

Adapting To Artificial Intelligence – The Future Of Academic Integrity



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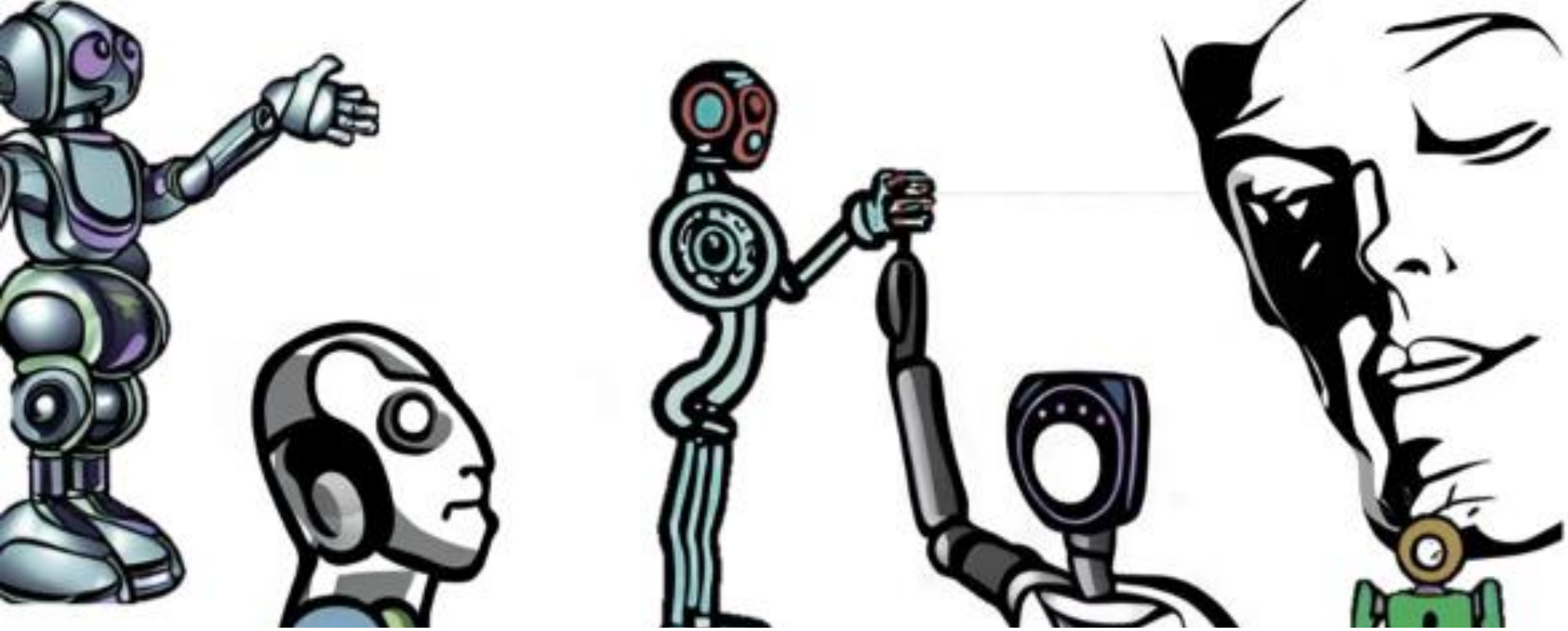
Webinar presentation for ENAI on 9 September 2022



