

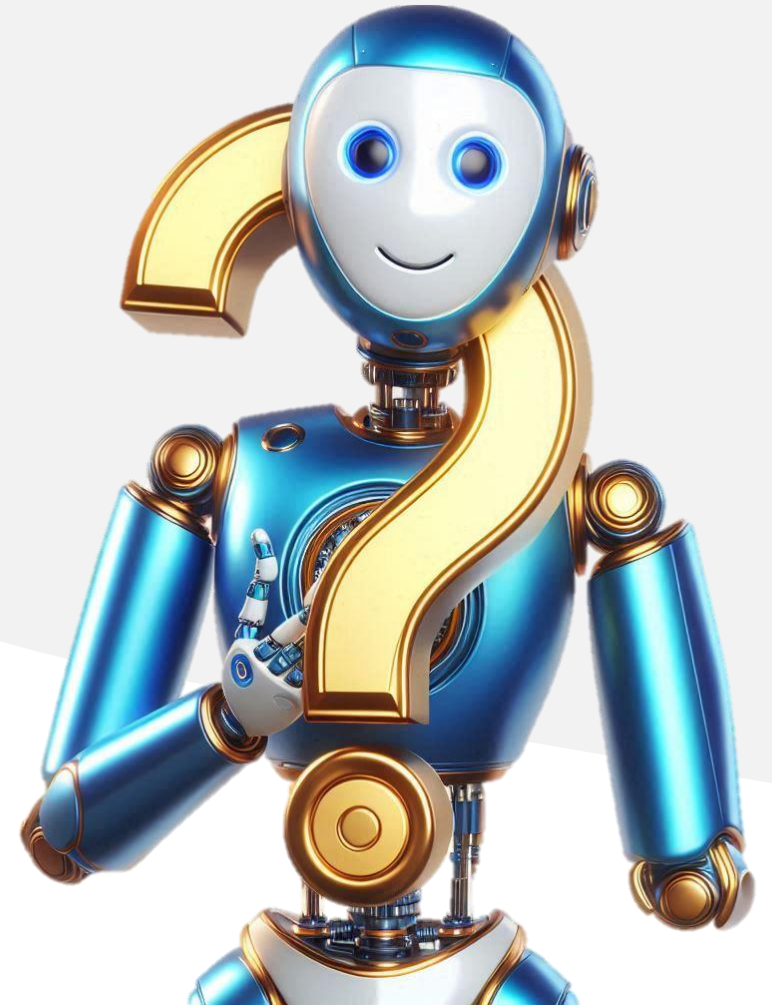
Academic Integrity in 2024

(AI may make things better)

Dr Thomas Lancaster
Imperial College London

Keynote Presentation for the
*Artificial Intelligence at Coventry University
Group – Staff Conference*

13 June 2024





Dr Thomas Lancaster

- Computer Scientist
- Technology enthusiast
- Academic Integrity practitioner and speaker
- Researcher, often with students as partners

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X: @DrLancaster



With lots of ideas...



Charles Knight

@Charlesknight



Catching up on my course whatsapp group – as far as I can work out there isn't a single person here not using AI to either assist or just write the assessment. There is more conversation about prompts and which platform people are paying for than the assessment itself.

