

## LEICESTER GRAMMAR SCHOOL

## Al for our Pupils

Peter Cox



# (G) ChatGPT



How would you define "generative AI"?



Generative AI refers to a subset of artificial intelligence (AI) techniques and models designed to generate new content or data that is similar to, and often indistinguishable from, human-created content. It involves the use of algorithms and models to produce text, images, audio, or other forms of data that appear as if they were created by a human.









Midjourney



**DALL**·E

EED.IO















I-TEAM

## Fake News? ChatGPT Has a Knack for Making Up Phony Anonymous Sources

Worries about the potential use of artificial intelligence to disseminate fake news and misinformation are just one area of concern surrounding ChatGPT — educators fear students might primarily use it to plagiarize or cheat on certain assignments

By Chris Glorioso • Published February 23, 2023 • Updated on February 24, 2023 at 6:14 am







**Trending Stories** 



#### DONALD TRUMP

Is Mar-a-Lago worth \$1 billion? Trump's winter home valuations are at the core of his NY fraud trial



NEWS

31-year-old teacher quit her job. Now she works at Costco and boosted her income by 50%: 'I've never been happier'



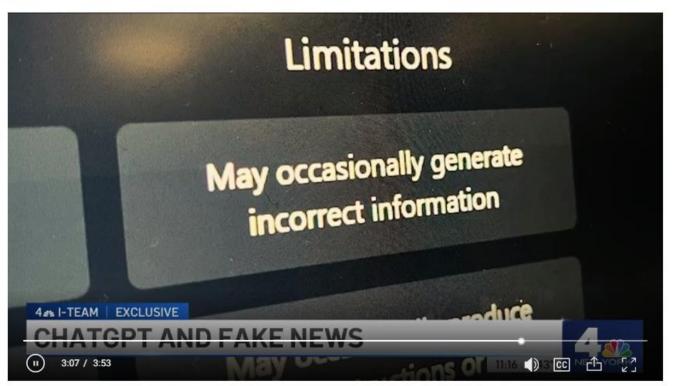
UPPER EAST SIDE

NYPD looking for inmate who escaped Mt. Sinai Hospital in midtown: Police



ISRAEL

Israeli survivors recount terror at music festival, where Hamas militants killed at least 260





Business Insider - Sindhu Sundar Feb 6, 2023

https://www.businessinsider.com/chatgpt-may-make-up-facts-openai-cto-mira-murati-says-2023-2?r=US&IR=T

The bot "may make up facts" as it writes sentences, OpenAI's chief technology officer Mira Murati said in an interview with Time magazine, describing that as a "core challenge." ChatGPT generates its responses by predicting the logical next word in a sentence, she said — but what's logical to the bot may not always be accurate.



If you hang three towels on a washing line and it takes three hours for them to dry, how long would it take 9 towels to dry on the line?





If you hang three towels on a washing line and it takes three hours for them to dry, how long would it take 9 towels to dry on the line?



The time it takes for towels to dry on a washing line can depend on various factors, including the weather conditions, humidity, and the thickness of the towels. However, assuming all other factors remain constant, we can make a simple assumption that the drying time is directly proportional to the number of towels.

In this case, if it takes 3 hours for 3 towels to dry, you can calculate the drying time for 9 towels using the proportion:

(3 towels drying time) / (3 towels) = (9 towels drying time) / (9 towels)

Now, solve for the drying time for 9 towels:

$$(3 \text{ hours}) / (3) = (9 \text{ hours}) / (9)$$





## Leicester Grammar School AI Policy

"For certain tasks, pupils can use AI tools to generate content (text, video, audio, images) that will end up in your coursework, homework, activities and responses."

"There are also situations and contexts within the school where pupils will be asked to use AI tools to enhance learning and to explore and understand how these tools can be used, and times where the use of AI tools will be expressly permitted."

"Our general assumption, however, is that classwork and homework that is designed to improve skills in that subject (e.g. problem practice in Maths, writing practice in English, translation practice in a language etc.) will be pupil's own."