Do share your thoughts

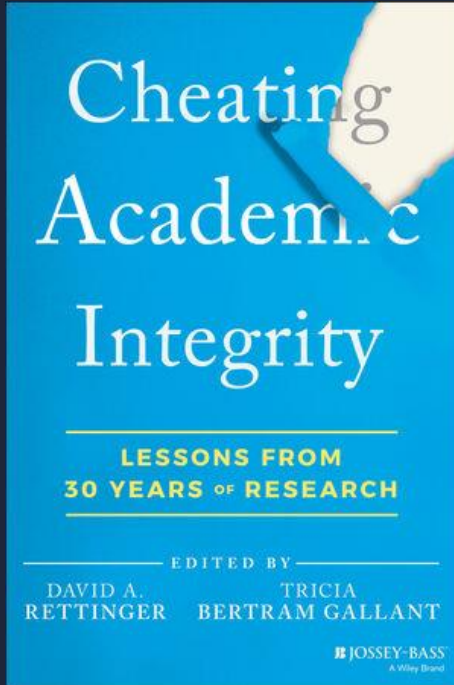


@DrLancaster @ENAIIntegrity #academicintegrity



- What does the future looks like (shared from the experience of a Computer Scientist)?
- How does this affect our view of academic integrity?

Acknowledgements



A recent book chapter where I consider the future of contract cheating

Artificial Intelligence Led Threats To Academic Integrity

Dr Thomas Lancaster - Imperial College London, UK

European Conference on Academic Integrity and Plagiarism 2022
#ECAIP2022

Imperial College
London

A conference presentation I gave in May (some parts already outdated – lots of fresh examples today)



A **warning** to the educational sector to not ignore the developments in artificial intelligence in the same way it ignored the growth of the contract cheating industry in 2006



What
should a
professor
do?



Actually,
this
person is
not a
professor!

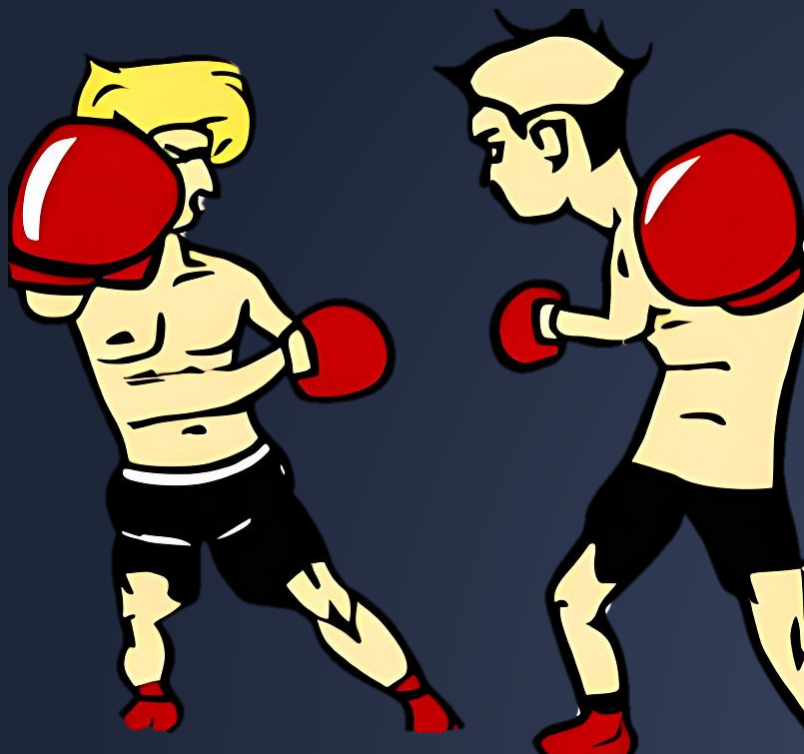


Actually,
this
person is
not a
person!

Most of the images in this webinar are generated by AI or heavily edited by AI (yes, even the one of me on the first slide)

CONFLICT

Computer
Scientists/
Business



Education/
Academic
Integrity

Not a pre-existing image (in case you haven't got the idea yet)

Some Truths



- Artificial intelligence (or, more commonly, machine learning) is **not magic**
- It is a **mathematical procedure** mimicking actions completed tens/hundreds/thousands/millions of times before
- Currently, the best results combine **automation with human editing** and understanding of specific processes

Real World AI



Control your plants



Drive for you



Clean your home



Improve your face

What About Writing?

AI Long-form writing

With our strong editor, you can write AI assisted longform content in minutes. Embed videos, get images and get real time quality grading for your content.