9:42 AM · Mar 30, 2024 · **5,906** Views

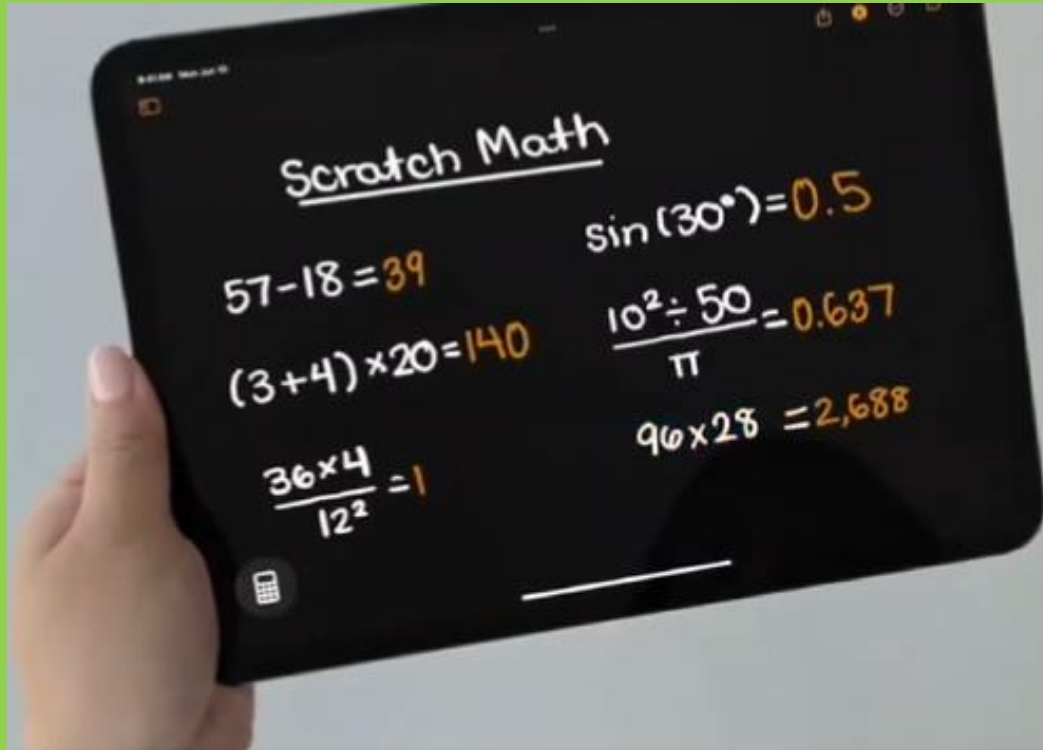


		Common Words: 56%	Common Pairs: 16%
			
Before	After		
Word Count: 188	Word Count: 180		
Reading Age: 17	Reading Age: 17		
The problem to academic integrity posed by student plagiarism should require little introduction.	Most issues raised in the introduction of student plagiarism and the need for academic integrity.		
The battle between students to plagiarise successfully and for tutors to detect this plagiarism has been likened to an 'arms race'; that is, students are always finding new and more efficient ways to cheat.	Successful for teachers to plagiarise, plagiarism "is similar to an arms race, the battle between the students to find"; students to cheat, I'm looking for a new and more effective.		
These new ways may be difficult for tutors to detect using standard anti-plagiarism software.	These new instruments to detect using standard software to prevent theft of a teacher is difficult.		
This study continues the pattern of publicising potential cheating methods in an attempt to ensure that academics have information about them readily available.	In this study, to ensure that the information available to facilitate the efforts of scholars have been published on how the pattern of potential fraud.		
One method that students may use to cheat successfully is to simply rewrite an essay until it is worded substantially different to the original.	One method is for students to cheat, the specimen can easily be rewritten to use a significant difference from normal.		
Where plagiarism detection software operates by looking for common word sequences between two documents, as is believed to be the case by the market leading detection software Turnitin,	Plagiarism detection software documentation for two common sequence between the two words, the market believed that Turnitin is the leading case tracking software, work		
there must be a level of changes that students can make beyond which their cheating is not likely to be detected. An extreme case would see a student rewriting every sentence in an essay.	Changes in the level of students is not likely to be identified, must be more than can be deceptive. In extreme cases, if the student appears to rewrite each sentence in the report.		
For the student such thorough rewriting is substantially faster than researching and writing an essay from scratch.	Students write a research paper than a thorough and much faster with this rewrite, from scratch.		

Example of
*“automatic
rewriting”* from
a 2009
presentation

Lancaster, T., & Clarke, R. (2009). Automated essay spinning—an initial investigation. *Proceedings of 10th Annual Conference of the Subject Centre for Information and Computer Sciences.*