### Leicester Grammar School AI Policy

- If using AI tools you should "acknowledge what part of any assignment was written or created by AI and what was written and created by you. You may not submit any work generated by an AI program as your own."
- "The unauthorised and unattributed submission of AI-generated answers
  constitutes plagiarism and is not permitted. We reserve the right to use AI
  plagiarism detectors or our academic judgement to identify unappreciated
  uses of AI. The school reserves the right to apply sanctions from the full range
  of those available where plagiarism has been committed."

assassination of Archduke Franz Ferdinand of Austria-Hungary by a Serbian nationalist in Sarajevo on June 28, 1914 1. The assassination led to a series of diplomatic crises and military mobilizations that

The underlying causes of the war include a complex web of alliances between European powers, rising nationalism, militarism, and imperialism 2 3 4. The Triple Entente (Great Britain, France, and Russia) and the Triple Alliance (Germany, Austria-Hungary, and Italy) were formed as a result of these alliances 1. The assassination of Archduke Franz Ferdinand was the spark that ignited the powder keg of tensions that had been building up for years 1.

The war lasted from 1914 to 1918 and involved many countries across the world. Battles were fought on land, sea, and air 1. Trench warfare was a common feature of the war 1. The war had a profound impact on the world and led to significant political, social, and economic changes 1.

Learn more: 1. bbc.co.uk 2. nationalgeographic.com 3. byjus.com 4. iwm.org.uk +1 more 1 of 30 ANSWERING YOUR **QUESTIONS** 

The causes of the First World War ar // 🛍 ...

Recent activity

**New topic** 

Ask me anything...

[6]



0/2000





#### Causes of First World War notes

09:41

10 October 2023

The causes of the First World War are complex and multifaceted. The war was triggered by the assassination of Archduke Franz Ferdinand of Austria-Hungary by a Serbian nationalist in Sarajevo on June 28, 1914<sup>1</sup>. The assassination led to a series of diplomatic crises and military mobilizations that eventually culminated in the outbreak of war<sup>1</sup>.

The underlying causes of the war include a complex web of alliances between European powers, rising nationalism, militarism, and imperialism<sup>234</sup>. The Triple Entente (Great Britain, France, and Russia) and the Triple Alliance (Germany, Austria-Hungary, and Italy) were formed as a result of these alliances<sup>1</sup>. The assassination of Archduke Franz Ferdinand was the spark that ignited the powder keg of tensions that had been building up for years<sup>1</sup>.

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Source: Conversation with Bing, 10/10/2023

(1) How and why did World War One start? - BBC Bitesize.

https://www.bbc.co.uk/bitesize/topics/zqhyb9q/articles/znhhrj6.

(2) World War I facts and information - National Geographic.

https://www.nationalgeographic.com/culture/article/world-war-i.

(3) Cause of World War I - Read about the Factors the Lead to First World War.

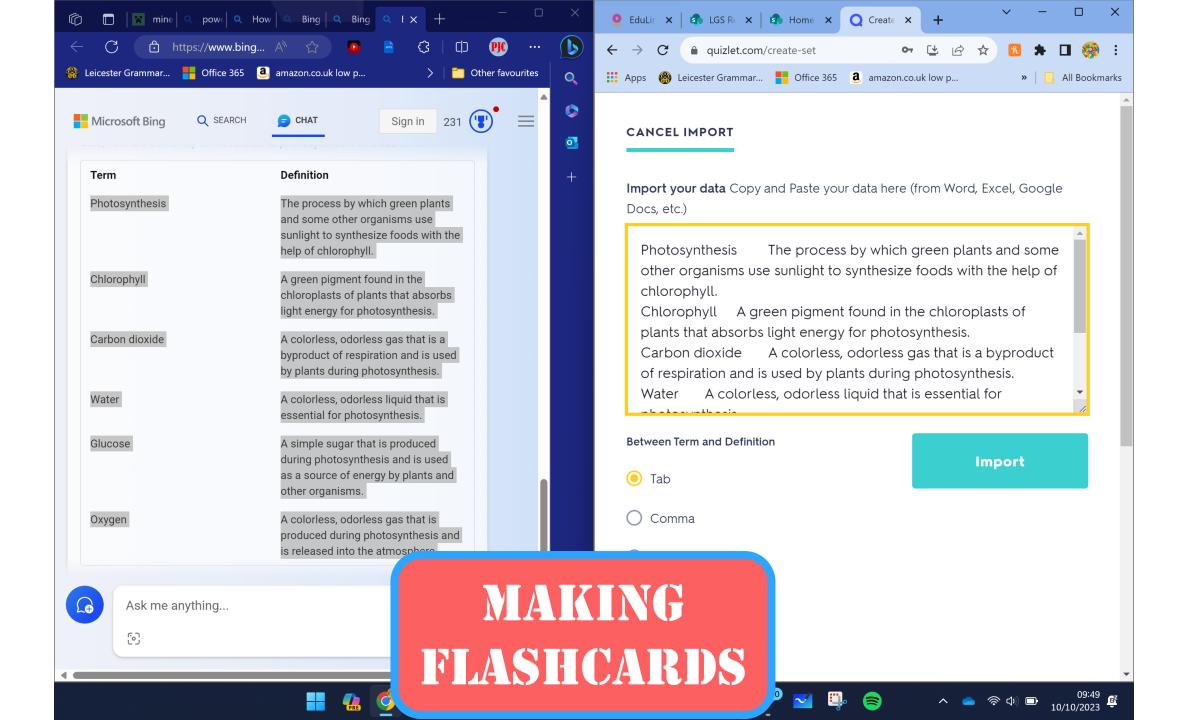
https://byjus.com/free-ias-prep/causes-of-world-war-one/.