Premium A.I Adult Writer

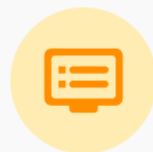
Our advanced AI Models are perfect for writing erotica and graphic content. What you create is your dirty little secret. Write explicit stories, fan fiction and more.

Collected real world examples



Cannabis Descriptions

Now that cannabis has been legalized in Thailand, there is a gold rush of people getting in on the trend. I see lots of funny and creative cannabis descriptions so thought this model would be useful!



Business Idea Pitch

Write a clear and engaging startup pitch for your business ideas

Unlimited, Quality-driven, Plagiarism-Free AI Writing

Essays?

ESSAY GENERATOR

Generate essay paper with one click

Forget about writing an essay, it's time to "generate" your essay paper with our unique Essay Generator software.

From a firm also offering an automatic rewriting service and a custom writing service

Get the ready-made essay

Now get the perfect essay ready within seconds using our essay typer free.

You won't face any difficulties while using our essay typer free. However, if you do, give our customer support team a call. "Who can **write my essay** for me?" you might be wondering. This tool will be extremely useful to you.

Free AI Writer and Text Generator

Generate high-quality, unique essays and articles with Smodin's free AI writer and text generator. Go from a few phrases to surprisingly great essays and articles with AI copywriting.

AUTO (.....) ▼ 

Smodin Author

ESSAY | ARTICLE | AUTHOR MODE

Title

Good titles have 5 or more words

Essay Type ⓘ


DESCRIPTIVE | ARGUMENTATIVE

Collected real world examples.

Note, many general AI writing tools also contain the functionality to write essays

EssayAiLab 

Write high quality essays *in seconds.*

 good ai

Choose a topic

Type in any topic, simple or complex, and a word count. Examples: dogs, importance of trees.

Essay is generated

The website will write relevant, unique and accurate content on the topic inputted.

Edit your paper

Make additional changes to your essay using our AI auto-complete feature; just enter how many words you'd like to add.

Case Study – Generating Reflection



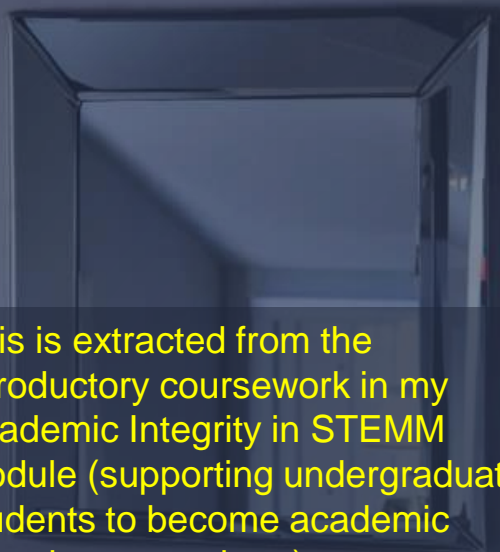
Reflective Summary Requirements ✓ ⬇

Now that you have reviewed the first set of materials, this is your opportunity to reflect on what academic integrity means to you.

Please write a short reflective summary of no more than one A4 page. This should be submitted in MS Word or PDF format to Turnitin.

The question to address is:

What does academic integrity mean for you and your discipline and why is it important?



This is extracted from the introductory coursework in my Academic Integrity in STEMM module (supporting undergraduate students to become academic integrity researchers).

Case Study – Sample Generated Text

“I believe that the most important thing about academic integrity is to keep our integrity and not to damage the work of others by cheating. A lot of people think that academic integrity is important only to students, but it is also important to professors because they have to teach students and students are the first people who will receive the knowledge after the professors. Cheating damages the reputation of professors, students and universities and this is why we should keep our integrity.”

