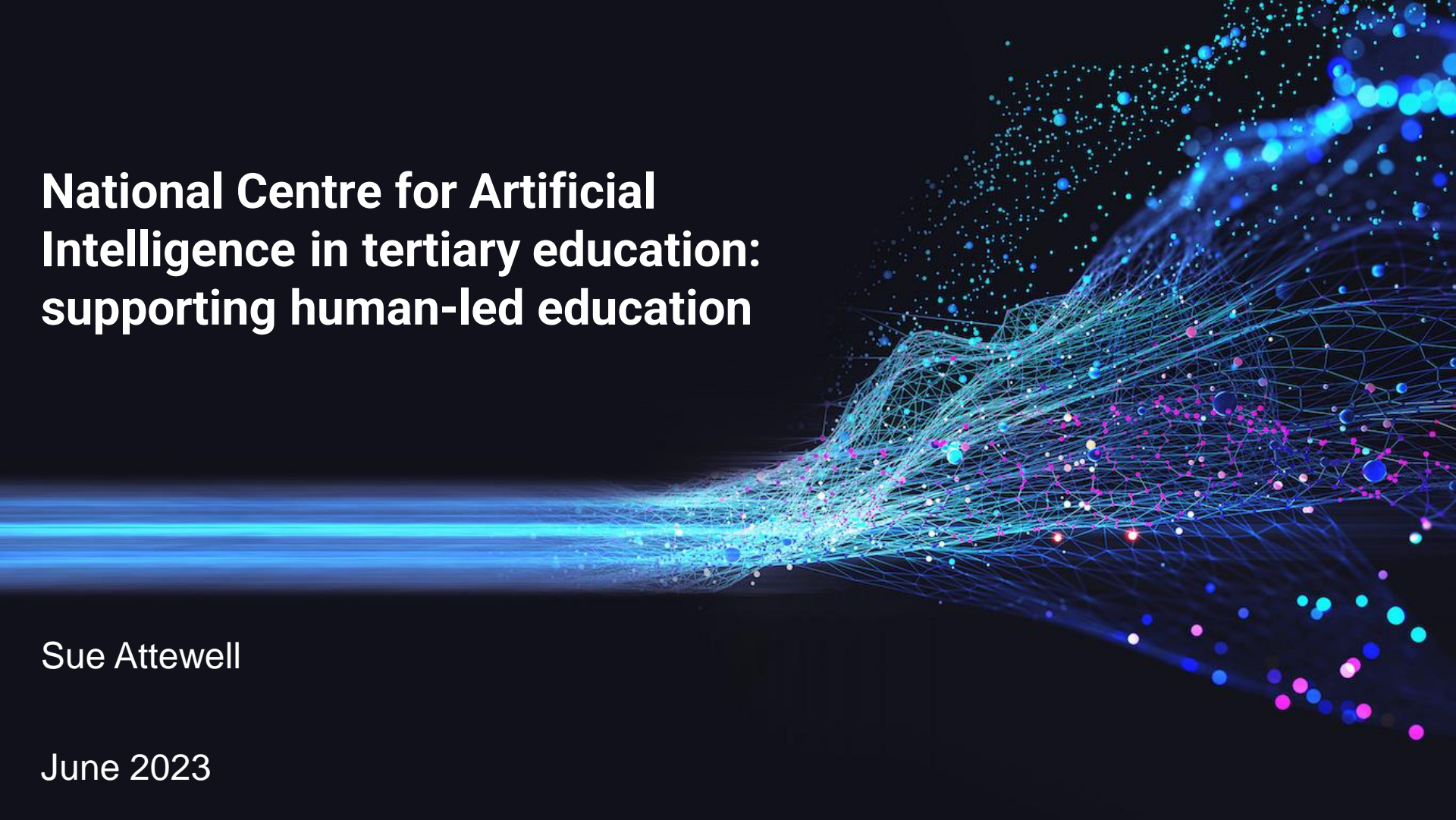


National Centre for Artificial Intelligence in tertiary education: supporting human-led education

An abstract digital graphic featuring a dense network of thin, glowing lines in shades of blue and cyan. Interspersed among these lines are numerous small, semi-transparent spheres in various colors, including blue, pink, and white. The overall effect is that of a complex, interconnected data network or a stylized representation of neural connections. The background is a deep, dark blue, which makes the glowing elements stand out prominently.

