

Artificial Intelligence and Cheating

Implications for Quality Assurance

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Who am I

Why am I here

What is a university?

- Contract with society
- Support learners to become independent, critical thinkers
 - Many will take on important roles in society
- Degree qualification is our certification of their learning
- The certification is based on our assessment
- Cheating invalidates the assessment
- Therefore, cheating invalidates the certification

Why do students 'cheat'?

- Because they can
 - Others are cheating
 - My university doesn't *really* care
- Because it works
- Don't know the rules
 - But they are confident that they do, underestimate penalties
- Strong incentives
 - Fear of failure, struggling academically, finances, competitive jobs
 - Stressors, distractors, pressures, etc
- Because they are *people!*

Cheating

Is probabilistic

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Hi, I am ChatGPT, and things are never going to be the same again.



ASSESSMENT & EVALUATION IN HIGHER EDUCATION
<https://doi.org/10.1080/02602938.2023.2299059>



 OPEN ACCESS



ChatGPT performance on multiple choice question examinations in higher education. A pragmatic scoping review

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53 studies

49000 exam questions

Medicine, Accounting, Law, Physics etc

Free version (ChatGPT3)

54%

Paid version (ChatGPT4)

75%



Discipline	ChatGPT(3)
Medicine	



A 57-year-old man with chronic low back pain comes to the office for a routine health maintenance examination. The patient's last visit to the office was 2 years ago, and today he says he is "doing about the same," except for an unintentional 10-kg (22-lb) weight gain. He attributes the weight gain to inability to exercise because of his back pain, and he is now considering applying for disability benefits. He was evaluated by a back pain specialist 3 months ago and underwent an MRI of the lumbar spine at that time; however, he says he did not understand the specialist's explanation regarding the MRI results and requests further explanation. Medical history also is remarkable for hyperlipidemia, seasonal allergies, and opioid use disorder; he has not used opioids of any kind since he stopped prescription oxycodone use 5 years ago. Routine medications are atorvastatin, diclofenac, and loratadine. He develops skin flushing when taking niacin, but he has no known drug allergies. He has smoked two packs of cigarettes daily for 25 years. He previously drank two beers daily, but he has not consumed any alcoholic beverages or used any recreational drugs for the past 5 years. He is 178 cm (5 ft 10 in) tall and weighs 104 kg (230 lb); BMI is 33 kg/m². Vital signs are within normal limits; blood pressure is 128/70 mm Hg. While standing, the patient leans forward slightly. Range of motion on lumbar extension and flexion is decreased. The remainder of the examination discloses no abnormalities. Results of fasting serum studies are shown:

Na ⁺	140 mEq/L
K ⁺	4.7 mEq/L
Cl ⁻	100 mEq/L
HCO ₃ ⁻	24 mEq/L
Urea nitrogen	15 mg/dL
Creatinine	0.7 mg/dL
Cholesterol	
Total	230 mg/dL
HDL	60 mg/dL
LDL	154 mg/dL
Triglycerides	80 mg/dL



MSC
Medical
Schools
Council

UK Medical School AKT Practice Exam

Paper 1

ChatGPT (4)

76%

ChatGPT (4_o)

94%

Rewrote it. Three times



ChatGPT (4_o)

94%













ChatGPT and essays

- ChatGPT writes *better* essays than human authors?
- Markers cannot really distinguish?
- Does better on essays than multi-choice exams
- Better tools write better essays
- 'Hallucinates' references?
 - Not really, any more

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Students *could* cheat with ChatGPT

**Are they actually cheating?
What does cheating even mean?**

'Have you cheated using ChatGPT?'

Vietnam:	10 - 24%
United Kingdom:	9 - 22%

'What did you do'?

Free text question, thematic analysis

- Online exams
- Write assignment
- Rewrite assignment
- Proofread assignment
- Planning an assignment
- Explain concepts

Cheating

?

Not Cheating

What could we do?

What should we do?

The AI writing report

turnitin

1 of 17: Lucas Anderson

Navigating the Complex Land...

Download Details Help

Similarity 23% AI Writing 56% Flags 0

56% detected as AI

The percentage indicates the combined amount of likely AI-generated text as well as likely AI-generated text that was also likely AI-paraphrased.