(4) The Causes Of The First World War | Imperial War Museums.

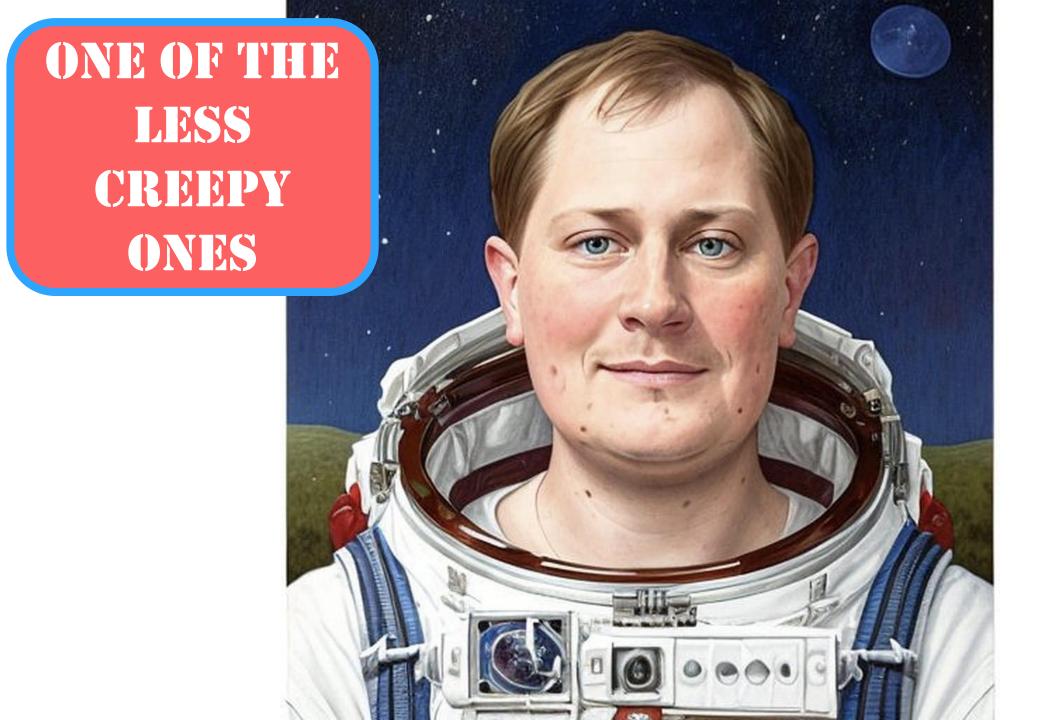
https://www.iwm.org.uk/history/the-causes-of-the-first-world-war.