Sue Attewell

June 2023

About National Centre for AI in Tertiary Education

Aim: To accelerate the adoption of artificial intelligence across the tertiary education sector in a responsible way.



Pilots



Information



Events



Community



Face Emotion Detection

Automatically detect faces and the emotions expressed in images



Image Description

Generate descriptions of images



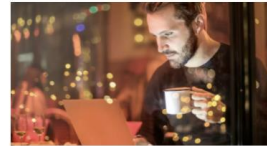
Object Detection

Automatically detect objects in images



Question Generation

Automatically generate questions and answers



Recommending Articles

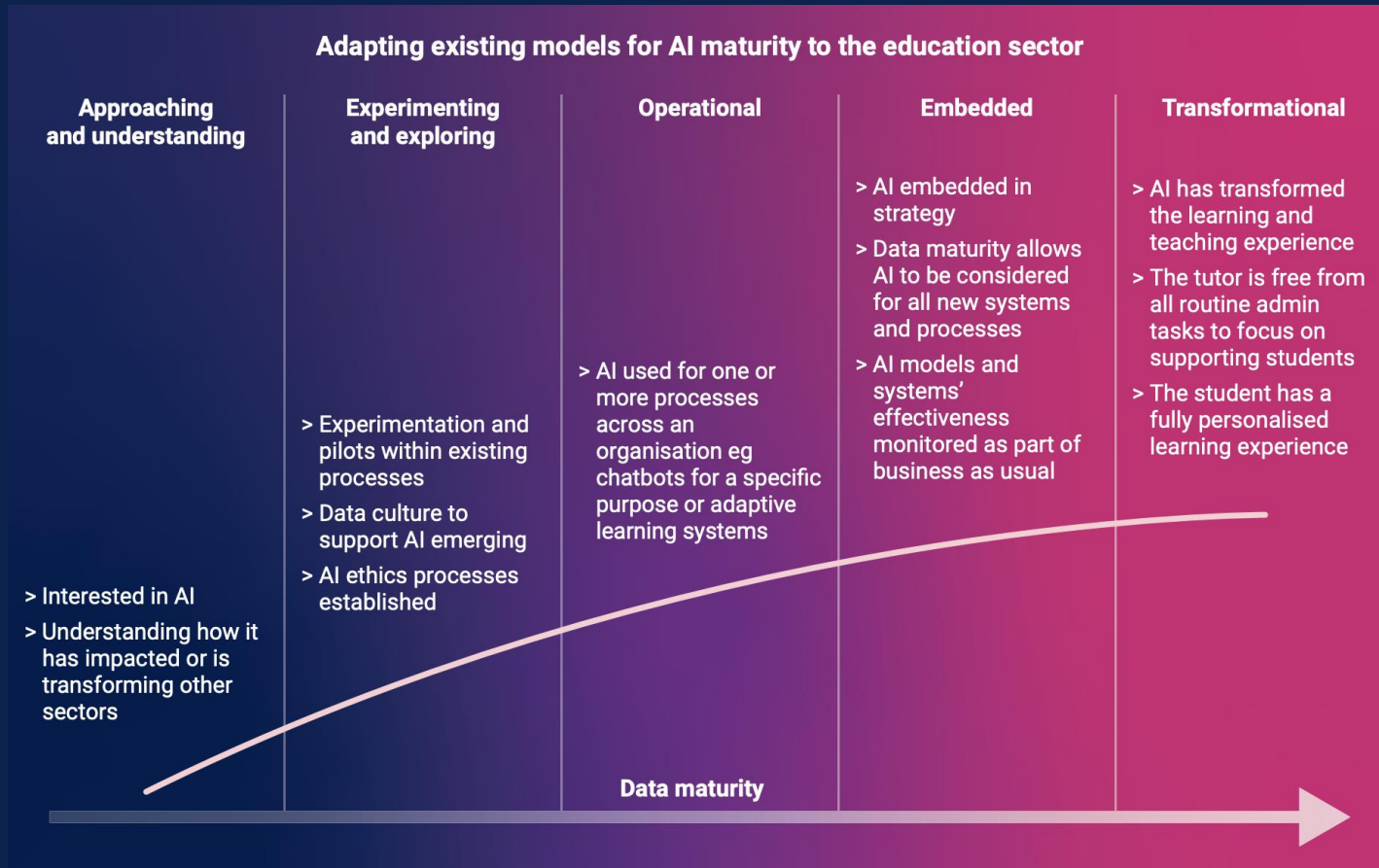
Recommendations based on Regulatory Developments blog posts



