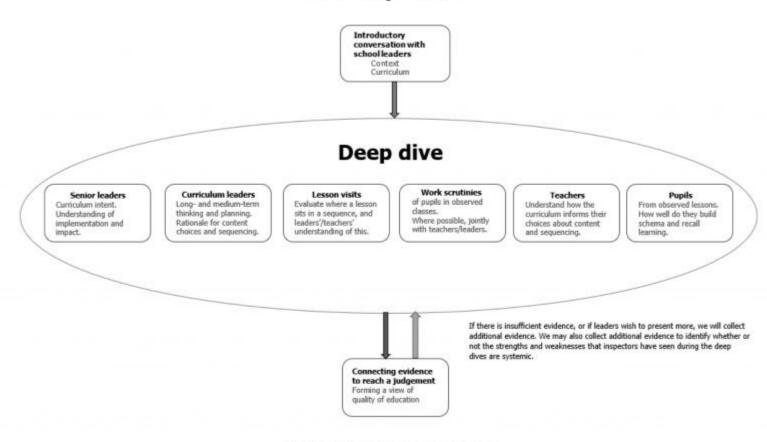
- Everyone has access to the National Curriculum Programmes of Study.
- Structured questions and sentence stems used to support.
- Differentiated activity recoding sheets provided.
- Adult / peer support in classroom.







Pre-inspection



Bringing it together