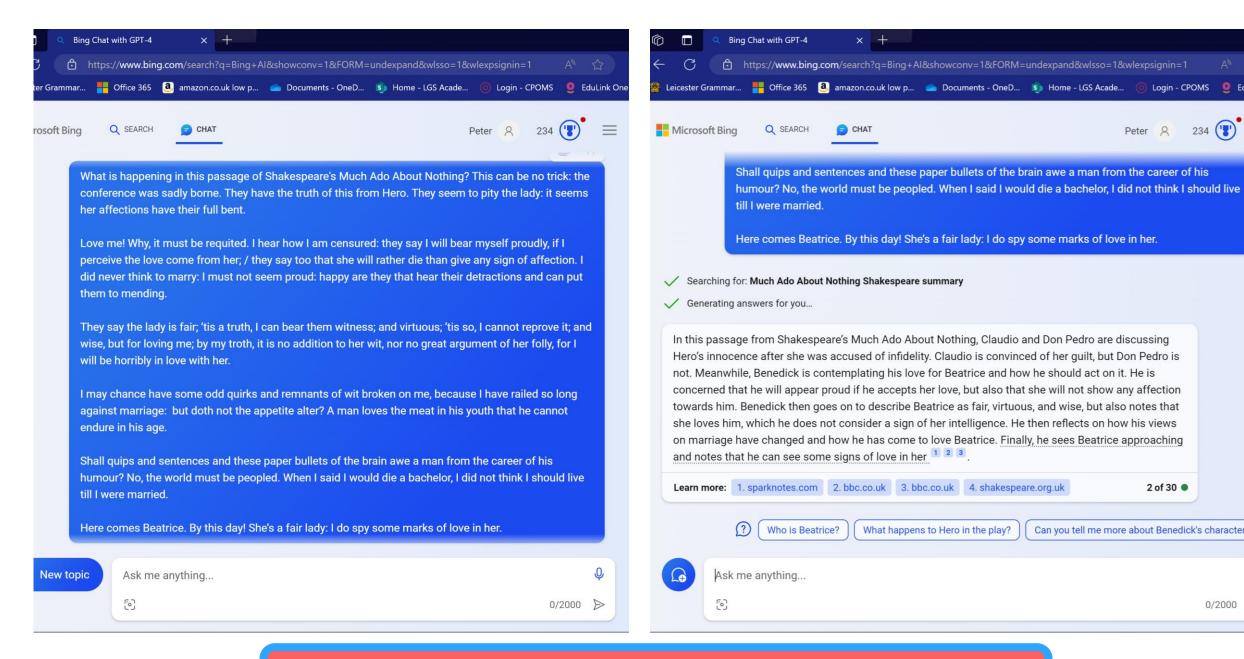
(5) The Top 5 Causes of World War I - ThoughtCo. <a href="https://www.thoughtco.com/causes-that-led-to-world-war-i-105515">https://www.thoughtco.com/causes-that-led-to-world-war-i-105515</a>.

## IMPROVING YOUR NOTES

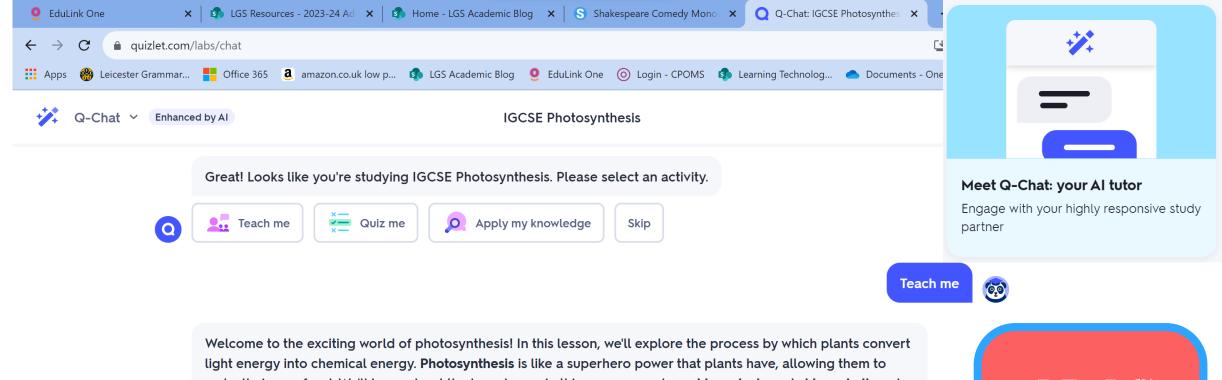


Can you generate an image of an erupting volcano with a river of running lava in front of it? I'll try to create that. 1 of 30 GENERATING IMAGES





### SUMMARISING A PASSAGE



make their own food. We'll learn about the key players in this process, such as chloroplasts and chlorophyll, and discover how factors like light, temperature, and carbon dioxide affect the rate of photosynthesis. Get ready to dive into the fascinating world of plants and their amazing ability to harness the power of sunlight! Let's get started!

