The Ladies' College Guernsey

KS3 Curriculum Evening

Howard Barnes
Director of Studies

The Ladies' College Guernsey

The Ladies' College aims to:

- **Encourage** each girl to grow in confidence, develop her talents to the full and value the qualities of others;
- **Create** an environment where each girl can be happy, love learning and make lifelong friends;
- **Inspire** each girl to be the best that she can be.

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Development Priorities from last year and updates:

- Well-being
- Learning Support
- BYOD
- Independent Learning
- Higher Order thinking and Questioning Skills
- ***Curriculum Review****
- ***21st Century Skills****

Previous presentations are available on our website.

**new*

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Bring Your Own Device (BYOD)

- Planning
  and implementation
- Communication
- Infrastructure upgraded
- Devices prepared
- Staff training
- Making it all work!
- ***Covid accelerated***
- ***Use of TEAMS***
- ***Next review and planning cycle***

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The IT Team...

... and Help desk

Mr Bougourd
IT Technician

Mrs Le Cras
Network Manager

Mr Andrade
IT Technician

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Communications to Parents

Parent Portal (accessed via www.rmunify.com)

- See/check details
- **Download reports**
- **Attendance data**
- Timetable
- *Behaviour (not currently used)*

www.ladiescollege.com
for help and support.

RM Launchpad

- device ordering Form
- Other useful links

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Communications to parents

- ParentHub app
  - Rolled out last year
  - Website has details in the event of queries
  - Replaced the GroupCall emails and prevents spoofing/phishing attacks

- Operoo (*formerly CareMonkey*)
  - Rolled out last year
  - Enables completion and return of forms electronically
  - Ease of use, no lost forms!

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IT Update for Parents
Online Safety

Paul Beasley
Head of Curriculum IT & Online Safety

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Online Safety – What is it?

'...online safety refers to the act of staying safe online. It is also commonly known as internet safety, e-safety and cyber safety. It encompasses all technological devices which have access to the internet from PCs and laptops to smartphones and tablets.'

National Online Safety®

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Online Safety for children – The three C's

- Content
- Contact
- Conduct

smoothwall®
Web Filtering + Security

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Table developed by the EUKids Online project. LSE

Online Safety

Content – The child as the recipient

Commercial	Aggressive	Sexual	Values
• Adverts • Spam	• Violent / hateful content	• Pornographic or unwelcome sexual content	• Bias • Racist • Misleading advice • Extremism

Table developed by the EUKids Online project. LSE

Online Safety

Contact– The child as the participant

Commercial	Aggressive	Sexual	Values
• Tracking • Harvesting personal info	• Being bullied, harassed or stalked	• Meeting strangers • Being groomed	• Self-harm • Unwelcome persuasions • Radical

Table developed by the EUKids Online project. LSE

Online Safety

Conduct– The child as the actor

Commercial	Aggressive	Sexual	Values
• Hacking	• Bullying or harassing others	• Creating or uploading inappropriate material.	• Providing misleading advice
• Gambling			

Online Safety – Three Main Personal Dangers

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Self

Health

Wealth

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Online Safety

Knowing whom to tell.

Self

Stranger Danger

- Being careful who you befriend.
- Wary of compliments from strangers.
- Not broadcasting itinerary.

Bullying / Online relationships

- Not commenting on social media in a negative way about anyone.
- Not falling out online.
- Understanding if you are being bullied or are the bully.
- Inclusion.

Reputation

- Use of social media and phones responsibly.
- Having good netiquette.
- Understand the digital tattoo we create
- Being careful how you use images of yourself and others.

Self-Image

- Understanding the risks and benefits of how to present yourself online.

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Online Safety

Health

Mental Health

- Social media obsession.
- Viral risks and challenges.

Knowing whom to tell.

Lifestyle

- What is healthy screen time?
- Basic health and safety.
- Taking breaks
- Using fitness apps/trackers

Well-being

- Differentiating health advice and information online.
- Understanding Bias.
- Taking breaks

- **Recognising worrying behaviour in others.**

Values

- Recognizing bias.
- Recognizing online content that promotes unhealthy coping strategies.
- Understanding 'Echo Chambers'.

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Online Safety

Wealth

Scams

- Emails or pop-ups
- Phishing / Spear Phishing
- Skeptical

Privacy and Security

- Keep data security
- Safe Passwords
- Understanding ID Theft

Copyright

- Understand Plagiarism
- Operate online legally

Virus & malware

- Trojan horse
- Spyware

Knowing whom to tell.

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Online Safety

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Online Safety

UK COUNCIL FOR CHILD INTERNET SAFETY

SWGfL
Safe, Secure, Online

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- Barnardo's,
- CEOP (the child protection command of the National Crime Agency),
- Childnet,
- Department for Education,
- Kent County Council,
- London Grid for Learning,
- NSPCC,
- MicroSoft
- Parent Zone,
- PSHE Association,
- UK Safer Internet Centre.

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Online Safety

Self-image and identity

This strand explores the differences between online and offline identity beginning with self-awareness, shaping online identities and media influence in propagating stereotypes. It identifies effective routes for reporting and support and explores the impact of online technologies on self-image and behaviour.

Online relationships

This strand explores how technology shapes communication styles and identifies strategies for positive relationships in online communities. It offers opportunities to discuss relationships, respecting, giving and denying consent and behaviours that may lead to harm and how positive online interaction can empower and amplify voice.

Online reputation

This strand explores the concept of reputation and how others may use online information to make judgements. It offers opportunities to develop strategies to manage personal digital content effectively and capitalise on technology's capacity to create effective positive profiles.

Online bullying

This strand explores bullying and other online aggression and how technology impacts those issues. It offers strategies for effective reporting and intervention and considers how bullying and other aggressive behaviour relates to legislation.

Managing online information

This strand explores how online information is found, viewed and interpreted. It offers strategies for effective searching, critical evaluation of data, the recognition of risks and the management of online threats and challenges. It explores how online threats can pose risks to our physical safety as well as online safety. It also covers learning relevant to ethical publishing.

Health, well-being and lifestyle

This strand explores the impact that technology has on health, well-being and lifestyle e.g. mood, sleep, body health and relationships. It also includes understanding negative behaviours and issues amplified and sustained by online technologies and the strategies for dealing with them.

Privacy and security

This strand explores how personal online information can be used, stored, processed and shared. It offers both behavioural and technical strategies to limit impact on privacy and protect data and systems against compromise.

Copyright and ownership

This strand explores the concept of ownership of online content. It explores strategies for protecting personal content and crediting the rights of others as well as addressing potential consequences of illegal access, download and distribution.

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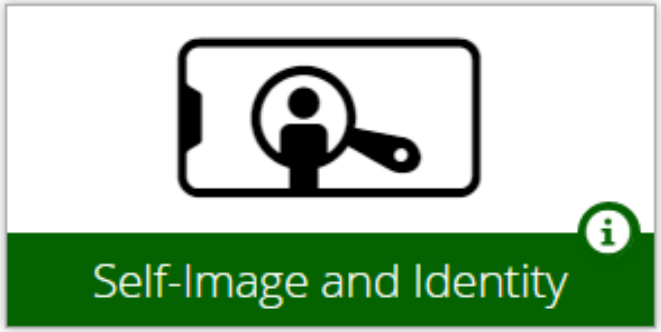
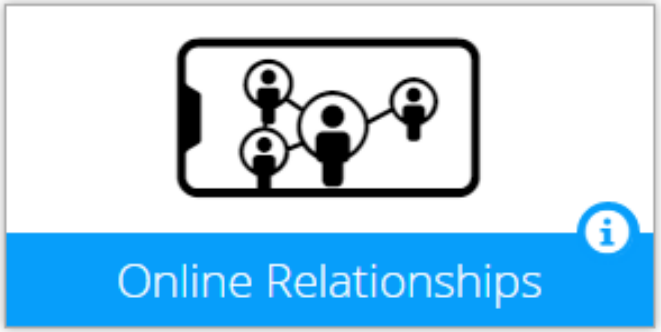
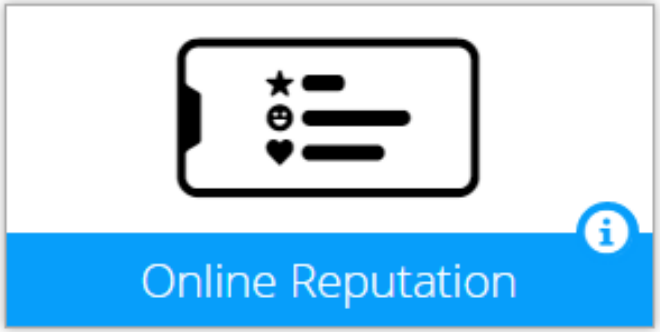
Online Safety - Self







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Online Safety - Health

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Online Safety - Wealth

Managing Online Information

Privacy and Security

Copyright and Ownership

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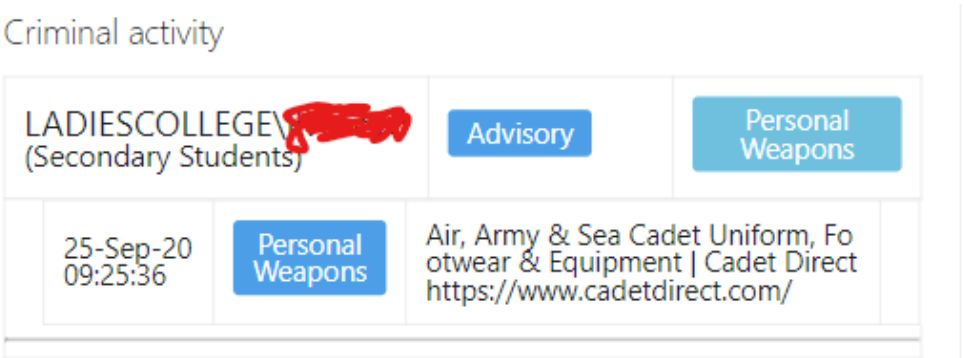
Online Safety in College

Repots generated if students look up content that it deems to fall into one of the following categories.