Technical Note
(very much a work in progress)

Trained on 10 real introductory paragraphs from submitted student work (all in STEMM disciplines)

Paragraphs generated using GPT-J (default settings)

Improvements are possible and the whole reflection could be generated



Technical Assignments

Case Study – Generating A Technical Web Page With Content

Academic Integrity

Academic integrity is the cornerstone of the academic community. It is essential to the intellectual life of the University. Each member of the community shares responsibility for maintaining academic integrity. The faculty has a responsibility to foster academic integrity and to set high standards of individual honor in course requirements and in the evaluation of student work. Students have a responsibility to adhere to these standards.

Question	Answer
What is academic integrity?	"The cornerstone of the academic community."
What is the importance of academic integrity?	"It is essential to the intellectual life of the University."
Who is responsible for maintaining academic integrity?	"Each member of the community shares responsibility for maintaining academic integrity."
What is the faculty's responsibility regarding academic integrity?	"To foster academic integrity and to set high standards of individual honor in course requirements and in the evaluation of student work."
What is the student's responsibility regarding academic integrity?	"To adhere to these standards."

These answers are generated by OpenAI davinci and are for entertainment purposes only!

Both the HTML and the content generated together using the Davinci model in the OpenAI playground

Examples shared at
<https://twitter.com/DrLancaster/status/1563971412691394560>

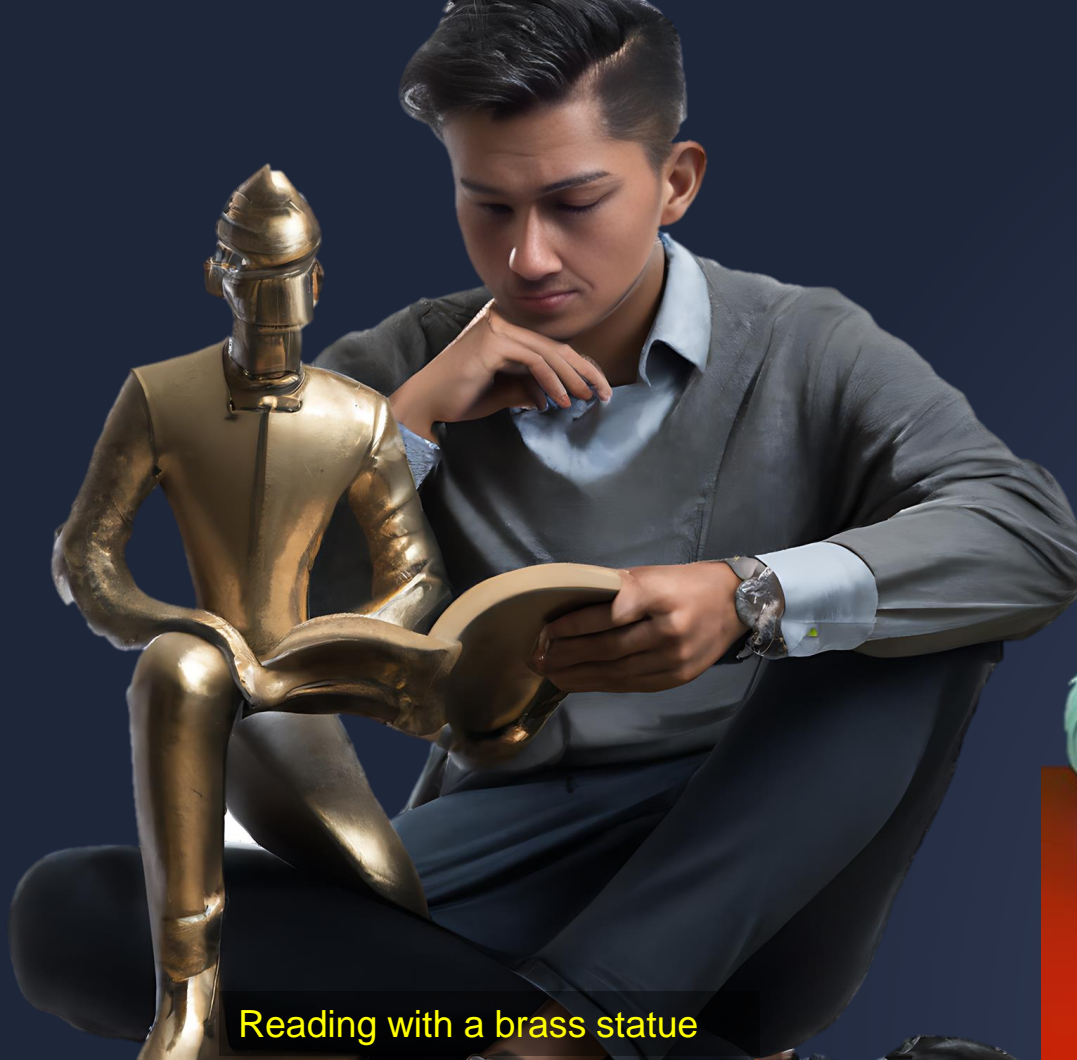
What About Photos, Graphics And Art?