Let's start with the term boil in water to: kill the leaf and denature the enzymes. Imagine you have a leaf that you want to study, but it's still alive and has enzymes that can affect your experiment. By boiling the leaf in water, you can kill the leaf and stop any enzyme activity. It's like turning off the leaf's "power switch". For example, if you want to investigate the leaf's structure, you would boil it in water to make sure the enzymes are no longer active.

Now, here's a question for you: Why is it important to denature the enzymes when studying a leaf? Q



Your AI tutor is ready to help. Just start typing.







☆ Exam Prep New

Assignments

Ask Amelia



^ 1 Foundations in Biology

^ 1.1 Cell Structure

1.1.1 Introduction to Cells

1.1.2 Ultrastructure of Eukaryotic Cells

1.1.3 Ultrastructure of Eukaryotic Cells 2

1.1.4 Cytoskeleton

1 1 5 Methods of Studvina

and forming signal recognition particles.



Typing speed: x1.0

0/1

#### The Nucleus



The nucleus is a big organelle that contains the cell's DNA. It is surrounded by a nuclear

Feedback?

Check

AI BASED
QUESTIONING

I am doing Biology, Chemistry and Geography A Level, can you plan me a revision timetable from 14th December to the 4th January. I want to take Christmas day off.

- Sure, I can help you with that.
   Here is a revision timetable for the period of 14th December to 4th
   January with Christmas day off:
- This timetable is based on the assumption that you will be studying for two hours every weekday and two hours on weekends. You can adjust the timings and subjects according to your preference and needs. Good luck with your revision!

Weekdays	Time	Subject
Mon 12/13/21	6-8 PM	Chemistry
Tue 12/14/21	6-8 PM	Biology
Wed 12/15/21	6-8 PM	Geography
Thu 12/16/21	6-8 PM	Chemistry
Fri 12/17/21	6-8 PM	Biology
Sat 12/18/21	10 AM-12 PM	Geography
Sun 12/19/21	10 AM-12 PM	Chemistry
Mon 12/20/21	6-8 PM	Biology
Tue 12/21/21	6-8 PM	Geography
Wed 12/22/21	6-8 PM	Chemistry
Thu 12/23/21	6-8 PM	Biology
Fri 12/24/21 - Sat 12/25/21	-	Christmas Day Off
Sun 12/26/21 - Mon 12/27/21	-	Christmas Break
Tue 12/28/21 - Wed 12/29/21	-	Christmas Break
Thu 12/30/21 - Fri 12/31/21	-	Christmas Break
Sat 1/1/22	-	New Year's Day Off
2/22	-	New Year's Break
3/22	-	New Year's Break
1/22	-	New Year's Break

Cargor with me an A Level style essay as to why Batman is belter than Sperman? Certainly! Here is an essay that compares Batman and Superman and argues that Batman is the superior superhero. Batman and Superman are two of the most iconic superheroes in popular culture.

While both characters have their strengths, Batman is the superior superhero for several reasons. First, Batman is a more relatable character than Superman. Unlike through Superman, who has god-like powers, Batman is a human being who relies on his intelligence, physical strength, and technology to fight crime. This makes him a more compelling character because he is more vulnerable and has to work harder hots of repetition of Proper hours > to overcome his limitations. Second, Batman is a more complex character than Superman. While Superman is a symbol of hope and justice, Batman is a darker character who struggles with his own demons. He is haunted by the death of his parents and has to constantly battle his own anger and desire for revenge. This makes him a more interesting character because he has to overcome his own flaws in addition to fighting crime. Millionaire Third, Batman is a better role model than Superman. While Superman is an Sperious listing idealized version of humanity, Batman represents what people can achieve through agument hard work and determination. He shows that anyone can be a hero if they are willing to put in the effort. This makes him a more inspiring character because he represents the best of what humanity can be. rather bland language Fourth, Batman's villains are more interesting than Superman's villains. While Superman's villains are often one-dimensional characters who are simply evil for comple. the sake of being evil, Batman's villains are complex characters with their own motivations and backstories. Characters like the Joker, Two-Face, and Catwoman are just as interesting as Batman himself, which makes for a more engaging story. Finally, Batman has a better supporting cast than Superman. Characters like Alfred Pennyworth, Commissioner Gordon, and Robin are just as important to the Batman mythos as Batman himself. They provide support and guidance to Batman when he needs it most, which makes him a stronger character overall. What about 5 mars team when he is Clarke Kent? Ignores possible counter-In conclusion, while both Batman and Superman are great superheroes, Batman is argument the superior character because he is more relatable, complex, inspiring, has more interesting villains and supporting cast than Superman. His struggles with his own demons make him a more interesting character, and his reliance on his own intelligence and technology make him a better role model for people who want to make a difference in the world Repeats points already made so not an effective conclusion. No development This structure is of type we might use as a model when training Year 7s in the first term. It is not an A-level essay as there is no subtlety or sophistication. There is no use of specific examples to back up points