- Abuse
- Adult Content
- Bullying
- Personal weapons
- Radicalisation
- Self-harm
- Substance Abuse
- Suicide



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Online Safety

Six Top tips for supporting your child online.

Childnet International

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1 – Have a conversation.

Get to know what your child likes to do online and how going online makes them feel.

2 – Establish boundaries and routines.

Do this for the whole family when using technology to go online. This could include where devices are kept, how long they are used and when.

3 – Be clear on safety strategies.

If something worries or upsets your child make sure they know what to do. This could be about talking to you, how to get external support or even turning over the device to get help.

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4 – Get to know the safety features on devices in your home.

These are features on devices, wifi, phone networks and entertainment services.

5 – Be curious not furious

It can be really worrying if your child sees something unexpected or inappropriate online but try to remain calm when supporting your child. This reaction will help them to feel that they can come to you again.

6– Keep the conversation going

It is important to keep the talking about online safety. Find quiet moments together or use current news stories as a way of approaching the subject again.

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History Department

Mrs Bronwyn Henderson

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	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6
	Michaelmas 1	Michaelmas 2	Lent 1	Lent 2	Trinity 1	Trinity 2
Remove: Living and Believing	"Poos and Loos" When did toilets in Britain really change?	What mattered to medieval people?	Who wanted religious change in England in the C16th?	"Pauper Palaces" Why did people disagree about the New Poor Law?	What can paintings tell us about Victorian attitudes to family life?	What's the story of The Ladies' College?
Lower 4: Power and Protest	How did the Normans successfully conquer England from 1066?	Was Richard III a "poisonous bunch backed toad"?	Was 'the world turn'd up side down' in England from 1642-1660?	When was Britain closest to Revolution 1815-32?	Who was Josephine Butler fighting for? + a close up on Millicent Fawcett's statue	What can we learn from a walk though St Peter Port?
Upper 4: Conflict and Co-operation	How can maps help us to understand the past?	Why was Edward Colston's statue toppled?	Did Britain become "Accidental rulers" of India? and Who was "The Patient Assassin"?	What was WWI's global significance?	How did the Nazi Holocaust affect Guernsey?	"Migration through Time"

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Image credit: "Medieval Realms" James Mason p. 41

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Image credit: https://www.historytoday.com/archive/all-king%E2%80%99s-fools

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Image credit: http://www.mirandakaufmann.com/blog/john-blanke-and-the-more-taubronar-renaissance-african-musicians-at-peckham-library

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Image credit: https://courses.lumenlearning.com/boundless-worldhistory/chapter/the-song-dynasty/

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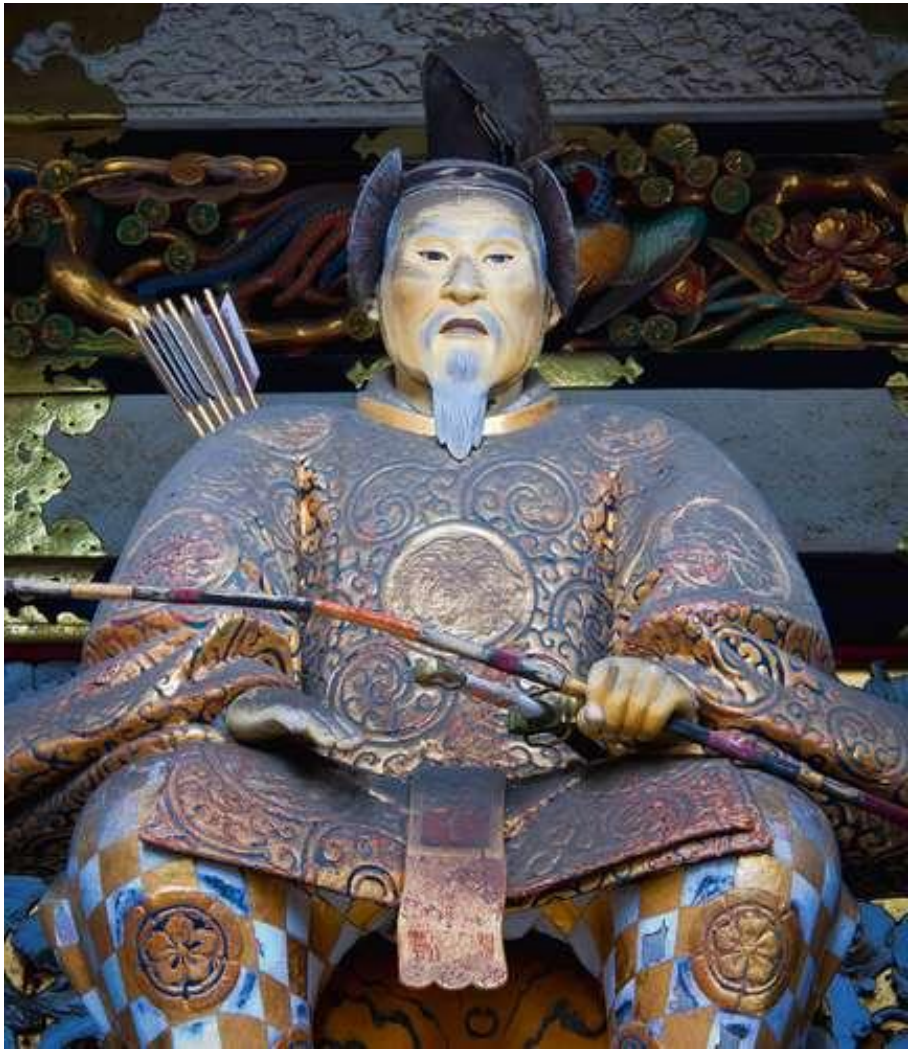

Image credit: https://www.britannica.com/event/Tokugawa-period

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Image credit: https://teara.govt.nz/en/object/34611/kate-sheppard-on-the-10-note

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Princess Sophia Dhuleep Singh selling "The Suffragette" outside Hampton Court Palace, where she has a suite of apartments.

Image credit: https://www.bl.uk/votes-for-women/articles/sophia-duleep-singh-princess-and-suffragette

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Image credit: http://enablemagazine.co.uk/meet-disabled-suffragettes-fought-vote/

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Image credit: https://www.independent.co.uk/news/world/world-history/meet-mansa-musa-i-of-mali-the-richest-human-being-in-all-history-8213453.html

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Image credit: https://www.npg.org.uk/collections/search/use-this-image.php?mkey=mw14738

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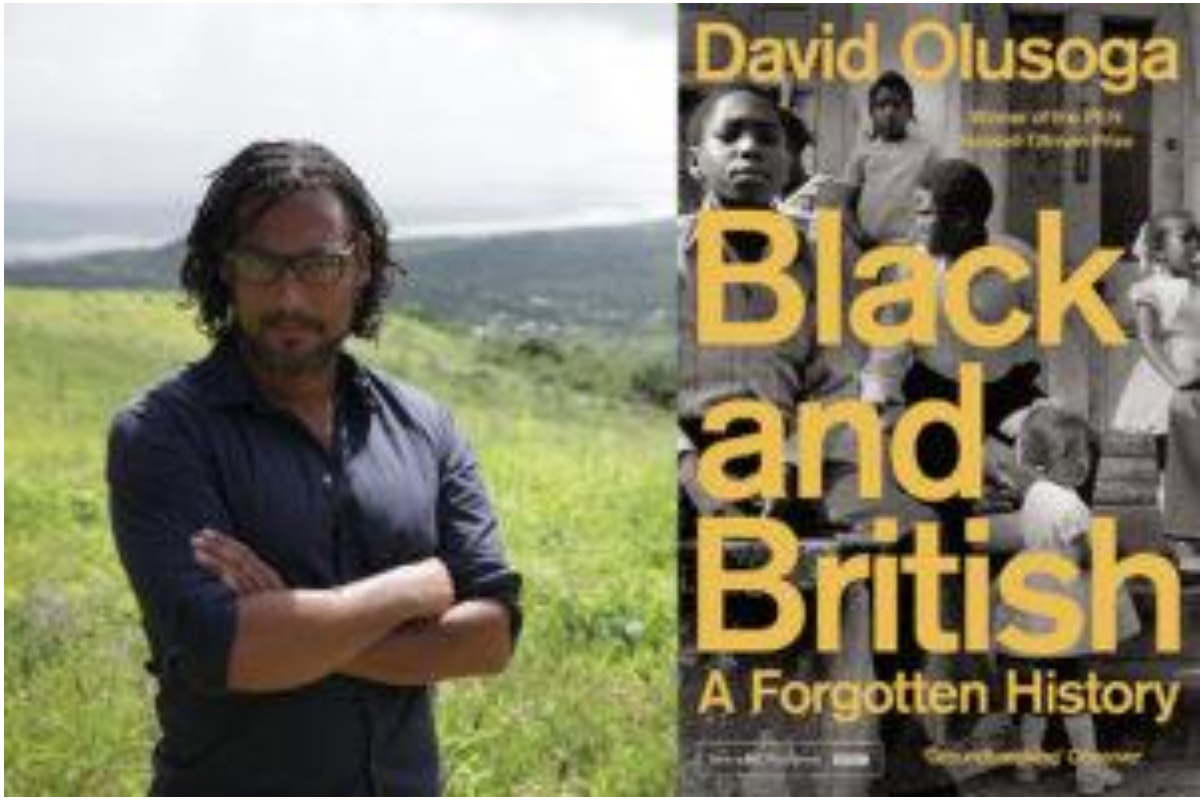

Image credit: https://bathfestivals.org.uk/david-olusoga-book-jacket/

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Image credit: https://www.bbc.co.uk/news/uk-england-bristol-53258535

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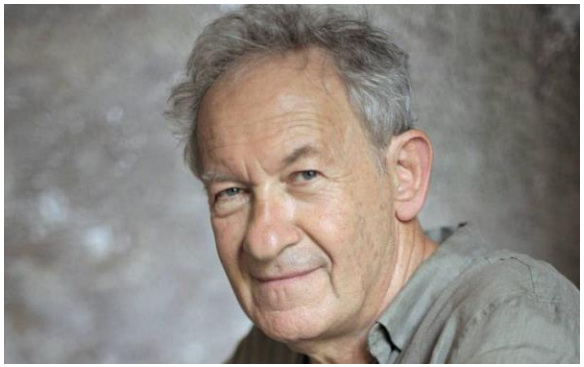