This lady won an academic integrity prize



This is what student plagiarism looks like

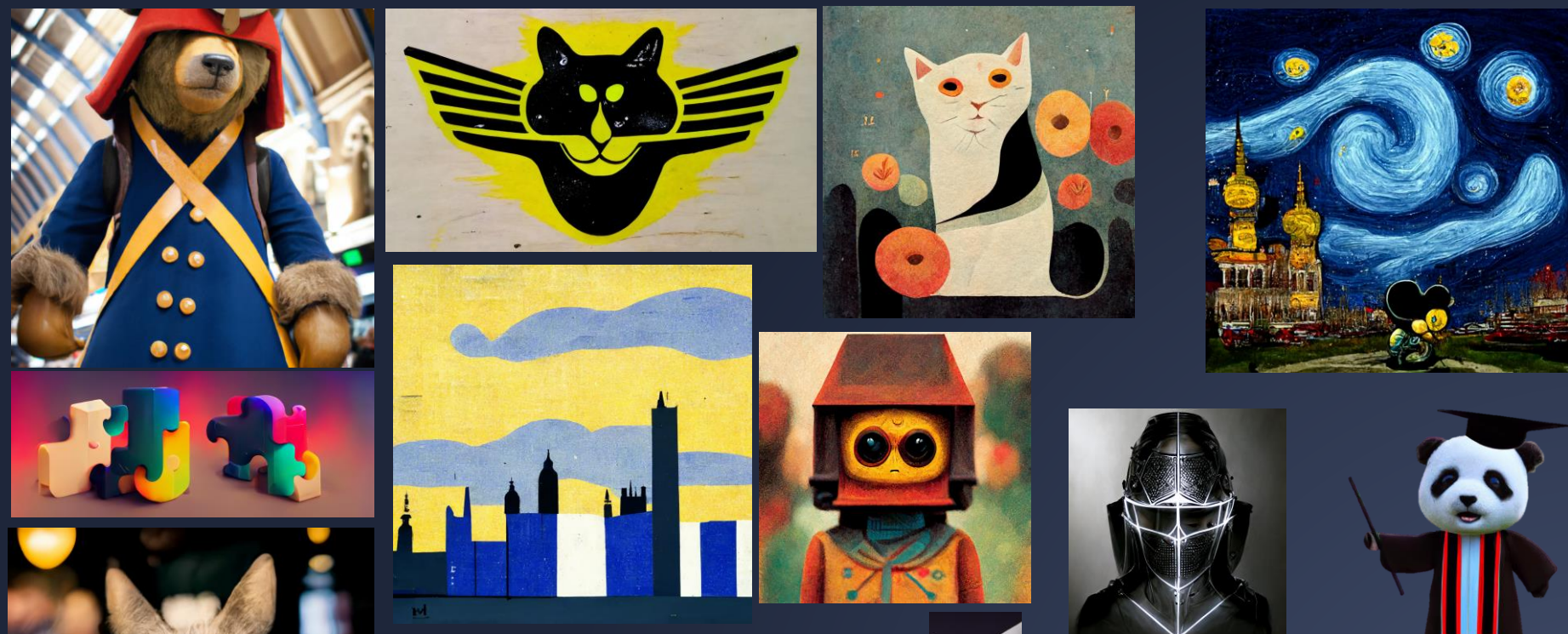


Reading with a brass statue



Working hard on homework





Case Study – Generating Art

A random collection of images

What Else Can Be Generated?