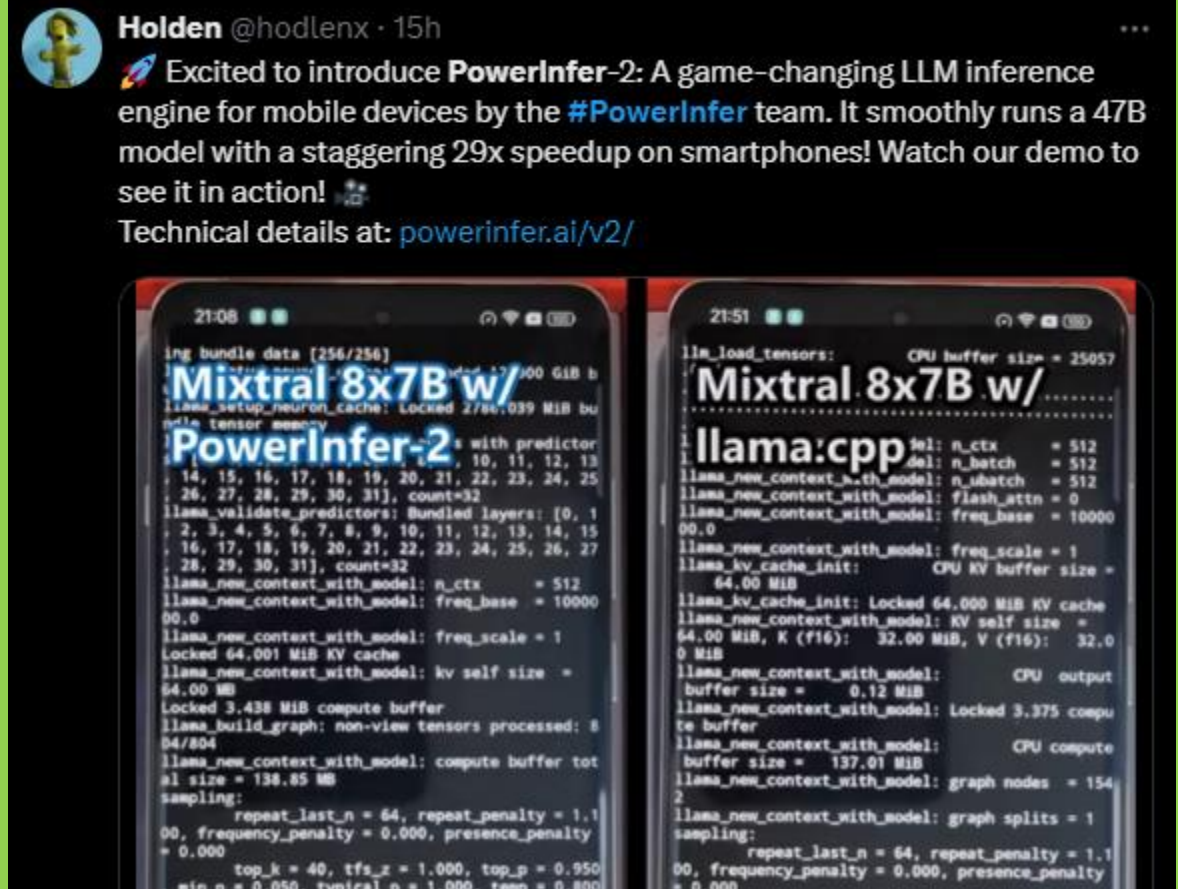
10 June 2024



Announcing the Open Release of Stable Diffusion 3 Medium, Our Most Sophisticated Image Generation Model to Date

12 June 2024

11 June 2024



BIZARRE

EXCLUSIVE: Coventry University Rocked by Telepathic Cheating Scandal!



THE DEFINITION

In what might be the most bizarre academic misconduct case to date, Coventry University has found itself at the epicenter of an unprecedented cheating scandal involving purported telepathic communication among its students. University officials are scrambling to address these startling accusations, which suggest a small group of students were allegedly using "mental messaging" to share answers during exams.

Text by GPT4-Turbo

The scandal came to light last Thursday when Professor Jane Hiddleston, a senior lecturer in Cognitive Psychology, reported unusual patterns in student behavior and test scores. "It was unlike anything I've ever seen," exclaimed Prof. Hiddleston. "Answers were not just similar—they were identical, down to the punctuation. And these students kept staring at each other, blinking in what looked like a coded pattern!"

Further investigation revealed that the accused students were part of the university's advanced neuroscience program, which includes training in enhanced cognitive techniques. Rumors quickly spread that these students had developed a way to communicate telepathically, using what they learned to exchange answers silently and instantaneously.

Campus security footage reviewed by university officials showed the students in question seemingly engaging in synchronized blinking and subtle head nods during their examinations. "It's all very X-Men," commented one bewildered security staff member.

The university has called in a team of neuroscientists to investigate the validity of these claims. Dr. Emily Tran, a neurobiology expert and the lead investigator, shared her skepticism but admitted, "While telepathic cheating sounds like science fiction, we cannot ignore the evidence presented. We are exploring all possibilities, including the potential misuse of sophisticated neural-enhancement technology."

Student reactions have ranged from amusement to concern. "I thought I'd heard it all with online cheating and smartwatches, but this is next level," said Tomás Reed, a final-year sociology student.

In response to the scandal, Coventry University is considering the implementation of anti-telepathy measures, including the use of signal-jamming hats and mandatory meditation sessions before exams to 'clear the mind.' A spokesperson for the university stated, "We are committed to maintaining the integrity of our academic programs. This includes addressing any and all forms of cheating, no matter how unconventional they may seem."

As the investigation continues, the academic community watches closely, with the case already sparking debates about the ethics of cognitive enhancement and its implications for the future of academic assessments. Meanwhile, the world is left to wonder: is telepathic communication the future of cheating in academics, or is Coventry University facing a very elaborate hoax?

“University officials are scrambling to address these startling accusations, which suggest a small group of students were allegedly using ‘*mental messaging*’ to share answers during exams.”

Query on Mitigating Circumstances for Thesis #123



4 hours ago in [General](#)



PIN



STAR



WATCH

46

VIEWS



3

I wanted to ask if we can apply for mitigating circumstances for our master report in the case there is an outage with ChatGPT this week. Can someone clarify if this would be considered valid?

[Comment](#) [Edit](#) [Delete](#) [Endorse](#) ...