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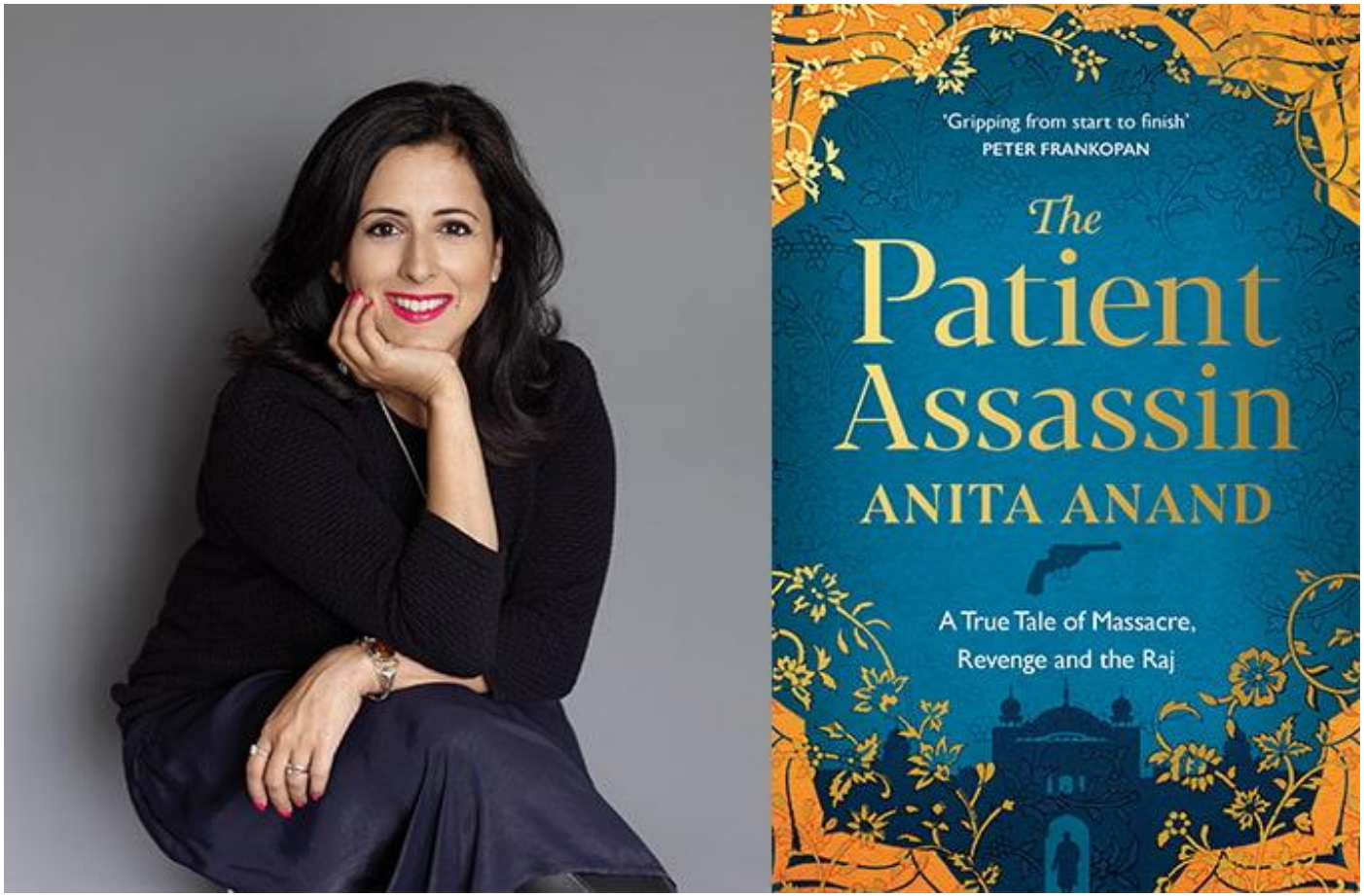

Image credit: https://bathfestivals.org.uk/the-bath-festival/event/massacre-revenge-and-the-raj/

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Intrigue
Interrupt
Intensify

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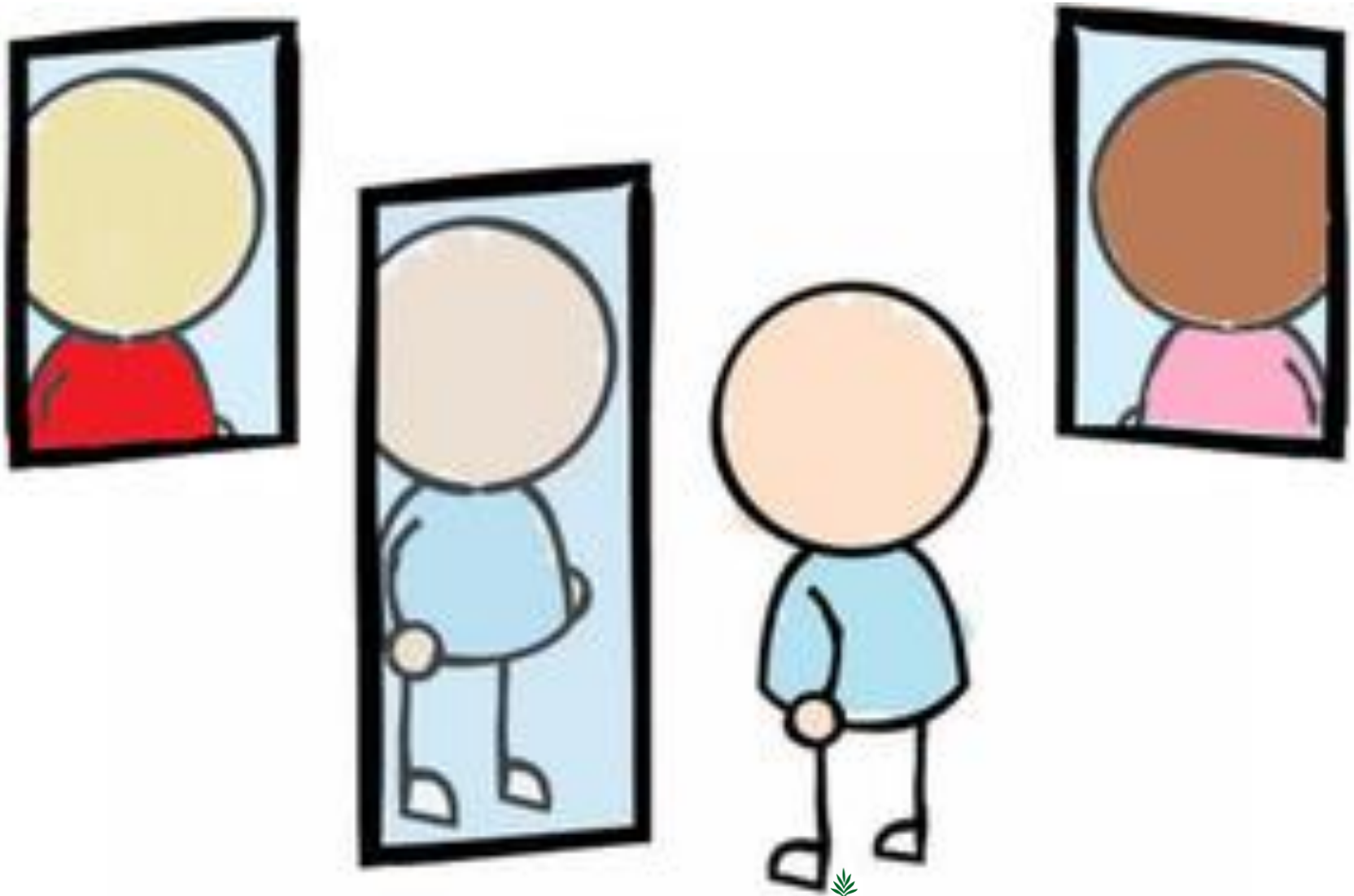

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STEM and a 21st Century Curriculum

Mr Howard Barnes and
Dr Karen Marshall

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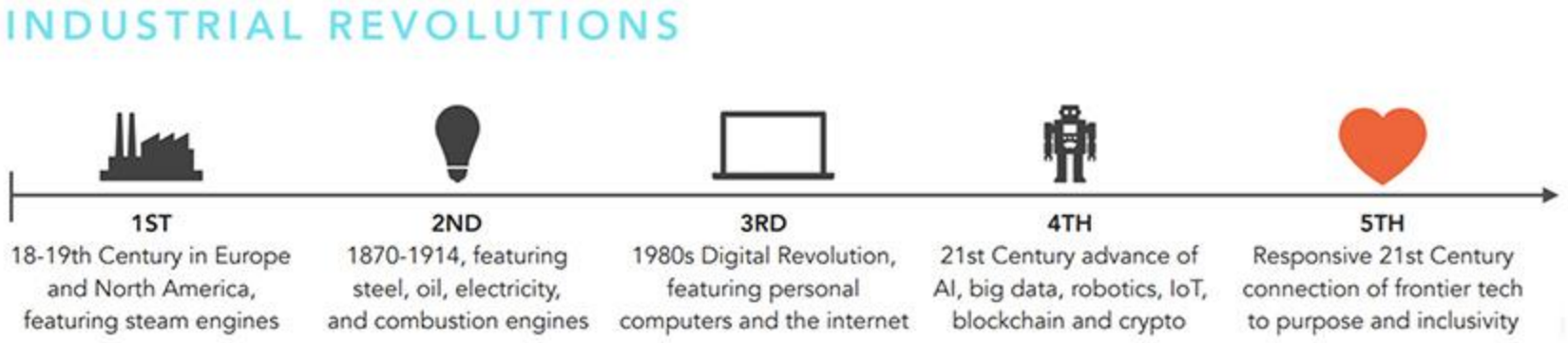
21st Century curriculum