Presentation slides
(content, design, layout)

Maths solutions
(step-by-step from photos)

Literature reviews
(data extraction and
comparison)

Music and Videos
(from scratch or edited)

Almost anything... if the student is a programmer

Is Using AI In Assessments A Breach Of Academic Integrity?

"At this point it's just a tool."

"The way I see it is that it's like the calculator you had in school. It doesn't do the math by itself, it needs a human operator to make it work. Same with open ai. Without you it would be worthless."

"I'm in grad school and no one's noticed (used on about 20 assignments so far). Alter some wording and add info here and there to mix it up. Ask GPT for the source. May be grounds for plagiarism, but definitely not plagiarism if you don't get caught lol."

"Is it unethical? Probably Is it illegal? Fuck no"

Real answers (not AI generated!)

https://old.reddit.com/r/OpenAI/comments/wy6u88/is_it_plagiarism_to_use_open_ai_generated_content/

How Should We Address This?

- Consider how we already address contract cheating and academic integrity and **see what ideas we can reuse**
- Note that (currently) AI often does not provide a one-stop assignment solution, but **AI requires input, editing, work and human ingenuity**
- Appreciate that contract cheating firms also have access to this technology



Possible Solutions

(not all fail safe)

Talk with students in class about AI technology

Get students to evaluate the quality of AI solutions in their field

Develop assignments that rely on local knowledge or processes

Have arts students use AI solutions to build a creative and consistent portfolio

Ensure that university processes and local procedures make it clear what level of AI use is acceptable

Set a real-world or authentic assignment where students use AI technologies

Use staged, supervised or interactive assessment types

Allow AI for inspiration, but require acknowledgement



This is a new and emerging field with minimal
published academic integrity research

We have **little knowledge yet** about what best
practice is

How will we **share**
our knowledge of
the problem with
colleagues and
within our
disciplinary
networks?

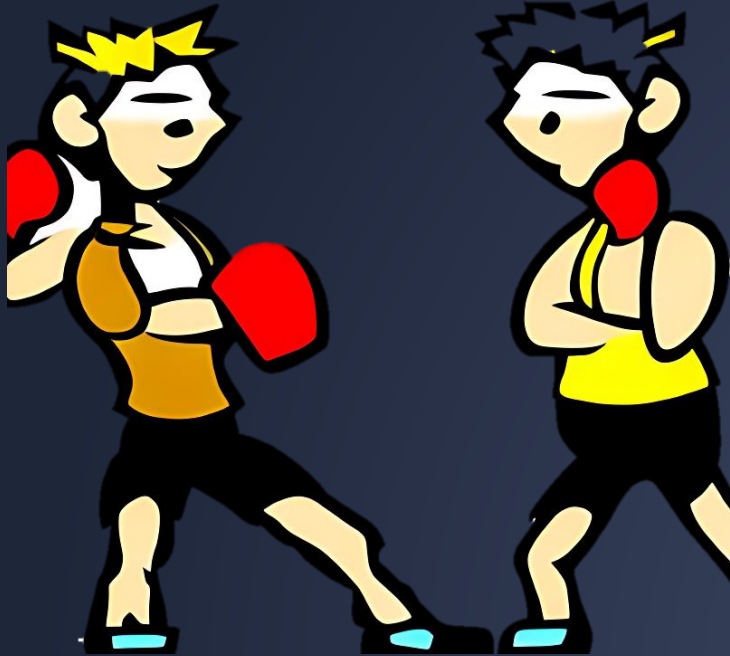




How will we **evaluate**
the success of our
solutions and share
the outcomes?

CONFLICT

Established
practice



Doing the
best for
our
students

Can we **partner** with
our students to
address the misuse
of AI technologies
within education?



And what will the world be like if we do not do so?