Your Answer



Paragraph



B

I

U

<>

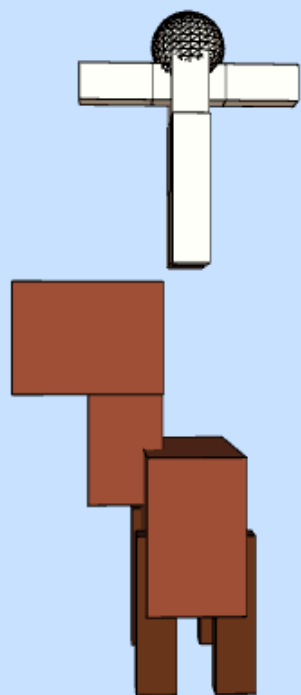


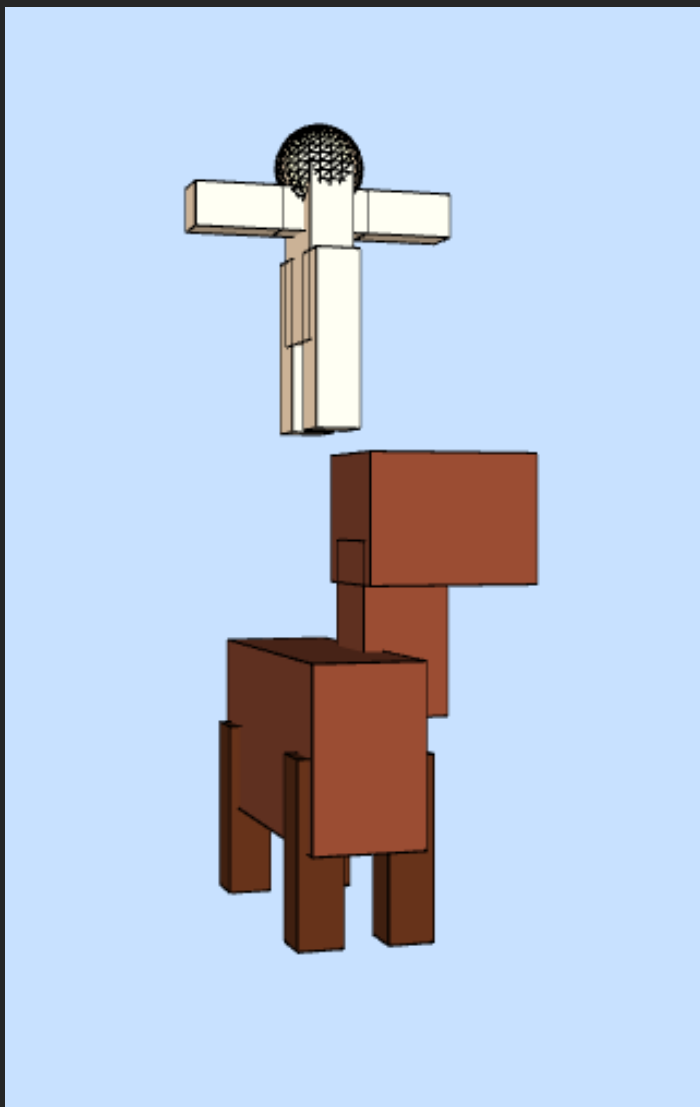
Thank you for your question. Mitigating circumstances are typically considered for unforeseen and unavoidable issues that directly impact your ability to complete your work. While an outage with ChatGPT could be inconvenient, it's important to note that relying on AI tools like ChatGPT for completing your report may raise academic integrity concerns. Therefore, this may not be deemed a valid reason for an extension or mitigation unless you can demonstrate that it had a significant impact on your ability to complete your project report independently and with integrity. Please contact the mitigating circumstances team with detailed information about your situation for further clarification.



Post







ChatGPT 4o ▾



You are an expert 3D modeller. You develop p5js animations that I can paste straight into a p5js interpreter and run. Assume I have no assets or programming ability. I will paste this directly. Do not use any external libraries. Your output should be highly relevant, detailed, correct, use bright colours and take up the full display area. Provide your output in a code block.

Create a 3D model of Lady Godiva in Coventry.



Creating a detailed 3D model of Lady Godiva in Coventry is quite complex and challenging, especially with the limitations of p5.js which is more suitable for simpler 3D shapes and animations rather than detailed 3D models. However, I can create a simple 3D scene that captures the essence of Lady Godiva on a horse. This will not be an accurate or highly detailed representation, but it will be a colorful and full-screen 3D animation.

Here is a basic p5.js sketch that creates a 3D scene with a simplistic representation:

