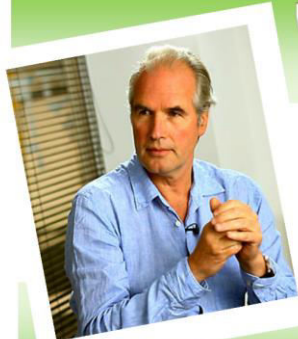




Design and Technology



**St Ralph
Sherwin**
Today Rather Than Tomorrow



"I Believe"

"D&T education is an essential part of a school's curriculum, not just as preparation for a career or further education in the creative industries, but for its wider educational benefits."

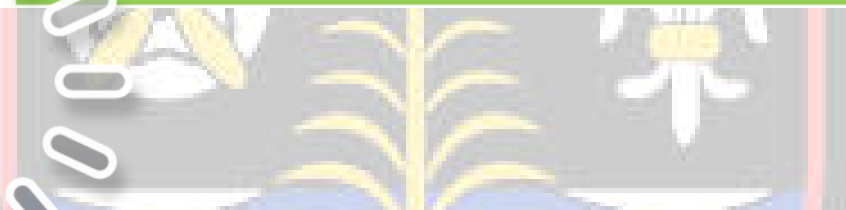
Dick Powell
Product designer and co-founder of Seymour-Powell Design Company



"I Believe"

"British designers are celebrated all over the world for the creativity and innovation, but the real strength of our industry has and always will, lie in education."

Wayne Hemingway MBE
Designer and co-founder of Red or Dead and Hemingway Design



"I Believe"

"D&T supports the developing of key cross-disciplinary skills. It provides a platform within which to inspire young people to re-think, redesign and build a positive future."

Dame Helen McCarthur
Record-breaking sailor and founder of the Ellen McCarthur Foundation



"I Believe"

"The teaching of quality design and technology in our schools is a vital requirement for the county's future in the 21st century."

Sir James Dyson
Industrial Designer, inventor and founder of Dyson.
Patron of the Design and Technology Association

Blessed Robert Sutton Catholic Voluntary Academy

Academic excellence, spiritual development and social awareness through Christ

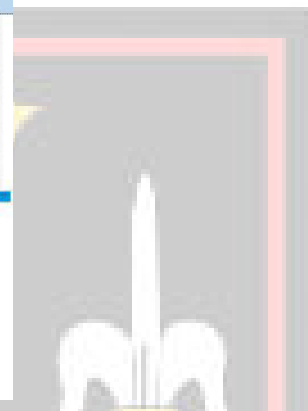
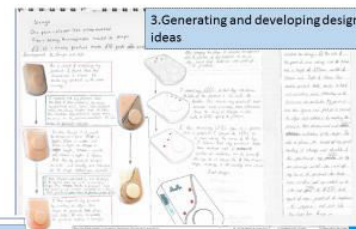
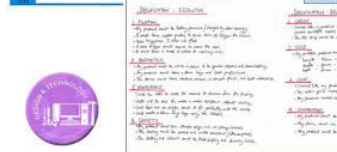
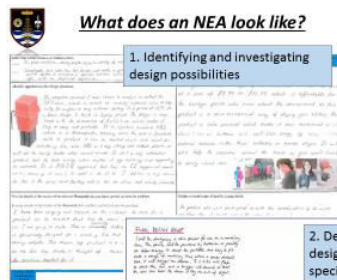
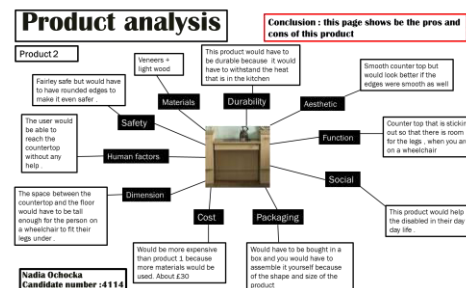
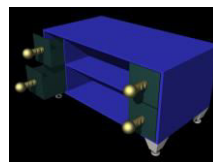
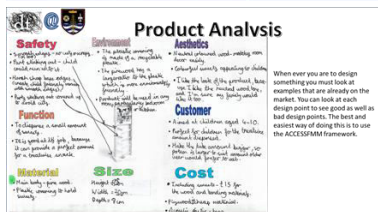
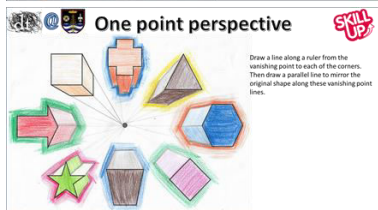