# YOU CRITIQUIING AI'S WORK

Thanks to Mrs Kendall for marking this one

## FINAL THOUGHTS



All is here to stay and is going to be a part of any working environments our young people hope to go into



Be cautious and critical of information coming from all sources, but especially AI. Check the information against multiple sources.



There are often free tools behind those that will charge you, so think before you get out your wallet.



Explore. Get used to using these tools appropriately.

## Risks and Dangers of Al

Jennifer Young
Deputy Head, Pastoral

## **L**



#### Safer scrolling:

How algorithms popularize and gamify online hate and misogyny for young people

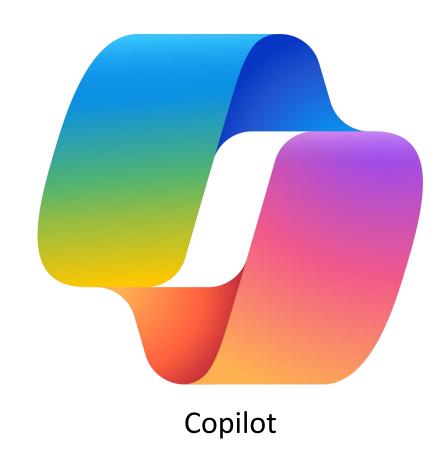
Kaitlyn Regehr, Caitlin Shaughnessy, Minzhu Zhao & Nicola Shaughnessy





## 'Chatbots' and 'virtual assistants'





## Trump supporters target black voters with faked AI images

3 4 March





This image, created by a radio host and his team using Al, is one of dozens of fakes portraying black Trump supporters

## Kate photo withdrawn by five news agencies amid 'manipulation' concerns

() 11 March

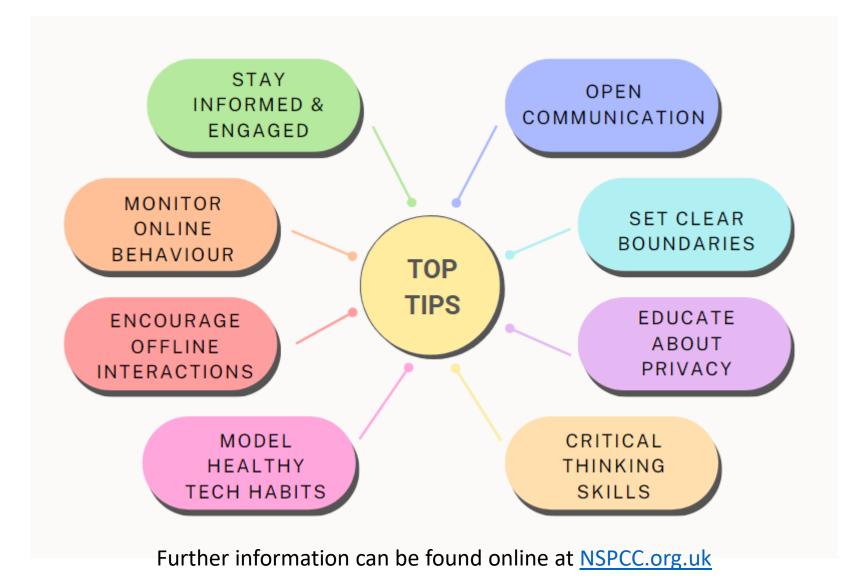




Source: Prince of Wales/Kensington Palace



## Tips for parents



## Parental control apps for Android and iPhone

('Tom's Guide' 2024)

BEST OVERALL

BEST VALUE

BEST MONITORING







BEST FOR BIG

BEST FOR IOS

BEST FOR ANDROID







Click here for further information





School Council





Life Education





Peer teaching



**Assemblies** 

## Healthy Digital Diet

#### THINK ABOUT WHAT WE ARE CONSUMING



what we're
'eating' - is it
the good
nutritious
stuff, or
highly
processed
'junk food'?