javascript

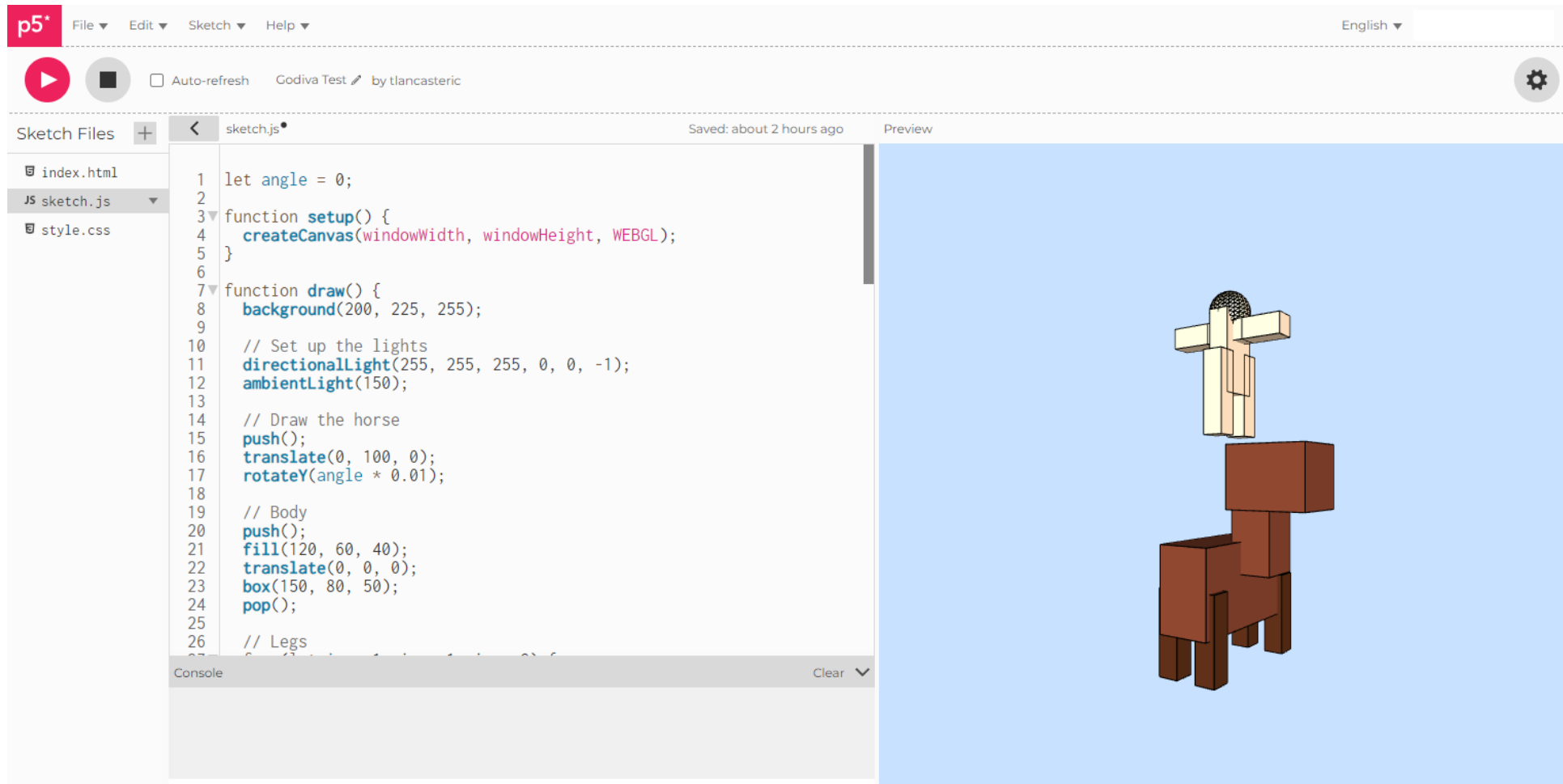
Copy code

```
let angle = 0;

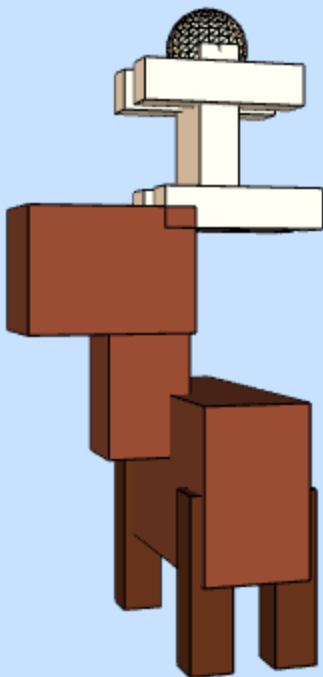
function setup() {
  createCanvas(windowWidth, windowHeight, WEBGL);
}

function draw() {
  background(200, 225, 255);
```





Edit the animation so that Lady Godiva is sat on the horse



Give Lady Godiva long flowing hair



Reflective Account on Learning p5.js

Student: [Your Name]

This week, I've been diving into p5.js and learning so much about creating animations. My project focused on creating an animation of Lady Godiva riding a horse. At first, I started with the basics—getting shapes to look recognizable. Boxes and spheres quickly became essential tools in my coding arsenal. However, as I grew more confident, I decided to make the animation more dynamic by adding moving hair and a gradient background.

One major aspect I learned was how to use lights to create a 3D effect, which made the animation look more lifelike. I also figured out how to rotate objects to give a sense of motion. The hair was particularly challenging; I used sine waves to simulate it waving in the wind, which felt like a huge achievement. Adding a gradient background was another highlight, giving the animation a professional and smooth look.

Despite these successes, there are areas for improvement. For instance, the horse could be more realistic with added textures or more detailed shapes. The hair, while impressive, could use more randomness to appear more natural. Moving forward, I plan to enhance my skills by experimenting with more complex animations and adding interactivity to my projects.

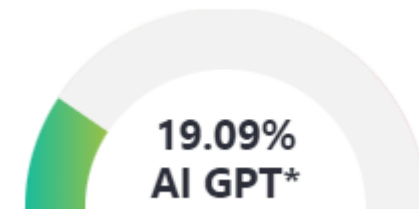
In the future, I aim to continue exploring p5.js, collaborate with peers to exchange ideas, and perhaps integrate other libraries or frameworks to push the boundaries of my work. Overall, I'm thrilled with my progress and excited to see where this journey will take me.