20th Century:

- Difficult to access information
- Knowledge often gained through acquiring, learning, memorising

Cevik, M. & Senturk C. (2019). Multidimensional 21st century skills scale: Validity and reliability study. *Cypriot Journal of Educational Sciences*. *14*(1), 011–028

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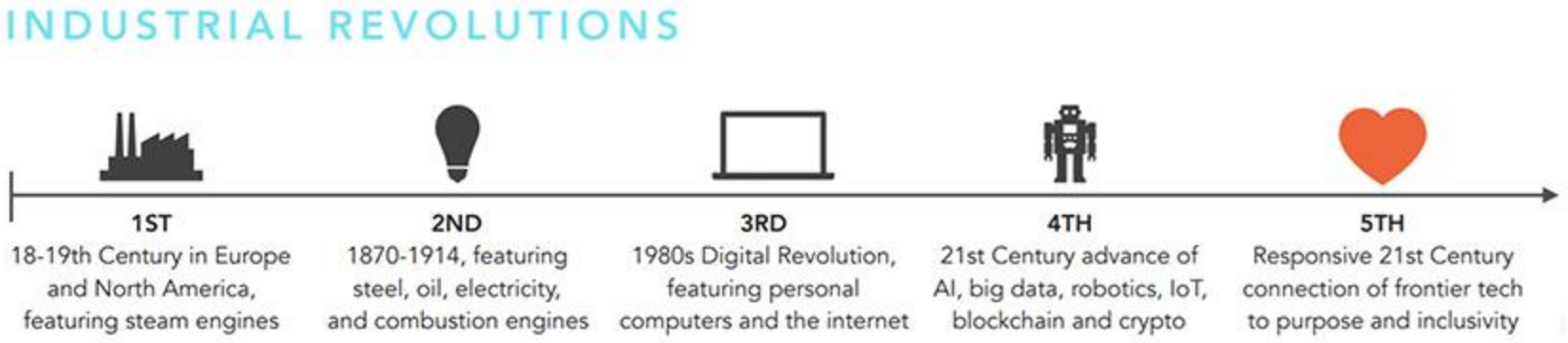
21st Century curriculum



21st Century:

- Increasing rapid changes in technology
- Access to lots of information – interrogate, interpret and develop
- *Digital literacy*
- *Skills valued*

Table 1. Comparison of 20th vs 21st Century Approaches to Teaching & Learning

20th Century Classroom	21st Century Classroom
Time-based	Outcome-based
Focus: memorization of discrete facts	Focus: what students Know, Can Do and Are Like after all the details are forgotten.
Passive learning	Active Learning
Learners work in isolation	Learners work collaboratively
Teacher-centered: teacher is center of attention and provider of information	Student-centered: teacher is facilitator/coach
Little to no student freedom	Some freedom toward meeting common goals
Fragmented curriculum	Integrated and Interdisciplinary curriculum
Grades averaged	Grades based on what was learned
Numerical or letter grades scores averaged over all work.	Grades can be cumulative based on performance.
Typically one chance for assessment per task.	May allow for resubmission; repeatable tasks.
Teacher is judge. No one else sees student work.	Self, Peer and Other assessments. Public audience, authentic assessments.
Literacy is the 3 R's – reading, writing and math	Multiple literacies
Driven by the NCLB and standardized testing mania.	Driven by exploration, creativity and 21st century skills

Adapted from Shaw, A. (2008). What is 21st Century Education? Retrieved from http://www.21stcenturyschools.com/what_is_21st_century_education.htm on Mar. 2, 2015.

If you are an independent learner you will:

- be motivated to learn
  - Curious
  - Self motivated
  - Risk taking / willing to go outside comfort zone
- manage your own learning
  - Using initiative
  - Resilient
  - Managing time
- reflect on your learning
  - Reflective
  - Accountable
  - Thinking critically

It doesn't mean you have to learn on your own!

Bring Your Own Device (BYOD)

Remove and Lower Four students required to have either a Microsoft Go or Surface Pro.

These devices are the **students digital learning device** and are **managed on The Ladies' College** network through Microsoft Intune.

All Remove to Upper Five students will be required to have the one of these managed devices **by September 2021**.

Final year of three year roll out plan!

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The Jobs Landscape in 2022

emerging roles, global change by 2022

Top 10 Emerging

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

declining roles, global change by 2022

Top 10 Declining

1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

Source: Future of Jobs Report 2018, World Economic Forum

Future of Jobs 2020-2030

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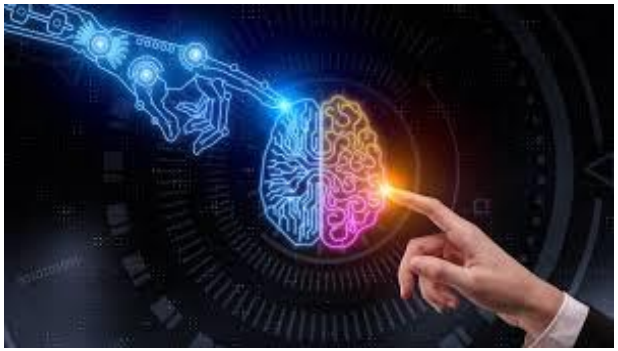
STEM subjects and why they are important

Science **T**echnology **E**ngineering **M**aths

They are important because they help us make sense of the world around us.



Pandemic

AI

Climate change

They are important because they teach us the transferrable skills to innovate, to lead, to problem solve, to make a difference

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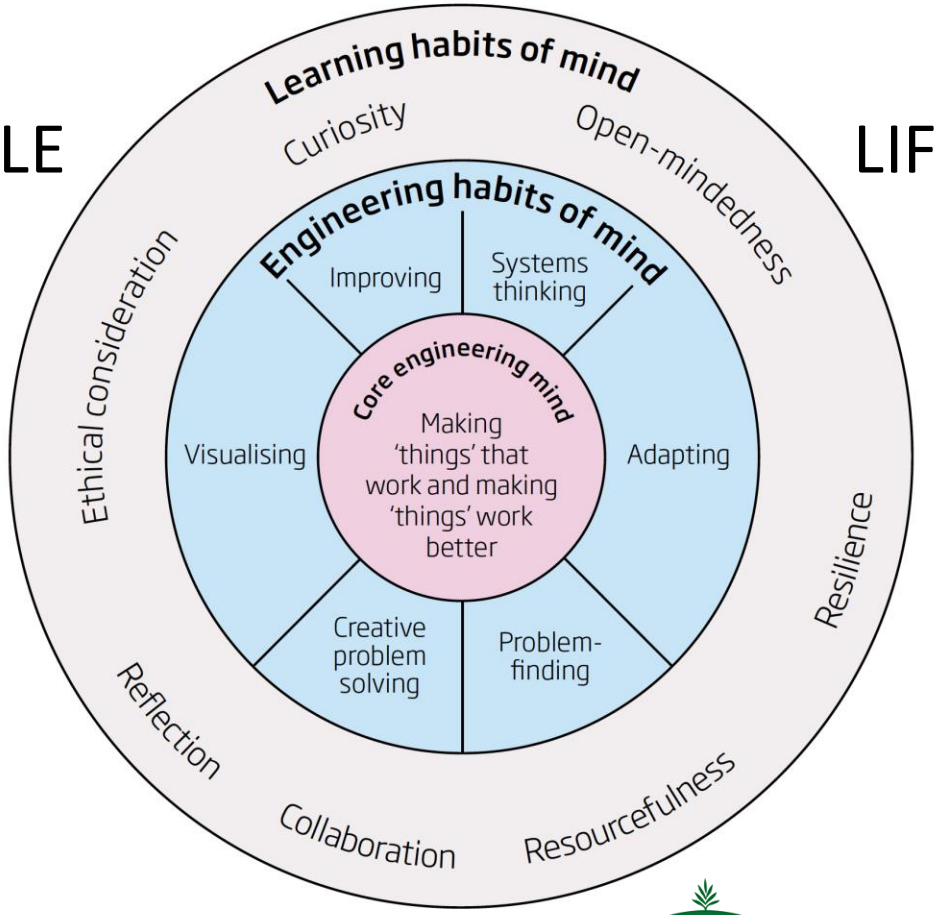
STEM subjects and why they are important

- TRANSFERABLE

- Needed
- For
- Jobs
- That
- Don’t
- Yet
- Exist



LIFE SKILLS

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STEM subjects and Girl's schools

Research studies……

Girls more likely to study Science and Maths in single sex schools

UNITED STATES OF AMERICA

To name but a few

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STEM subjects and Girl's schools

CONFIDENCE:

At the Ladies' College, there are no glass ceilings and no assumptions about what girls like or prefer because no one is saying "that subject is for boys" or "that subject is too hard."

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STEM subjects and Girl's schools

Women inspiring action, *transforming lives*

NETWORKS:

Successful women in STEM "invest in peer networks" and "build up protégés."

Girls' schools are educational environments centred on community, collaboration, and mentoring.

Girls' schools understand that positive female STEM role models are essential for girls to believe that they too can be successful.

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STEM subjects and Girl's schools

AUTHENTICITY:

Bringing their "authentic self" to the job is another trait of women who succeed in STEM.

Nearly 89% of girls' school students, compared to only 72% of females at mixed schools report they are comfortable at being themselves at school. They don't feel the need to compete with boys in STEM.

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STEM subjects and Girl's schools

VOICE:

Women who succeed in STEM must be able to “speak up when they’re overlooked.”

In our science learning environment, girls are encouraged to use their voice, better preparing them to speak up first in the classroom and later in professional settings.

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STEM subjects and Girl's schools

PURPOSE:

Finally, women who thrive in STEM fields understand the relevance of the work they are doing, not just their technical expertise.

Girls' schools know girls are more engaged in learning the "how," if they also learn the "why."

The Ladies' College Guernsey

Girls- STEM NEEDS YOU

- Globally, women account for **less than a third** of those employed in scientific research and development.
- Women also only make up **12% of the board seats** in the IT industry across the world.
- We need more women in STEM taking their seat at the table—be it in the lab or the boardroom—to insure varying perspectives for a more balanced approach to solving our world's problems.