Design and Technology

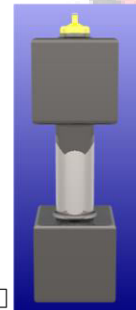
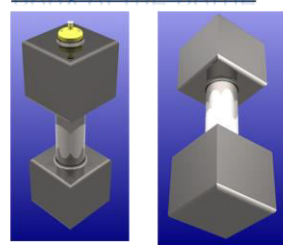


St Ralph
Sherwin
Today Rather Than Tomorrow

Product Design



Body of the Bottle

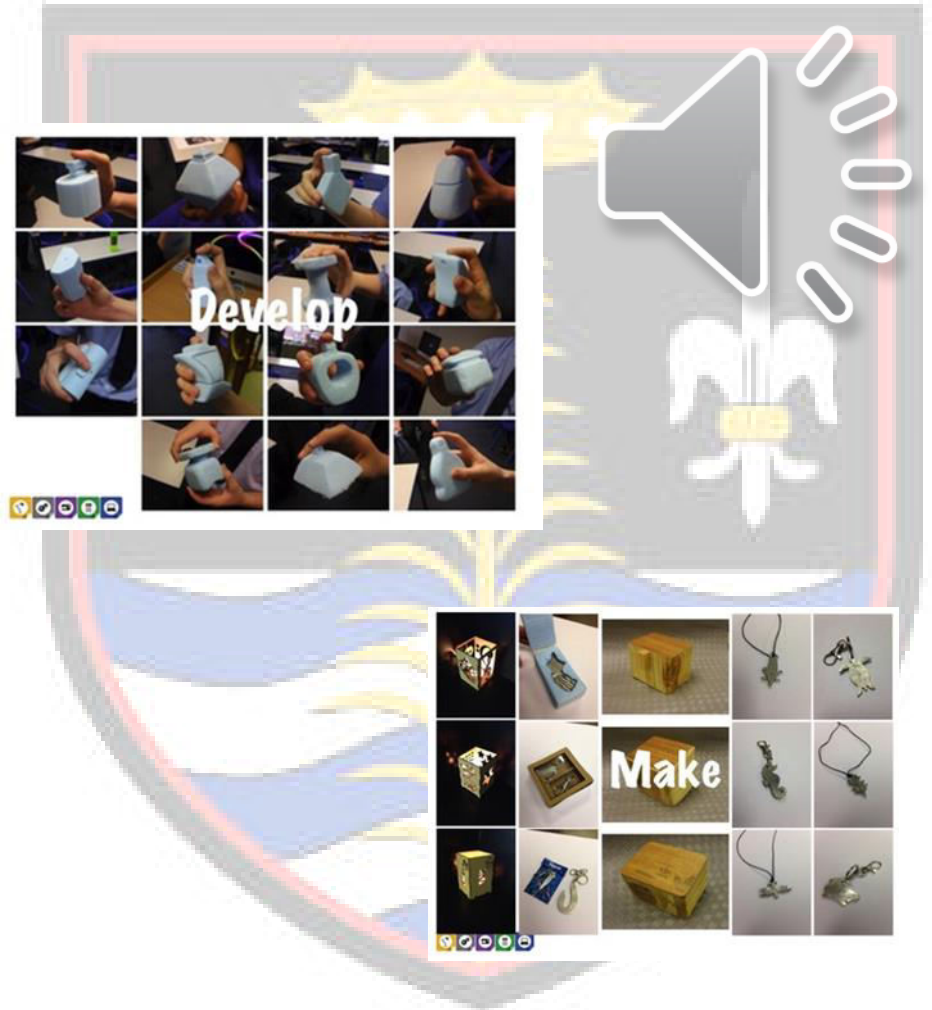


Conclusion
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my original idea but
can still be used for a
water bottle and as it
has two large areas each
side it can hold a high
volume. As well as the
handle can hold a sections to.

My Name: Hector Abel Candidate Number:4000

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Our Inspiring Curriculum



KS4 GCSE Design & Technology

' GCSE Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise. Our GCSE allows students to study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth..'

This specification encourages students to:

- actively engage in the creative process of art, craft and design in order to develop as effective and independent learners, and as critical and reflective thinkers with enquiring minds
- develop creative, imaginative and intuitive capabilities when exploring and making images, artefacts and products
- become confident in taking risks and learn from experience when exploring and experimenting with ideas, processes, media, materials and techniques
- develop critical understanding through investigative, analytical, experimental, practical, technical and expressive skills
- develop and refine ideas and proposals, personal outcomes or solutions with increasing independence

Design

For students to explore a wide variety of work produced by artists and designers. Develop ideas that are informed by these studies and analyse these contextual sources.

Evaluate

To record ideas through first-hand observations, especially drawing including examples of line, colour, tone and form. Reflect on progress and identify areas to develop.

Make

To refine and reflect upon work as it progresses. Selecting and experimenting with appropriate media, materials, techniques and processes.

Technical knowledge

To present personal, imaginative and meaningful final outcomes. Make connections to media and artists explored in the project.

Assessment

Students will be assessed through a personal learning checklist for each unit of work, grading their progress based on a RAG rating and a teacher digital tracker. A formal assessment of each unit will take place using the GCSE assessment objectives.