How much are we 'eating' and when?



Are we hitting the different 'food groups'? - social media, high quality journalism, gaming, wellbeing, films and TV etc.

## Al in Education

Carl James

Deputy Head, Curriculum

### Al is old news

- Al has been doing stuff for us (to us?) for ages
- Amazon's suggestions increasingly good
- Google's search engine suggestions increasingly good
- As you move down the street, ANPR, traffic lights, CCTV etc.

#### **Buy Again**



Purchased Apr 2024

Purchased Jan 2024



Purchased Sept 2023

Purchased Apr 2024

More in Buy Again

## Generative AI is basically new

- Mass availability is post-Covid
- Possibly stimulated by industry capacity as remote working began to shrink back
- Movement from ability to perform very specific tasks (like searching, or certain types of shopping) to being able to generate 'novel' content on anything (within reason and some rules)

## Why now?

Difficult to decide when to say anything about AI Possibility that we have seen the end of the 'big bang' phase Popularity tide is turning – a critical cynicism is probably an asset for us (and children) as users

#### The A Register®

## Al spam is winning the battle against search engine quality

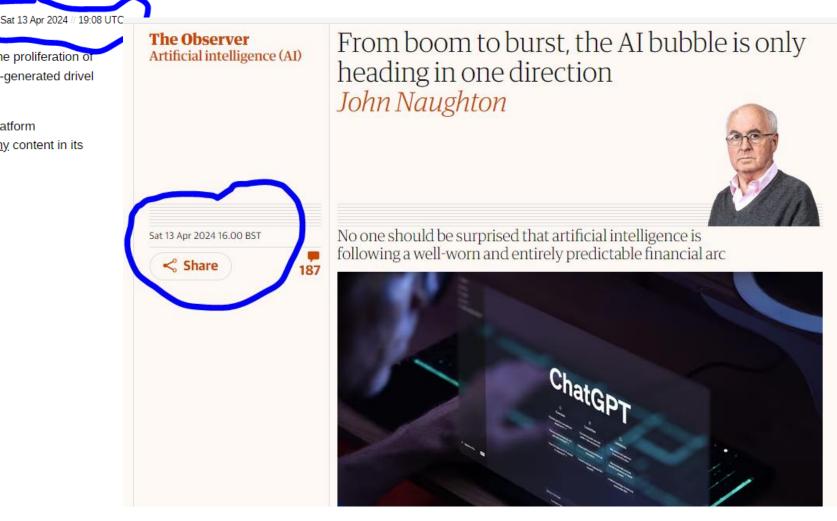
'Not all AI content is spam, but I think right now all spam is AI content'

Brandon Vigliarolo

INTERVIEW We know Google search results are being hammered by the proliferation of

All garbage, and the web giant's attempts to curb the growth of machine-generated drivel haven't helped all that much.

It's so bad that Jon Gillham, founder and CEO of AI content detection platform Originality.ai, told us Google is losing <u>its war</u> on all that <u>spammy</u>, <u>scammy</u> content in its search results. You can see our full interview with Jon about it all below.



#### Let's build a new car!

- An actually new car
- There are rules about this, set by legal frameworks in many countries
- We (manufacturer) need to spend hundreds of millions, e.g.:
  - R&D
  - Compliance
  - Safety testing
  - Tooling for novel parts
  - New factory?
  - (Probably) Product Recall for early adopter consumers

#### Let's run a new Generative Al

- A bit like launching a new car but:
  - without (m)any rules
  - without much safety testing (if any)
- So this means that we are the crash test dummies:
  - all of us in society at large
  - children included

# There are some rules, but they aren't necessarily helpful

A scene that depicts all that is bad about modern Britain

A scene that depicts all that is bad about modern Germany – computer says no.



#### Generative Al is limited

A Science teacher wishes to produce an image to support a lesson on Laboratory Safety. He asks Gen-AI for an image showing some schoolchildren behaving dangerously in a lab – so that pupils can then identify the dangerous behaviour.