Submission Breakdown

Category	Percentage
1 AI-generated only	24%
2 AI-generated text that was AI-paraphrased	32%

The pervasive presence of social media platforms in contemporary society has fundamentally altered the dynamics of human interaction and communication. From the proliferation of Facebook to the rise of Instagram influencers, social media has become an integral aspect of daily life for billions worldwide. However, amid the convenience and connectivity afforded by these platforms lies a nuanced relationship with mental health that warrants deeper exploration. This essay embarks on a comprehensive journey to dissect the multifaceted impact of social media on mental well-



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Use This Trick

 ChatGPT

No Ai Detection ~~X~~
No Plagiarism ~~X~~



HOW TO :
TRICK AI
CONTENT
DETECTORS



100%
HUMAN-GENERATED CONTENT



Fantastic!

BYPASS
AI DETECTION



PARAPHRASE
WITHOUT
PLAGIARISM



6 steps to reduce detection (from YouTube)

- Use better systems (e.g. GPT₄ rather than 3.5)
- Screen using free AI detectors
- 'Humanise' using paraphrasing tools (e.g. Quillbot)
- Add spelling mistakes and non-native language traits
- Sprinkle in some human writing
 - (get ChatGPT et al to do all these)
- Repeat detection

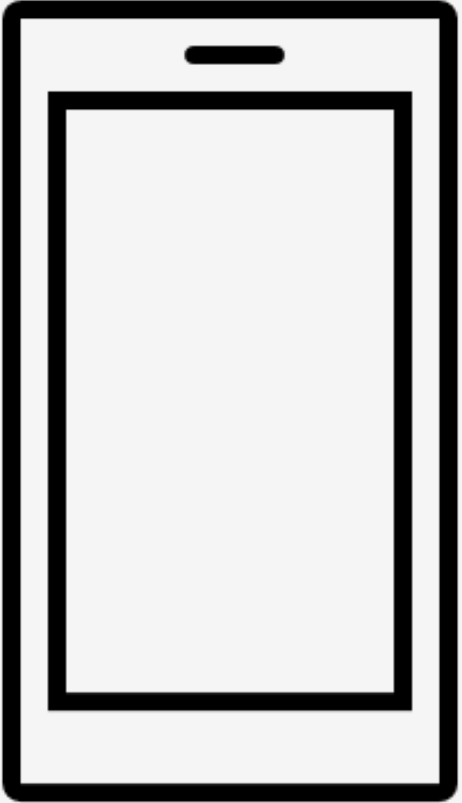
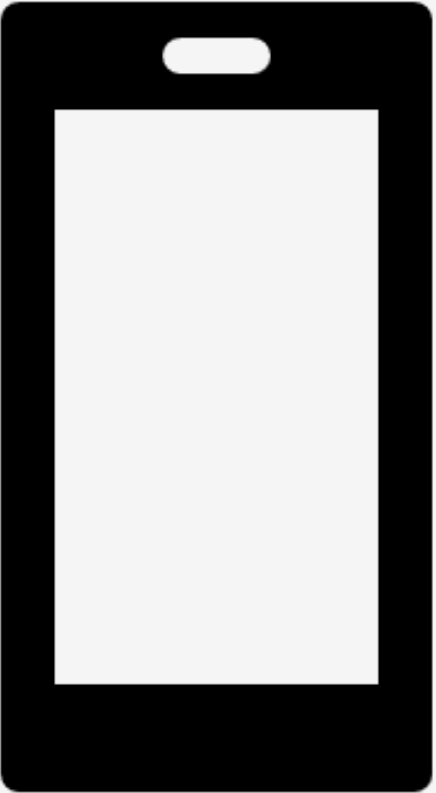
6 steps to reduce detection (from YouTube)

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- Add spelling mistakes and non-native language traits
- Sprinkle in some human writing
 - (get ChatGPT et al to do all these)
- Repeat detection
- These things are effective

Learning is cumulative

**Foundational knowledge is
essential**





Summary

- ChatGPT makes cheating a lot easier
- Need to assess core knowledge under secure conditions
- Need to teach students how to use the tools
- How to assess that.....?

Thank you



Tomas Folynek
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University of Toronto



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Cath Ellis
Karen van Haeringen
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Zoe Birch



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Megan Croombs



Caitlin Gilbert



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Ffinian Jones



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Questions?

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