The Ladies' College Guernsey

Science

At the Ladies' College we start our curriculum by focussing on skills.

Girls learn to ask questions: how, why, what if

Girls learn to investigate an idea fairly

Our curriculum is spiral, so theory learnt at a basic level creates a foundation on which to build later on in the course

We have removed theory lower down to allow us to build

confident resilient curious

young Ladies

It takes time to do this

The Ladies' College Guernsey

Science Remove project

- At the end of Remove, all girls participate in the Bright Ideas Challenge.

- Creative,
  problem solving
  innovative solutions
  Research
  teamwork
  presentation

To power cities of the future.

The Ladies' College Guernsey

Science Remove project

Bright Ideas

Who

Who does this problem impact and who might be able to help?

Almost anyone in the future will be impacted by pollution and carbon emission, which is why it is a problem that needs solving as soon as possible. Even those who aren't using things like cars and ovens, it will probably still affect their futures.

Making compressed air cars, using other sources of energy to power stuff and not using petrol because this uses fossil fuels which give out carbon dioxide and pollution.

What

What might be some solutions?

FUTURE CITY ENERGY PROBLEM

How

How will the proposed solution work?

How could different experts or industries work together to make it happen?

Will supporting materials help your case?

For the compressed air cars, the 'Power plant's' electricity is put into a compressor, which compresses the air into the car's tank. Then the engine of the car converts the compressed air into 'mechanical energy'

Why

Why is the problem you want to solve so important?

The problem is important to solve as it reduces the amount of carbon emission going into the atmosphere and slowing down climate change and global warming.

Where

Where will a solution work best (across the whole city, in homes, schools etc.)?

The solution now is helping us power cars. Hopefully we can also use it to power all sorts of different buildings, and vehicles.

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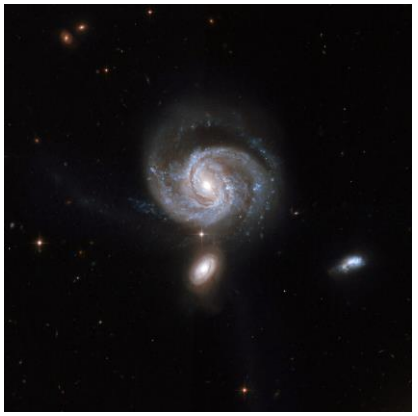
L4 Great Science Share for School

Tree selfies

Floating Gardens



Pictures from Hubble Telescope

Measuring levels of pollution after lockdown

One topic each week during lockdown
One practical challenge

Great Pacific Garbage Patch

The Ladies' College Guernsey

Ladies' Girls excel at UK national level 2017

Winners- UK Big Bang Competition

The Ladies' College Guernsey

Ladies' Girls excel at UK national level 2018

Winners- UK Big Bang Competition

Winners- UK Teen Tech Competition

Chosen to participate in UK Headstart course

Representing Guernsey- International Science Forum

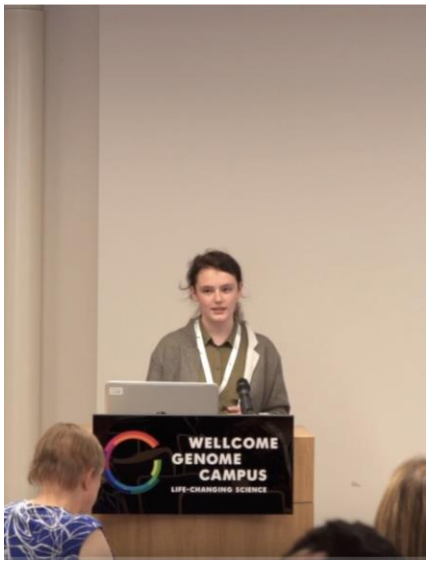
Research for the UK Whipworm Genome project

The Ladies' College Guernsey

Ladies' Girls excel at UK/International level 2019

Winners- UK Schools Robotic Competition

Winner- UK Teen Tech Competition



Winner- UK IRIS Conference

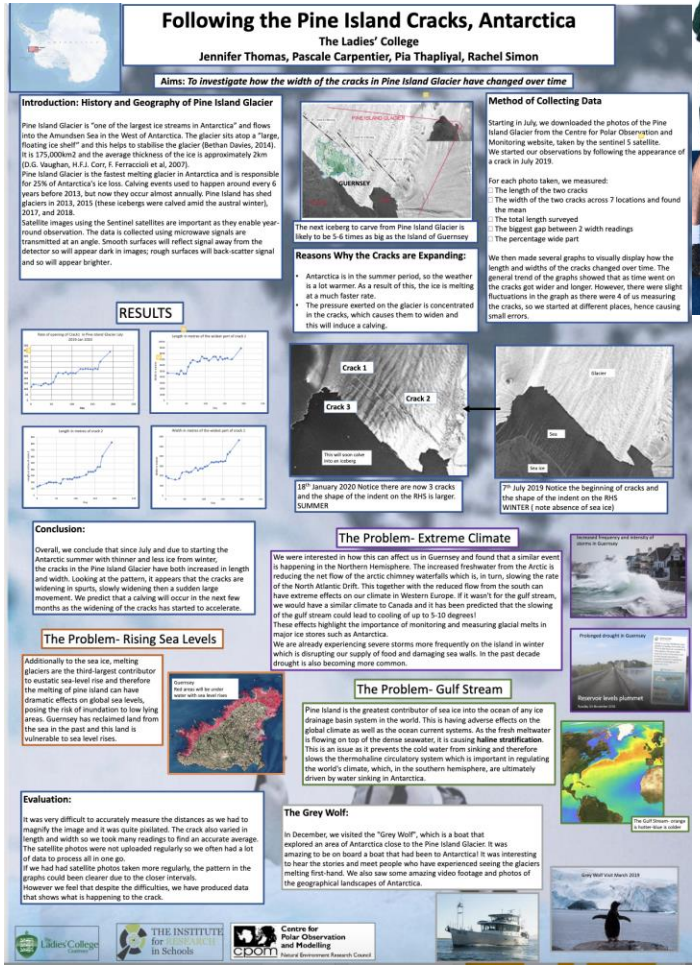
Representing Guernsey- International Science Forum

Winners - International Periodic Table competition

The Ladies' College Guernsey

Ladies' Girls excel at UK/International level 2020

Winners- Best research project UK Carbon Footprint IRIS



Following the Pine Island Cracks, Antarctica

The Ladies' College

Jennifer Thomas, Pascale Carpentier, Pia Thapliyal, Rachel Simon

Aims: *To investigate how the width of the cracks in Pine Island Glacier have changed over time*

Introduction: History and Geography of Pine Island Glacier

Pine Island Glacier is "one of the largest ice streams in Antarctica" and flows into the Amundsen Sea in the West of Antarctica. The glacier sits atop a "large, floating ice shelf" and this helps to stabilise the glacier (Bethan Davies, 2014). It is 175,000km2 and the average thickness of the ice is approximately 2km (D.G. Vaughan, H.F.J. Corr, F. Ferraccioli et al, 2007).
Pine Island Glacier is the fastest melting glacier in Antarctica and is responsible for 25% of Antarctica's ice loss. Calving events used to happen around every 6 years before 2013, but now they occur almost annually. Pine Island has shed glaciers in 2013, 2015 (these icebergs were calved amid the austral winter), 2017, and 2018.
Satellite images using the Sentinel satellites are important as they enable year-round observation. The data is collected using microwave signals are transmitted at an angle. Smooth surfaces will reflect signal away from the detector so will appear dark in images; rough surfaces will back-scatter signal and so will appear brighter.

The next iceberg to carve from Pine Island Glacier is likely to be 5-6 times as big as the Island of Guernsey

Method of Collecting Data

Starting in July, we downloaded the photos of the Pine Island Glacier from the Centre for Polar Observation and Monitoring website, taken by the sentinel 5 satellite.
We started our observations by following the appearance of a crack in July 2019.

For each photo taken, we measured:
- The length of the two cracks
- The width of the two cracks across 7 locations and found the mean
- The total length surveyed
- The biggest gap between 2 width readings
- The percentage wide part

We then made several graphs to visually display how the length and widths of the cracks changed over time. The general trend of the graphs showed that as time went on the cracks got wider and longer. However, there were slight fluctuations in the graph as there were 4 of us measuring the cracks, so we started at different places, hence causing small errors.

Reasons Why the Cracks are Expanding:

- Antarctica is in the summer period, so the weather is a lot warmer. As a result of this, the ice is melting at a much faster rate.
- The pressure exerted on the glacier is concentrated in the cracks, which causes them to widen and this will induce a calving.

RESULTS

Crack 1 Crack 2 Crack 3

18th January 2020 Notice there are now 3 cracks and the shape of the indent on the RHS is larger. SUMMER

7th July 2019 Notice the beginning of cracks and the shape of the indent on the RHS WINTER (note absence of sea ice)

Conclusion:

Overall, we conclude that since July and due to starting the Antarctic summer with thinner and less ice from winter, the cracks in the Pine Island Glacier have both increased in length and width. Looking at the pattern, it appears that the cracks are widening in spurts, slowly widening them a sudden large movement. We predict that a calving will occur in the next few months as the widening of the cracks has started to accelerate.

The Problem- Extreme Climate

We were interested in how this can affect us in Guernsey and found that a similar event is happening in the Northern Hemisphere. The increased freshwater from the Arctic is reducing the net flow of the arctic chimney waterfalls which is, in turn, slowing the rate of the North Atlantic Drift. This together with the reduced flow from the south can have extreme effects on our climate in Western Europe. If it wasn't for the gulf stream, we would have a similar climate to Canada and it has been predicted that the slowing of the gulf stream could lead to cooling of up to 5-10 degrees!
These effects highlight the importance of monitoring and measuring glacial melts in major ice stores such as Antarctica.
We are already experiencing severe storms more frequently on the island in winter which is disrupting our supply of food and damaging sea walls. In the past decade drought is also becoming more common.