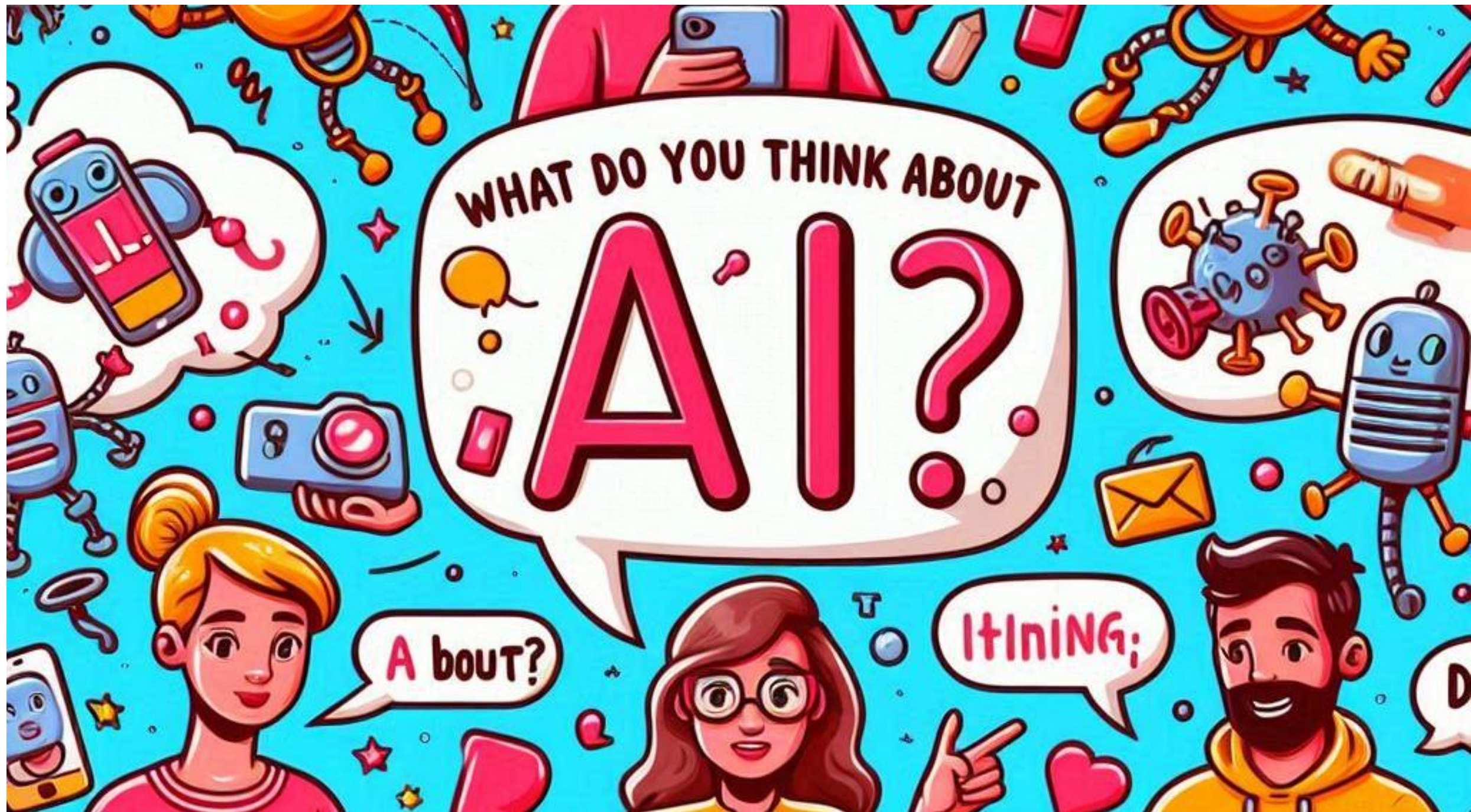
Reflection and Future Plans

Reflecting on this assignment, I am pleased with the creative and technical skills I've developed. I understand the importance of continuous learning and collaboration. By experimenting with new techniques and technologies, I hope to enhance my abilities further and contribute more significantly to future projects.

Now take on the role of a university student who is learning p5.js. Write a reflective account of 200 words detailing what you have learnt, how you could improve the animation, your plans to develop your skills for the future. Make this entertaining and write in a student style, with mistakes and slang. Take full credit for the work as a talented and engaged student. Do not write in a typical AI style.