Recommending Blog Posts

Recommendations based on Prospects Luminare blog posts

Our maturity model



Pilot example: Graide

Accelerating marking of STEM

Initially created by University of Birmingham students

The screenshot displays the Graide marking interface. On the left is a feedback table with columns for 'Feedback' and 'Grade'. The table contains ten rows of feedback comments and their corresponding grades. On the right is a question interface for 'Polynomial differentiation (example) (Response 6 of 172)'. The question asks to differentiate $\sqrt{x} \times x$. The student's answer is $\frac{d}{dx}(\sqrt{x} \times x) = \frac{d}{dx}(x^{\frac{3}{2}}) = \frac{3}{2}x^{\frac{1}{2}}$. The interface shows two feedback entries: a +0 grade for 'Well done for simplifying the question before differentiating.' (53%) and a +2 grade for 'Correct answer in the preferred form. Well done!' (90%).

Feedback	Grade
Well done for simplifying the question before differentiating.	+0
Correct answer in the preferred form. Well done!	+2
Unnecessary simplification after the getting the correct answer. This form is also not preferred.	-0
Correct answer but not in the preferred form of $\frac{3}{2}x^{\frac{1}{2}}$	+1.5
$\frac{d}{dx}$ is an operator. It cannot equal something algebraic. You wouldn't write $\therefore = \sin(x)$ for example.	-0
You've written the wrong question.	-0
Error carried forward: Correct steps and preferred form from previous incorrect step.	+1
You should've simplified first before differentiating, instead of using the the product rule.	-0
You've differentiated incorrectly. You should bring down the power and reduce the power by one. This would give the answer as $\frac{3}{2}x^{\frac{1}{2}}$	-0
Incorrect answer. This should be $\frac{3}{2}x^{\frac{1}{2}}$	-0
You've simplified the answer to an incorrect form.	-0.5

Feedback table (left):

Feedback	Grade
Well done for simplifying the question before differentiating.	+0
Correct answer in the preferred form. Well done!	+2
Unnecessary simplification after the getting the correct answer. This form is also not preferred.	-0
Correct answer but not in the preferred form of $\frac{3}{2}x^{\frac{1}{2}}$	+1.5
$\frac{d}{dx}$ is an operator. It cannot equal something algebraic. You wouldn't write $\therefore = \sin(x)$ for example.	-0
You've written the wrong question.	-0
Error carried forward: Correct steps and preferred form from previous incorrect step.	+1
You should've simplified first before differentiating, instead of using the the product rule.	-0
You've differentiated incorrectly. You should bring down the power and reduce the power by one. This would give the answer as $\frac{3}{2}x^{\frac{1}{2}}$	-0
Incorrect answer. This should be $\frac{3}{2}x^{\frac{1}{2}}$	-0
You've simplified the answer to an incorrect form.	-0.5

Question interface (right):

Polynomial differentiation (example) (Response 6 of 172)

Grade: 2 out of 2

Differentiate $\sqrt{x} \times x$.