The Problem- Rising Sea Levels

Additionally to the sea ice, melting glaciers are the third-largest contributor to eustatic sea-level rise and therefore the melting of pine island can have dramatic effects on global sea levels, posing the risk of inundation to low lying areas. Guernsey has reclaimed land from the sea in the past and this land is vulnerable to sea level rises.

The Problem- Gulf Stream

Pine Island is the greatest contributor of sea ice into the ocean of any ice drainage basin system in the world. This is having adverse effects on the global climate as well as the ocean current systems. As the fresh meltwater is flowing on top of the dense seawater, it is causing **haline stratification**. This is an issue as it prevents the cold water from sinking and therefore slows the thermohaline circulatory system which is important in regulating the world's climate, which, in the southern hemisphere, are ultimately driven by water sinking in Antarctica.

Evaluation:

It was very difficult to accurately measure the distances as we had to magnify the image and it was quite pixilated. The crack also varied in length and width so we took many readings to find an accurate average. The satellite photos were not uploaded regularly so we often had a lot of data to process all in one go.
If we had had satellite photos taken more regularly, the pattern in the graphs could been clearer due to the closer intervals.
However we feel that despite the difficulties, we have produced data that shows what is happening to the crack.

The Grey Wolf:

In December, we visited the "Grey Wolf", which is a boat that explored an area of Antarctica close to the Pine Island Glacier. It was amazing to be on board a boat that had been to Antarctica! It was interesting to hear the stories and meet people who have experienced seeing the glaciers melting first-hand. We also saw some amazing video footage and photos of the geographical landscapes of Antarctica.

The Ladies' College | The Institute for Research in Schools | Centre for Polar Observation and Modelling | Natural Environment Research Council

Winners- Best presentation UK Antarctic Climate Change project

Lowering our Island carbon footprint

School name: The Ladies' College, Guernsey

Student names: Sophie Elliott, Genevieve Evans, Hannah Jones, Robyn Surcombe, Ria Thapliyal and Lauren Walsh.

Overview

One Friday we went on a climate strike along with many other students from around the island and marched around town demanding climate action. A petition was signed and handed to the politicians to persuade them to make Guernsey carbon neutral. We were inspired by this and decided to think about ways that we could make our school carbon neutral.

We used the carbon calculator to investigate travel, fuel bills, water and waste.
There are three main ways that we can feel we can make a difference:
- Persuading less people to come to school by car
- Finding a renewable source of fuel
- Reducing our food waste and food miles

Research Aims

- To investigate how big our school carbon footprint is....
- To work out how out we can realistically lower this footprint....

Experimental Method

- We made a questionnaire using survey monkey to investigate how people got to school
- We asked the Bursar for the fuel bills
- We went through the school calendar to list all the trips
- We asked the Deputy head how many staff had flown to the UK for CPD

Results: Travel Survey

Number of Journeys Between Home and School each week

Background Information

A carbon footprint is the amount of carbon dioxide released into the atmosphere as a result of the activities of an individual, organization, or community. As CO_2 emissions are increasing this is leading to changes in our climate. Within 12 years the damage that this will cause will be irreversible. Unless we act now and try to reduce our carbon footprint, our generation will be the ones to suffer these consequences.

For Guernsey this will mean the North end of our island will disappear under water and we will have more severe storms that will cut off our supplies in winter.

The total number of miles travelled by students and staff in day to and from school is approximately 1960 miles by car and 936 miles by bus. This makes the number of miles travelled by students at our school to and from school by bus and car in one 195 day school year enough to get you around the world 22.7 times... THIS NEEDS TO CHANGE!!!

It should not be too difficult as we live on an island 5 miles wide and 10 miles long. We need to persuade more people to cycle, walk and come by bus (or even a full car as a first step).This is our task for next term.

We are also a perfect location for electric cars and could easily have lots of charging points around the island. We are holding a **Student Environmental conference** next term and we will be asking the politicians why we can't do this.

Results: Fuel Source for school

100% of our energy is from electricity. Our electricity is from France and fed to us via a cable under the sea.

We visited Guernsey post office - they run an electric fleet of 92 vans using electricity from solar panels on their roof. We could power our school using this renewable source of energy.

We can fit 749 (1.5m x 2m) solar panels on our roof which would take up 2247 m². Unfortunately, due to constant use the playing field cannot be used to fit solar panels.

The problem with 749 solar panels on our roof is the total weight would be 8988 kg so we might have to reinforce the roof. It is also expensive but it is renewable - what price do YOU put on the environment.

The 654 Post Office solar panels give 200000kwh per year. They power off at night but we don't use the school at night. They feed electricity back into the grid so we would save money on electricity bills.

The flat roofs of our school are highlighted in red on the image from Digimap.

Analysis and Conclusions

*Our **car usage is too high** and on a small island with a good bus service we should be able to persuade the pupils at our school to **get to school another way.***
*Our **electricity usage contributes to global warming.** We are in a perfect position to install solar panels and have a **renewable** source of power for the school. We will be presenting this costed plan to the Bursar.*

Further work

Our Youth Forum on the island is working with all the schools to reduce this and we have recently had an assembly on it.

Problems arising: it was difficult sorting the different information which was often over different time periods. The questionnaire was only answered by a third of the school so we had to extrapolate the results. One of the questions was worded so that people misunderstood it

The Institute for Research in Schools | The Ladies' College Guernsey

What do our STEM girls do- class of 2019/2020

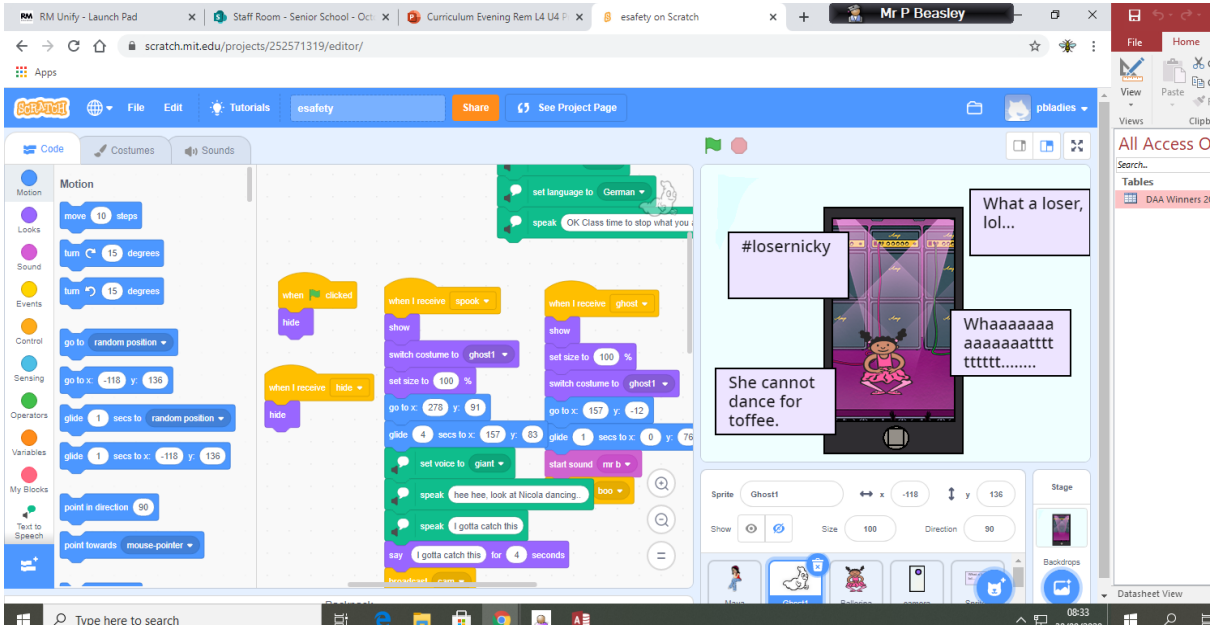
- Medicine
- Veterinary
- Engineering
- Oceanography
- Biomedical sciences
- Zoology
- Maths with meteorology

- *Watch this space- these girls will make a difference*
- *They are future leaders in their field*

The Ladies' College Guernsey

Technology and Engineering

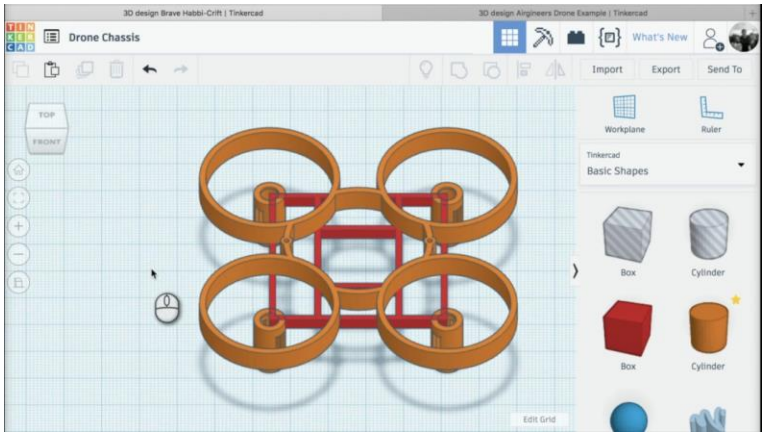
Inc DT, IT and coding

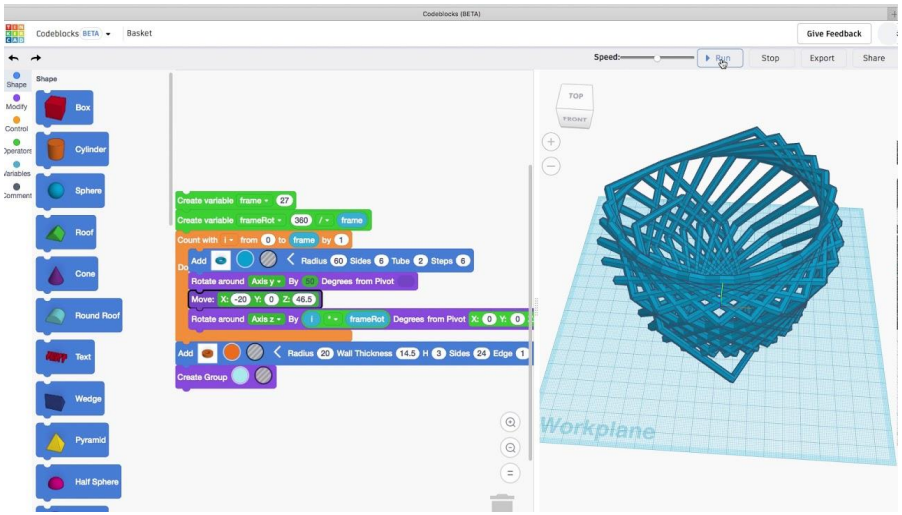

esafety on Scratch
Mr P Beasley
scratch.mit.edu/projects/252571319/editor/
File
Edit
Tutorials
esafety
Share
See Project Page
pbladies
Code
Costumes
Sounds
Motion
#losernicky
What a loser, lol...
Whaaa