Your Text is Human written







danger

misconduct

productivity

overwhelming

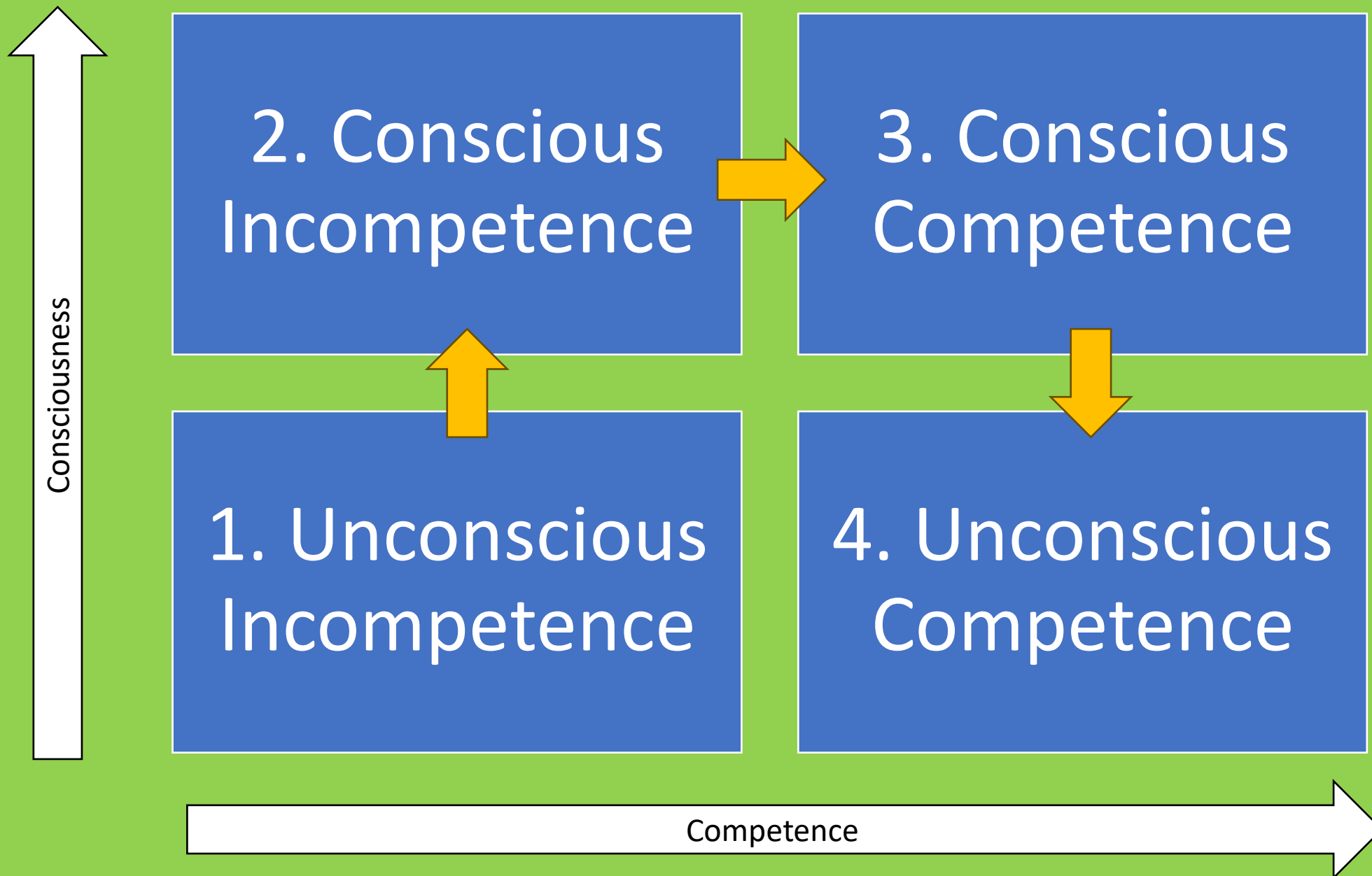
necessary

opportunity

The **use** of AI is
not a problem

A **lack of proficient use**
of AI may be a problem







- More than just **stopping cheating**
- A system of values
- Ideals for the whole educational community

The Fundamental Values of Academic Integrity

(<https://www.academicintegrity.org>)