$\frac{d}{dx}(\sqrt{x} \times x) = \frac{d}{dx}(x^{\frac{3}{2}}) = \frac{3}{2}x^{\frac{1}{2}}$

+0 Well done for simplifying the question before differentiating. 53% X

+2 Correct answer in the preferred form. Well done! 90% X

Add feedback for the whole answer

Information example:

A generative AI primer

<https://nationalcentreforai.jiscinvolve.org/wp/2023/05/11/generative-ai-primer/>

[AI in Education: Here and Now](#) [Understanding AI in Education](#)

A Generative AI Primer

By [Michael Webb](#) [11 May 2023](#) [2 Comments](#)

Publishing an intro to generative AI is a challenge as things are moving so quickly. However, we think things have now settled down enough for us to bring together information in a single place, to create a short primer. We aim to publish this as a more formal guide that will be updated regularly, but we are posting an initial version as a blog post to get feedback on whether it is useful and if there is other information you would like included.

[Version 1.1](#) – May 22 2023



Events/Insights:

- Student discussion forums:
 - Critical thinking
 - Information literacy
 - Employment



Community:

Sector level advice for senior leaders

- How to manage an external unexpected change into a controlled response

Assessment

- Short term and long term
- Assessment types

Advice for students

- Briefing notes for institutions
- Nuancing policy

Assessment & detection

London school likely to scrap essay homework due to fears of ChatGPT manipulation

Artificial intelligence software risks making traditional essays redundant

Artificial intelligence [+ Add to myFT](#)

AI chatbot's MBA exam pass poses test for business schools

AI is killing off homework with one school ditching essays due to ChatGPT

Education ▶ Schools Teachers Universities Students

Opinion
Artificial intelligence (AI)

Now AI can write students' essays for them, will everyone become a cheat?

Rob Reich



Mon 28 Nov 2022 10:17 GMT

Teachers and parents can't detect this new form of plagiarism. Tech companies could step in - if they had the will to do so



206



HOME WORLD UK COMPANIES TECH MARKETS CLIMATE OPINION WORK & CAREERS LIFE & ARTS HTSI

AI breakthrough ChatGPT raises alarm over student cheating

Artificial intelligence (AI)

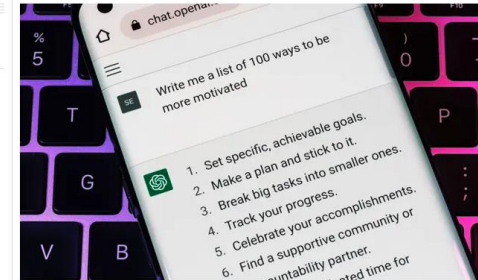
Lecturers urged to review assessments in UK amid concerns over new AI tool

ChatGPT is capable of producing high-quality essays with minimal human input

ChatGPT: what can the extraordinary artificial intelligence chatbot do?

Sally Weale *Education correspondent*

Fri 13 Jan 2023 16:23 GMT



ChatGPT has already triggered concerns about the potential for hard-to-detect plagiarism and questions about the validity of the essay as a future form of assessment. Photograph: Ascannio/Alamy

Lecturers at UK universities have been urged to review the way in which

But this problem isn't new....