Technology and Engineering

Design Technology

AUTODESK®
TINKERCAD®





3D CAD – Computer Aided Design

3D Models from Coding Blocks

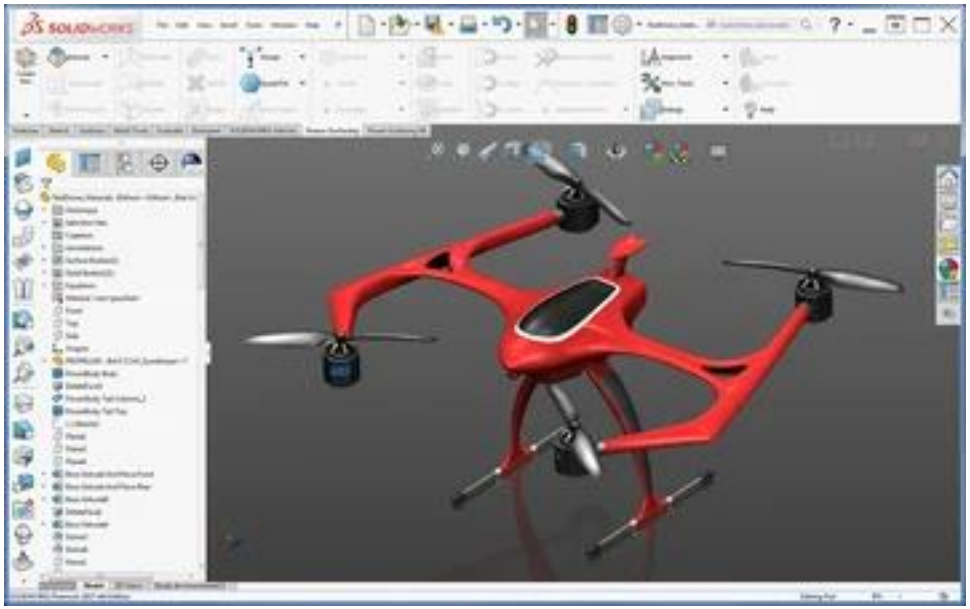
Available to all pupils to use on all platforms – Mobiles, Tablets and Desktops.

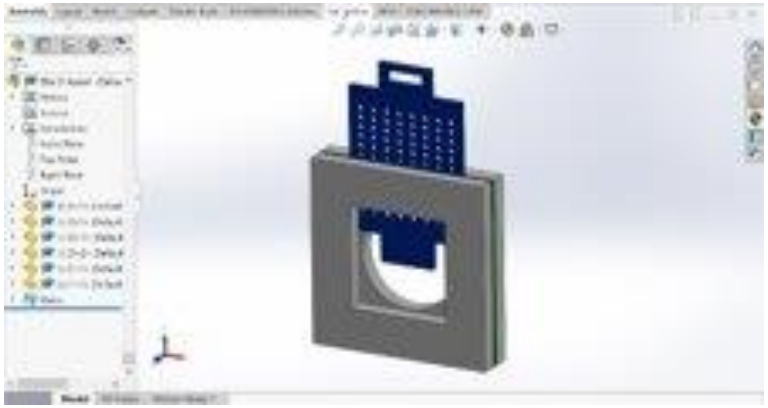
The Ladies' College Guernsey

Technology and Engineering

Design Technology

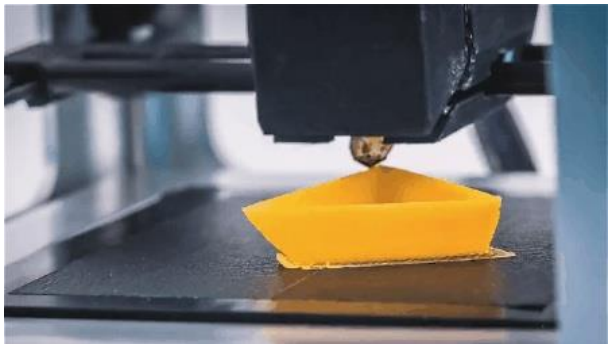
Advanced 3D CAD - Computer Aided Design





The Ladies' College Guernsey

Technology and Engineering



Design Technology

3D Printers / Laser Cutter

CAM - Computer Aided Manufacture

The Ladies' College Guernsey

Technology and Engineering

Design Technology

Lunch Time Clubs and Activities starting in DT

TINKERCAD

AUTODESK® TINKERCAD®

The Ladies' College Guernsey

Technology and Engineering

Food Tech – Food and Nutrition

Exciting New Development

- Food Tech Building
- Dedicated to food
- Small class sizes

The Ladies' College Guernsey

Technology and Engineering

Food Tech – Food and Nutrition

KS3 24 week course (3 x 8 weeks)

BNF – British Nutrition Foundation

Food a fact of life - Licence to cook

- Cooking for health
- Hygiene and safety
- Cooking skills
- Licence to cook certificate
- Food hygiene Certificate
- Clubs / 6th form Enrichment / KS4
- House bake off

The Ladies' College Guernsey

Thinking Mathematically

Exploring, questioning, working systematically, visualising, conjecturing, explaining, generalising, justifying, proving... are all at the heart of mathematical thinking.

These collections of activities are designed to develop your capacity to work as a mathematician.

Exploring and Noticing Structure

What mathematical structures do you notice as you explore these problems?

Working Systematically

Work on these problems to improve your ability to work systematically.

Thinking Strategically

Work on these problems to improve your strategic thinking.

Posing Questions and Making Conjectures

Work on these problems to improve your questioning skills.

Visualising

Work on these problems to improve your visualisation skills.

Mathematical Modelling

Work on these problems to improve your mathematical modelling skills.

Representing

Consider how alternative representations can help us to understand the underlying mathematical concepts.

Reasoning, Justifying, Convincing and Proof

Work on these problems to improve your reasoning skills.

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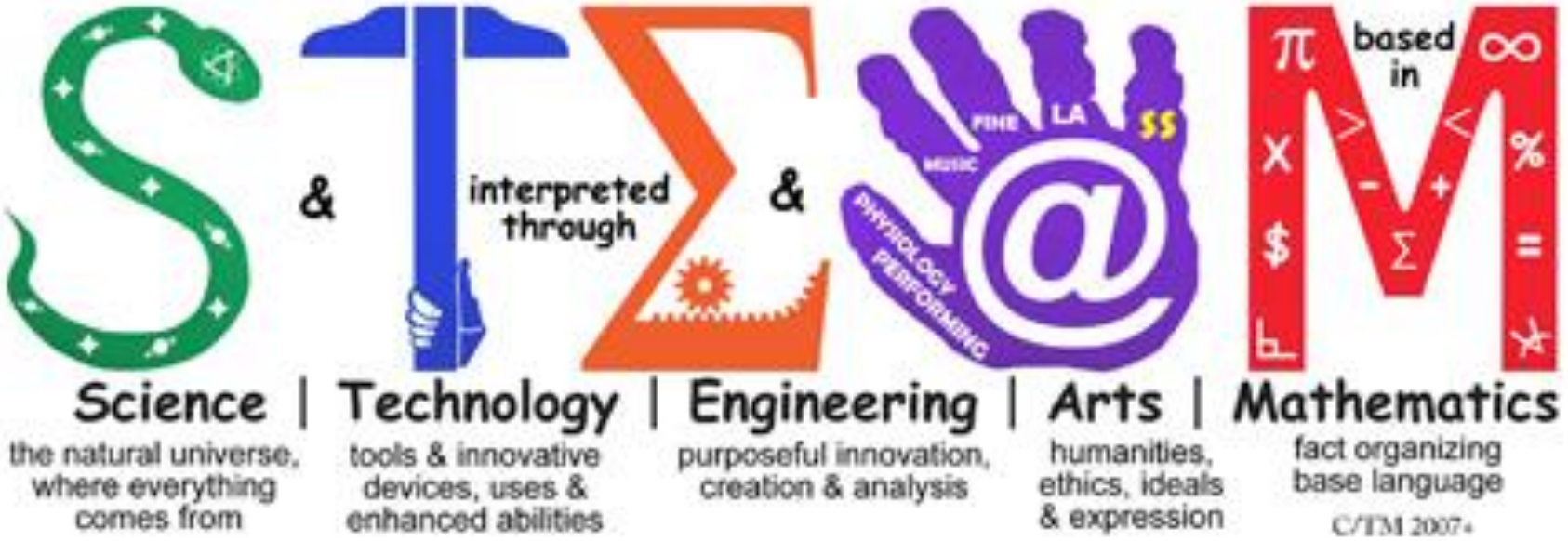
STEAM - The Arts in 21st Century learning



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educationcloset
1
INVESTIGATE
2
DISCOVER
3
CONNECT
4
CREATE
5
REFLECT
integration foundation

Curriculum Review 2019-20+

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Curriculum update

- Evolution to include development of 21st Century skills throughout curriculum
- Changes already made:
  - Increase in IT in L4
  - Choice of languages in L4
  - Learning support L4-U5
  - Food Technology
  - Addition of PE as GCSE option
  - EPQ at Sixth Form
  - Flexibility at Sixth Form
  - Digital literacy
  - Wellbeing