honesty

respect

fairness

responsibility

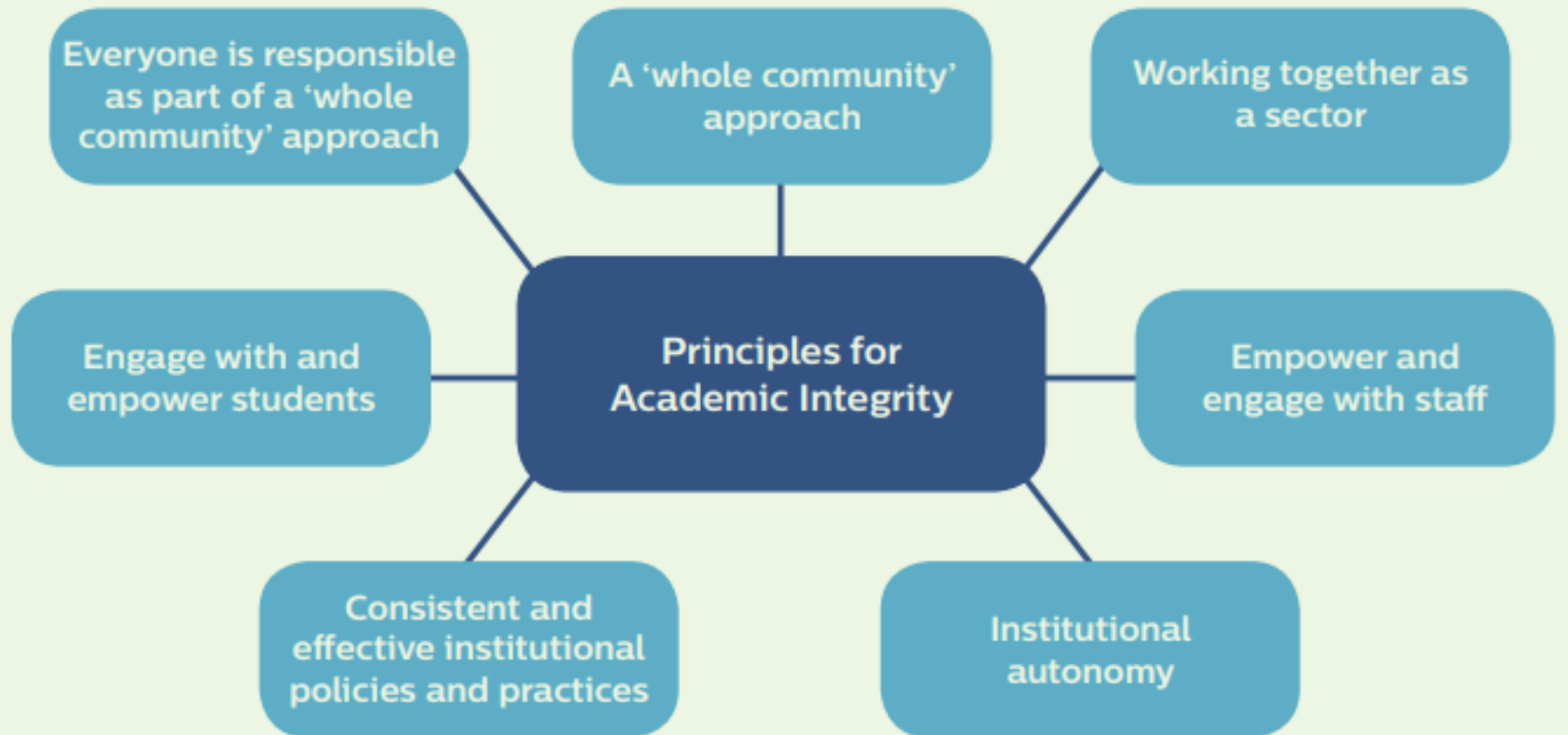
trust

courage

Academic Integrity Charter for UK Higher Education



Principles for Academic Integrity



<https://www.qaa.ac.uk/docs/qaa/about-us/academic-integrity-charter.pdf>

What can we
do as an
educational
community?



AI Assistance or AI Replacement?

An Academic Integrity Conversation

Dr Thomas Lancaster
Imperial College London
<http://www.thomaslancaster.co.uk>
Twitter/X - @DrLancaster



Focus on understanding AI

- how AI systems work
- what their capabilities are within our disciplines
- how this technology is used externally

<https://bit.ly/3t9EUH9>

Is Generative AI your solution to becoming productive as an academic integrity researcher?

Is Generative AI your solution to becoming productive as an academic integrity researcher?

Written by *Thomas Lancaster*
June 11, 2024



So many of the discussions surrounding academic integrity and generative AI have focused on the implications for teaching, education and learning. My experience is that proficient users of systems like ChatGPT can do so much more than generate academic-sounding text. Academics and students alike can use this to complete research studies, bringing in opportunities for increased productivity, but also raising research integrity

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Keep your
knowledge
and skills up
to date

<https://academicintegrity.org/resources/blog/129-2024/june-2024/507-is-generative-ai-your-solution-to-becoming-productive-as-an-academic-integrity-researcher>

Make the
rules clear to
students



Expert AI CONTENT EDITING & PROOFREAD

- ➔ Fact check
- ➔ Add New Sections
- ➔ Improve Readability

Consider
when it's
better for
students to
use AI



Support students to use AI
effectively and ethically

Embrace AI to improve our own teaching and student support

Academic Integrity in STEMM Artificial Intelligence

This concept summary was developed with the aid of ChatGPT (with human editing and additions) and is provided as a learning aid. Errors are possible. Do refer to the main video for full information.

Overview

The lecture explored the integration of artificial intelligence (AI) in academic integrity within education, highlighting AI's omnipresence in teaching and research. It emphasised AI's potential for both enhancing educational experiences and posing challenges to academic honesty, urging a balanced approach to leveraging AI tools responsibly in academic work.

Useful Concepts

AI's Role in Education and Academic Integrity:

- AI tools like ChatGPT have become integral to education and cannot be ignored.
- The use of AI presents both opportunities for enhancing learning and risks to the integrity of assessments.
- Understanding and navigating AI's impact on academic integrity is crucial for students.

Evolving Definitions of Academic Integrity:

- Academic integrity concepts are changing due to AI technologies.
- Post-plagiarism ideas suggest a future where hybrid human-AI authorship is normal.
- Students must adapt to these changes while maintaining ethical standards.

The Importance of Critical Engagement with AI:

- Blind reliance on AI tools can undermine learning and academic integrity.
- Students should critically engage with AI, understanding its limitations and potential inaccuracies.
- Learning to use AI responsibly is part of modern academic skills.

Educational Responses to AI Challenges:

- Institutions must educate students about AI's capabilities and limitations.
- Embracing AI in education requires balancing its use to enhance learning without compromising academic integrity.
- Ignoring or banning AI is impractical; education and critical engagement are key.

Research Opportunities and AI:

- AI offers new avenues for academic research, including studies on its role in education and integrity.
- Ethical considerations and transparency in using AI for research are essential.
- Investigating AI's impact on academic practices offers valuable insights for future educational strategies.

Self-Review Questions

- How does the concept of post-plagiarism challenge traditional definitions of academic integrity, and what implications does this have for students and educators?
- In what ways can AI tools both enhance and undermine the learning process?
- Considering the lecture's discussion on the arms race between AI development and AI detection tools, what strategies can educators and institutions employ to maintain academic integrity in the face of rapidly evolving AI technology?



Thomas Lancaster

@DrLancaster

Congratulations to Naashiya Ali, Nurin Mohd Amrilshah, James Ormsby & Nadine Rei Ying Wang on winning the @Turnitin @imperialcollege undergraduate #academicintegrity group research prize showing #contractcheating companies cashing in on student motivations

How contract cheating companies cash in on student's motivations to cheat

BY: NADINE WANG, JAMES ORMSBY, NAASHIYA RAFIQ ALI, NURIN MOHD AMRILSHAH

<https://www.youtube.com/watch?v=qlod7C4p9XI&t=4194s>

Embrace
collaborating with
our students as
our academic
integrity partners



Connect With Me



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My LinkedIn: <https://uk.linkedin.com/in/thomaslancaster>

My X: [@DrLancaster](#)

Slide Archive:

<http://www.slideshare.net/ThomasLancaster>

An artistic impression