#### We're expecting:

- Missing goggles
- Wet surfaces
- Lack of lab coats

## Unsafe Laboratory Behaviour

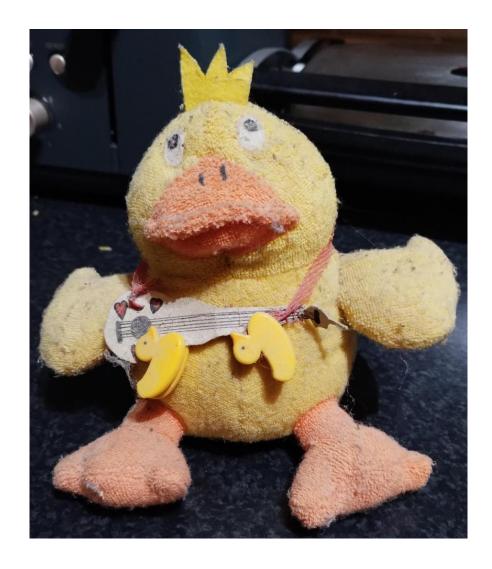


#### Generative AI – The Students' SNAKE-OIL<sup>TM</sup>

- Gen-AI is already being sold as personalised learning
- It is efficient at helping certain learners prepare for certain exams
- Exams, useful as they are, are a reduction to common factors (so it's the polar opposite to personalised learning)
- Unlikely (in its current form) to replace teachers...
- ...but, could have a role to play in plugging gaps

#### Generative AI - Plagiarism

- This is the big panic for educators, especially Universities
- "Turnitin" etc. not proving an enormous help [yet]
- What happens to:
  - Homework
  - Coursework
  - Exams with any sort of 'open book' element or remotely conducted
- International Bacc embrace!
- English system retrenchment!
  - Don't really use AI, and if you do you must acknowledge it like any other source (else it is malpractice)





It took me just three goes to get this sort of likeness.

#### Generative AI – What to Teach

- "We need to be teaching children how to prompt AI effectively"
  - This creates time savings in the order of minutes
  - Gen-AI will look completely different when our children hit the workforce

#### • Better:

- General awareness of its functions
- Potential
- Limitations
- Ethics (plagiarism, avoiding dangerous content (reading/creating)
  - Responsible and Appropriate use
- Dangers (largely as inherited from the Internet at large)
- Career implications: some jobs will disappear, others will change

#### Generative AI - opportunities

- China has a 'tutor match' app [technology similar to dating apps] this will come to the Anglosphere
- Job market disruption probably helpful for those with enough time to pivot before entering the fray
- Facility for learners:
  - Effectively a 'more human' search engine
  - Obvious potential for some assistance with learning
- Improvements for teachers:
  - Create some resources [little excellent, but mediocrity in abundance]
  - Hopefully useful for admin [with wins for T&L], but we said this before about email

### Generative AI – A bright future!?

- It's not clear
- Gen-Al uses the internet for its learning
- But an increasing proportion of the internet is Gen-Al generated
- This circular logic is likely to end badly without good management:
  - Propagation of a limited amount of information in convergent style
  - Risk of propagation of misinformation

## So what's happening?

- Ofsted and Ofqual must present to ministers this month how they will approach AI with a strategy to include what is currently going on to understand it and manage current and emergent risks
- JCQ (who run the exams system) are perpetually clarifying the regulations
- Governments are gradually regulating: the US now has 25 AI-related regulations (versus 1 back in 2016)

#### What do we [all] do about it?

Al may appear more authoritative. **But don't forget it's the internet**. So it's mostly common-sense and proportionate care.

- Careful with personal data
- Don't do anything offensive, rude or irresponsible
- Know that it could save time or augment progress...
- ...but know also there are reliability concerns
- Check outcomes carefully
- Never pass off other's work as yours (including that of machines)
- Talk to each other about what you are doing

#### What does a school do about it?

- The above..!
  - Make sure teachers are aware
  - Make sure pupils are aware
  - Help families to be aware
  - Listen to families (who may know a great deal more than us)
- Use it where there is cause to use it
  - Shaping up as a tool rather than an end in itself
  - Does need to find niches within our existing curriculum this comes next

"Any intelligence is better than none"