Exam: 50% of qualification: 100 marks

Section A – Core technical principles (20 marks)

A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding.

Section B – Specialist technical principles (30 marks)

Several short answer questions (2–5 marks) and one extended response to assess a more in-depth knowledge of technical principles.

Section C – Designing and making principles (50 marks)

A mixture of short answer and extended response questions.

Non-examined Assessment (NEA): 50% qualification: 100 marks

Substantial design and make task

• Assessment criteria:

- Identifying and investigating design possibilities
- Producing a design brief and specification
- Generating design ideas
- Developing design ideas
- Realising design ideas
- Analysing & evaluating
- In the spirit of the iterative design process, the above should be awarded holistically where they take place and not in a linear manner
- Contextual challenges to be released annually by AQA on 1 June in the year prior to the submission of the NEA
- Students will produce a prototype and a portfolio of evidence
- Work will be marked by teachers and moderated by AQA

Our key stage 4 DT curriculum aims to ensure the following skills and knowledge are developed for them to achieve a GCSE DT

Our GCSE Design and Technology specification sets out the knowledge, understanding and skills required to undertake the iterative design process of exploring, creating and evaluating. The majority of the specification should be delivered through the practical application of this knowledge and understanding. Topics and themes have been grouped to help you teach the specification, but these are not intended as a route through the specification, you can teach the content in any order. The subject content has been split into three sections as follows:

Core technical principles

- new and emerging technologies
- energy generation and storage
- developments in new materials
- systems approach to designing
- mechanical devices
- materials and their working properties.

Specialist technical principle

- selection of materials or components
- forces and stresses
- ecological and social footprint
- sources and origins
- using and working with materials
- stock forms, types and sizes
- scales of production
- specialist techniques and processes
- surface treatments and finishes.