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Curriculum update

- Evolution to include development of 21st Century skills throughout curriculum
- What stays:
  - Encourage
  - Create
  - Inspire
  - Flexible pathway at (I)GCSE
  - 7-ll (I)GCSEs
  - Sixth Form Partnership
  - Broad, balanced and relevant curriculum

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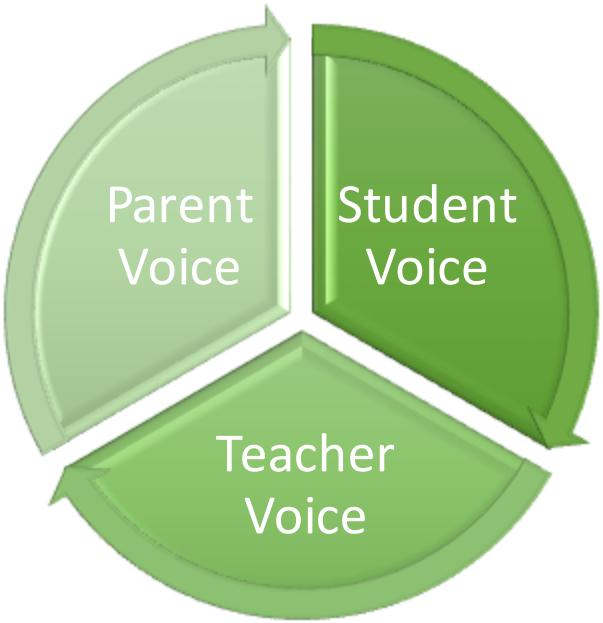
Curriculum update

- Evolution to include development of 21st Century skills throughout curriculum
- What next:
  - Review and Development
  - Skills
  - BYOD/Digital Literacy
  - Subjects
  - Feedback



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Physical Education Department

Mrs Helen Le Maitre
Head of Physical Education

The Ladies' College Guernsey

- Gavin St Pier told me I had to do 2 hours of exercise EVERYDAY during lock down … so I did!
- Mrs Le Maitre 2020

- According to the British Journal of Sports Medicine, physical activity declines from the **age of 7.**
- The average girl spent 63 minutes per day doing moderate to strenuous physical activity when **seven years old**, which fell to 41 minutes **age 15.**

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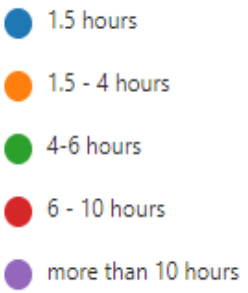
Hours of Physical Exercise a Week



Remove

Lower 4

Upper 4

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The Ladies' College Physical Education Department echoes The Ladies' College vision:

To **encourage** confidence which will allow each girl to develop her talents to the full, regardless of the activity.

To **create** an environment where all students can take part in a range of physical activities that become a central part of their lives, both in and out of The Ladies' College

To **inspire** students to be the best that they can be through a healthy and active lifestyle.

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Top 10 tips for Physical Education

- Try your best
- Be organised.
- Help others.
- Never say "I can't…"
- Do not be afraid of making mistakes.
- Try something new – it's never too late!
- Learn the rules …
- … then stick to them!
- Be gracious in defeat …
- …and modest in victory!

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PE in the Curriculum

- Remove and Lower 4
- 2 x one hour lessons a week
- In Key Stage 3 the following activities are offered:
- Athletics, Dance, Football, Gymnastics, Hockey, Netball, Rounders, Swimming, Tennis.

PE in the Curriculum

- **Upper 4**
- 2 x one hour lessons a week
- In groups names Faster, Higher and Stronger
- **In Key Stage 3 the following activities are offered:**
- Athletics, Dance, Football, Gymnastics, Hockey, Netball, Rounders, Swimming, Tennis, Badminton , Volleyball, Fitness (which includes: Cross fit, Yoga, Aerobics and Circuits)

Co-Curricular

- Clubs - Netball, Gym and Dance, Hockey, Swimming, Tennis, Athletics, Rounders, Football and Yoga
- Ladies' College Teams
- House Competitions
- Other Events e.g. Triathlon, Park run

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Kit

- Comfortable
- Warm
- Named

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How can you support your daughter?

- Encourage her to sign up to clubs and events
- Build confidence and enthusiasm
- Active Travel
- Remember the 10 Top Tips
- Let us know – hlemaitre@ladiescollege.ac.gg

The Ladies' College Guernsey

Learning Support

Mrs Nicola Ingrouille

The Ladies' College Guernsey

An Inclusive Community

Learning Support

- Mrs Nicola Ingrouille (Head of Learning Support)

ningrouille@ladiescollege.ac.gg

- Mr Dave Herschel

dherschel@ladiescollege.ac.gg

- Available throughout the College, including Sixth Form
- Individual weekly one-to-one sessions
- Can take place instead of an additional language in Upper Four- group sessions

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Research

Strategies

The Ladies' College Guernsey

The Ladies' College Guernsey

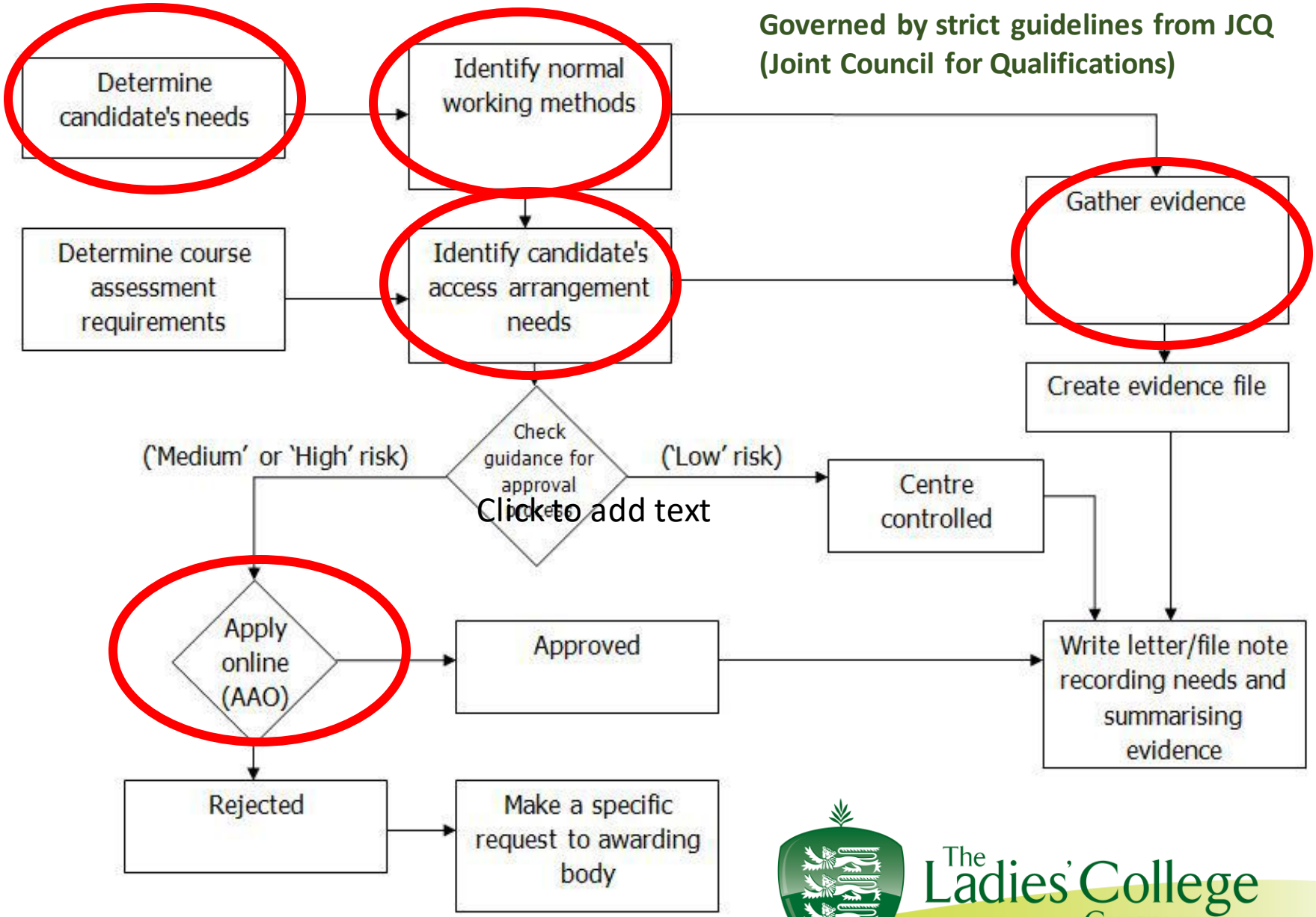
An Inclusive Community

Learning Support

We support the girls in the following areas:

The Ladies' College Guernsey

Governed by strict guidelines from JCQ (Joint Council for Qualifications)



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Exam Access Arrangements

- Communication and Interaction Needs (e.g. Autistic Spectrum Disorder, Speech. Language and Communication Needs)

- Sensory and Physical Needs (e.g. Hearing Impairment, Multi-Sensory Impairment, Physical Disability, Vision Impairment)

- Social, Mental and Emotional Needs (Attention Deficit Disorder, Attention Deficit Hyperactivity Disorder, Mental Health Conditions)

- English as an Additional Language

Exam Access Arrangements

The Ladies' College Guernsey

INFORMATION

INFORMATION / Examinations

Examinations

Key Dates

GCE A-Level results will be published on Thursday 15th August 2019.
GCSE results will be published on Thursday 22nd August 2019.

Joint Council for Qualifications CIC

Information for candidates documents

Policies

Appeals Policy for Controlled Assessment and Examinations (pdf)
Word Processing Policy (pdf)

Examinations Access Arrangements

Download EAA Guidance (docx)

The Ladies' College Guernsey

ENCOURAGE CREATE INSPIRE

The Ladies' College Guernsey

The Ladies' College aims to:

- **Encourage** each girl to grow in confidence, develop her talents to the full and value the qualities of others;
- **Create** an environment where each girl can be happy, love learning and make lifelong friends;
- **Inspire** each girl to be the best that she can be.

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The Ladies' College Guernsey