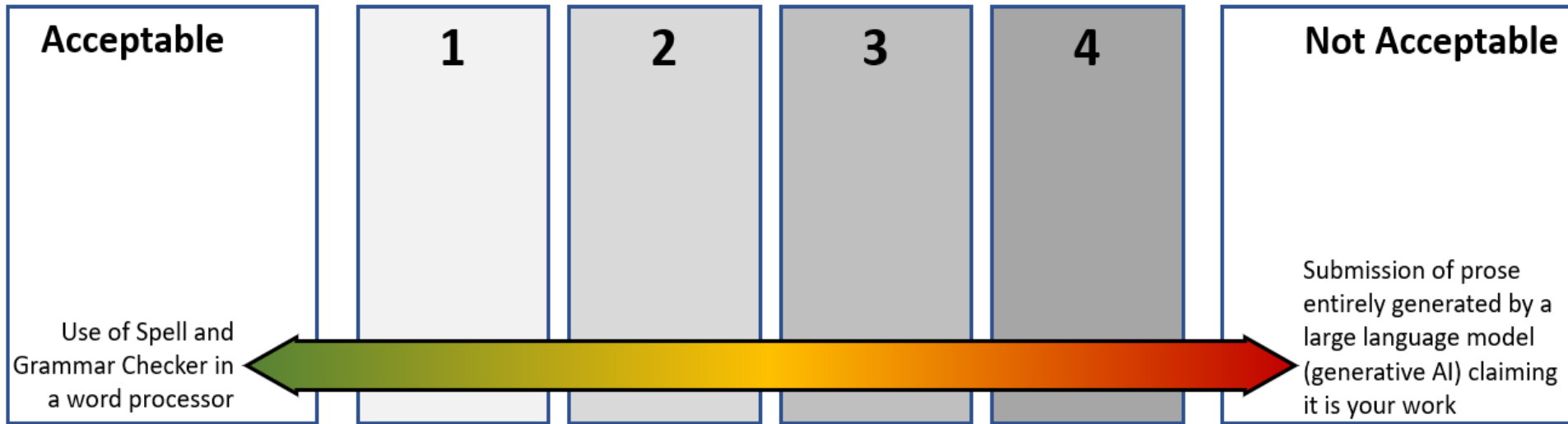
The future of assessment: five principles, five targets for 2025 (Jisc, 2020)



However, there is also a growing need to monitor how new technology is being used to break assessment rules. Cheating has never been easier or more prevalent. A **recent study by Swansea University** (swansea.ac.uk/press-office/latest-research/) analysed surveys dating back to 1978 in which students were asked if they had ever paid for someone else to complete their work. The findings – covering 54,514 participants – showed a 15.7% rise between 2014 and 2018 in the number of students who admitted cheating. Essay mills – online companies that offer essay writing services – are seen to be at the heart of the problem. Illegal in some countries, a ban on their operation in the UK **has been called for** (<https://ji.sc/the-guardian-ban-essay-mills>) by more than 40 vice-chancellors.

Academic integrity is at the heart of this issue. Better assessment design, resulting in fresh, situated, personalised assessment tasks which effectively design out reasons and opportunities to buy in essays, has a role to play in reducing the likelihood of cheating. Technology can play a part.

Where do we draw the line?



A short experiment in defeating a ChatGP detector

By [Michael Webb](#) | [31 January 2023](#) | [1 Comment](#)



In our webinar before Christmas, we suggested that *“A war between AI plagiarism detection software and generative AI won't help anyone”*

We want to share a quick example that shows why this might be the case.

For this experiment, we are using [GPTZeroX](#), which has recently been updated. Our aim isn't to call out a particular product but instead to give a flavour of the battle that's to come if we rely on AI writing detectors.

AI writing detectors – concepts and considerations

By [Michael Webb](#) | [17 March 2023](#) | [No Comments](#)



There has been much discussion of the role of AI writing detectors.

The issue has become more urgent for us with [Turnitin announcing the imminent release of an AI detector](#). At the moment we've very little information about the Turnitin offering, other than the detail in the press release, where it claims 97% accuracy (recall) and 1% false positive, so in this post we'll explore the issue more generally.