Designing and making principles

- investigation, primary and secondary data
- environmental, social and economic challenge
- the work of others
- design strategies
- communication of design ideas
- prototype development
- selection of materials and components
- tolerances
- material management
- specialist tools and equipment
- specialist techniques and processes

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Enrichment and Extra Curricular



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ABLE - GIFTED - TALENTED

Key stage 4 Subject Super Curriculum

Name of Book	Subject Websites/Documents/Podcasts	Name of Film	Name Of Task
<p>List of books children could read:</p> <p><i>Write a short book review, explaining what you have learnt about the context in which the book is set.</i></p> <p>AQA GCSE (9-1) Design & Technology By M J Ross</p> <p>AQA GCSE 9-1 Revision Design & Technology By Collins</p> <p>Icons of Design- The 20th Century By Prestel</p> <p>Cookie By Jaqueline Wilson</p>	<p>Websites Iterative Design https://www.youtube.com/watch?reload=9&v=eWcFm1tBt4</p> <p>https://www.youtube.com/watch?v=Rnsk5JA52ps Ergonomics or Human Factors https://www.youtube.com/watch?v=8Jnf1kwaDpc Inclusive Design https://www.youtube.com/watch?v=iccWRhKZa8</p> <p>https://www.youtube.com/watch?v=pzKMNaJnt0</p> <p>Moral & Social Design https://www.youtube.com/watch?v=fjl-5VDRITA</p> <p>Sketching skills https://www.youtube.com/watch?v=aful-alWwMk&list=PL464150F7E94D52F4</p>	<p><i>Write a short film review of each film you watch., explaining what you learnt about the</i></p> <p>BBC iPlayer</p> <p>Bauhaus 100</p> <p>Taste Understanding Product Design https://www.youtube.com/watch?v=i69U0Uvi89c</p>	<p><i>Get inspired using these suggestions, or create some ideas of your own!</i></p> <p><i>Look at the variety of contexts below</i></p> <ul style="list-style-type: none"> • Multi-functional living • Teenage Life Style • Nature and the environment • Making life more comfortable • Assisting the Disabled • Help in the Developing countries <p><i>Look at each one and produce a spider diagram of as many situations and products that fit into these. Some products may occur many times. Think about as many users' and their needs as you can. Doodle simple images for these products.</i></p>

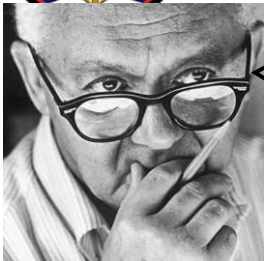
"Your talent is God's gift to you; what you do with it is your gift to God." Leo Buscaglia

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What our students think...



Innovation distinguishes between a leader and a follower.

Paul Rand - International Graphic Designer



The pessimist sees difficulty in every opportunity. The optimist sees the opportunity in every difficulty.

Sir Winston Churchill British Prime Minister



As a Designer, you design for the present, with an awareness of the past, for a future which is essentially unknown

Lord Foster - Architect



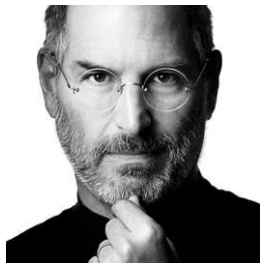
Design & Technology
pupils and students are
future leaders



We are problems solvers.
We don't focus all of our
time on a problem but
Find a solution



We identify problems that
we can see in our designs
but also anticipate problem
that may occur



Design is a way of life, a point of view. It involves the whole complex of visual communications: talent, creative ability, manual skill, and technical knowledge. Aesthetics and economics, technology and psychology are intrinsically related to the process.

Steve Jobs - Founder of Apple



Saint Jerome

Good, better, best.
Never let it rest.
'Til your good is
better and your
better is best



Design & Technology
pupils are 'all rounder's',
with both creativity and
knowledge.
A major employability skill



We use our skills and
knowledge to improve our
design work to solve a
problem



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