What's coming next

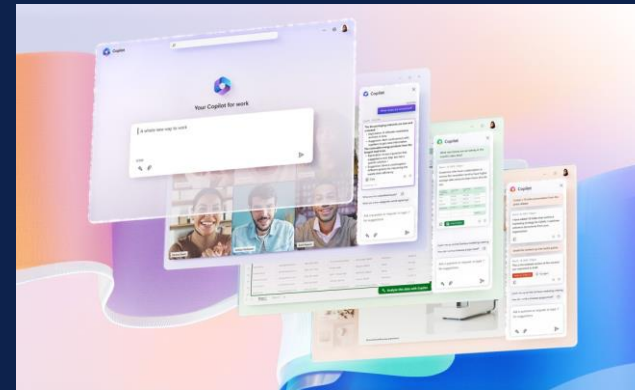
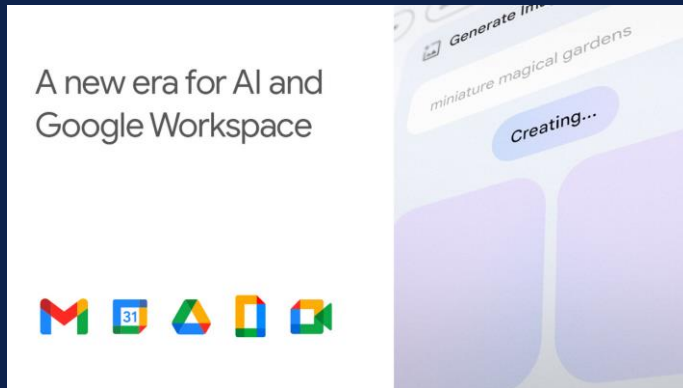
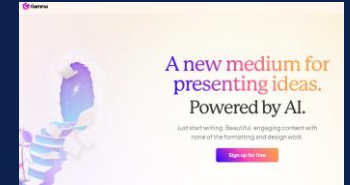
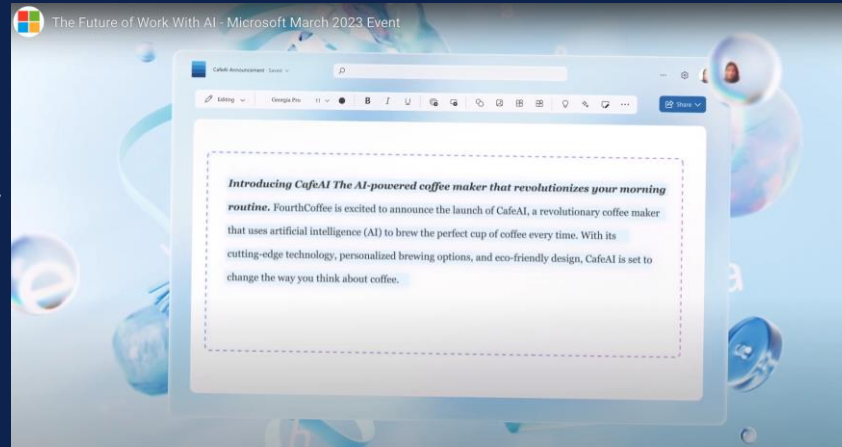
ChatGPT and Generative AI

What we see across the sector

- Early discussion all around assessment and policy (avoid, outrun, embrace)
- Initial assessment guidance
- Some early (speculative) ideas about how to use it in learning and teaching
- Broad acknowledgement that work will change too, but limited action at the moment

Everyday GPT:

Copilot in Word writes, edits, summarises and creates right alongside people as they work.



Education tools

lessonplans.ai

TEACHERMATIC

CogBooks



Quizlet



grammarly

turnitin

bodyswaps



gradescope

Sentira^{XR}

SimConverse

The issues we are exploring...

- There are a growing field of tools that have the potential to disrupt education– both in positive and negative ways.
- What does it mean if AI tools can write essays, solve maths problems or automatically code programming tasks?
- Do we see these as tools enabling students to ‘cheat’, or can we harness them?



ChatGPT and Generative AI

Our take: short term

- Embrace/adapt.
- AI is rapidly getting built in to all the tools we use.
- Spend time understanding it, thinking about impact on assessment etc
- Relying on AI detection is going to be problematic.
- Don't feel the need to rush into using it in teaching – things are changing rapidly.
- Discuss, collaborate, sector view

Contact details

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