

At the intersectionality of Human Centricity and Gen AI: where do learning organisations stand?



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The acute problem

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Degrees devalued
Australian universities

'Nobody is blind to it': mass cheating through AI puts integrity of Australian universities at risk, academics claim

Caitlin Cassidy Education reporter

Wed 31 Jul 2024 01:00 AEST

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Australian Government
Tertiary Education Quality and Standards Agency

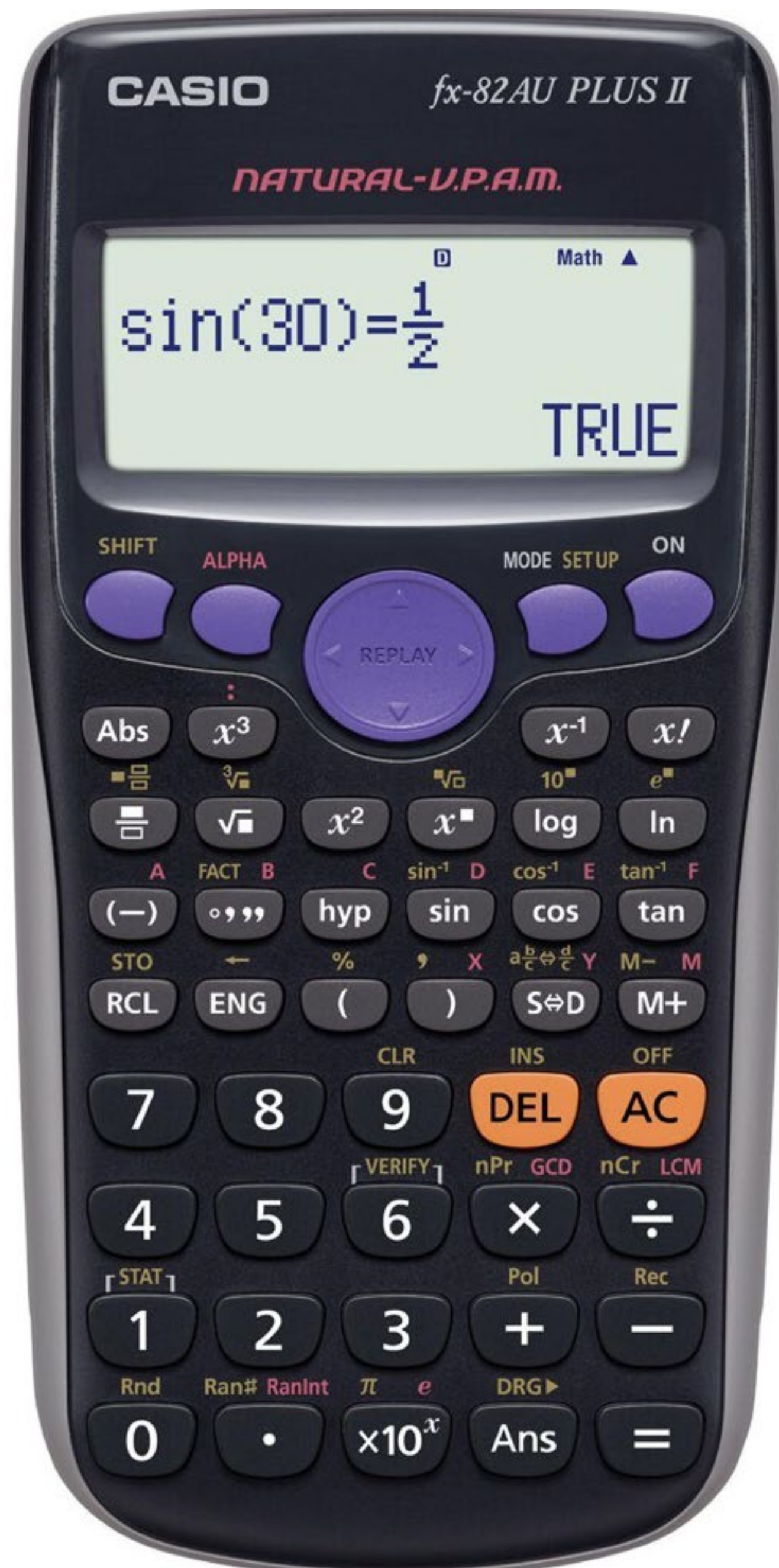
The evolving risk to academic integrity posed by generative artificial intelligence: Options for immediate action

Associate Professor Jason M Lodge,
The University of Queensland

August 2024

TEQSA

The chronic problem



Gemini ▾

Gemini was just updated. [See update](#)

Hello

How can I help you today?

Brainstorm presentation ideas about a topic

Write a product description for a new type of toothbrush

Help me incorporate more plant-based options in my diet

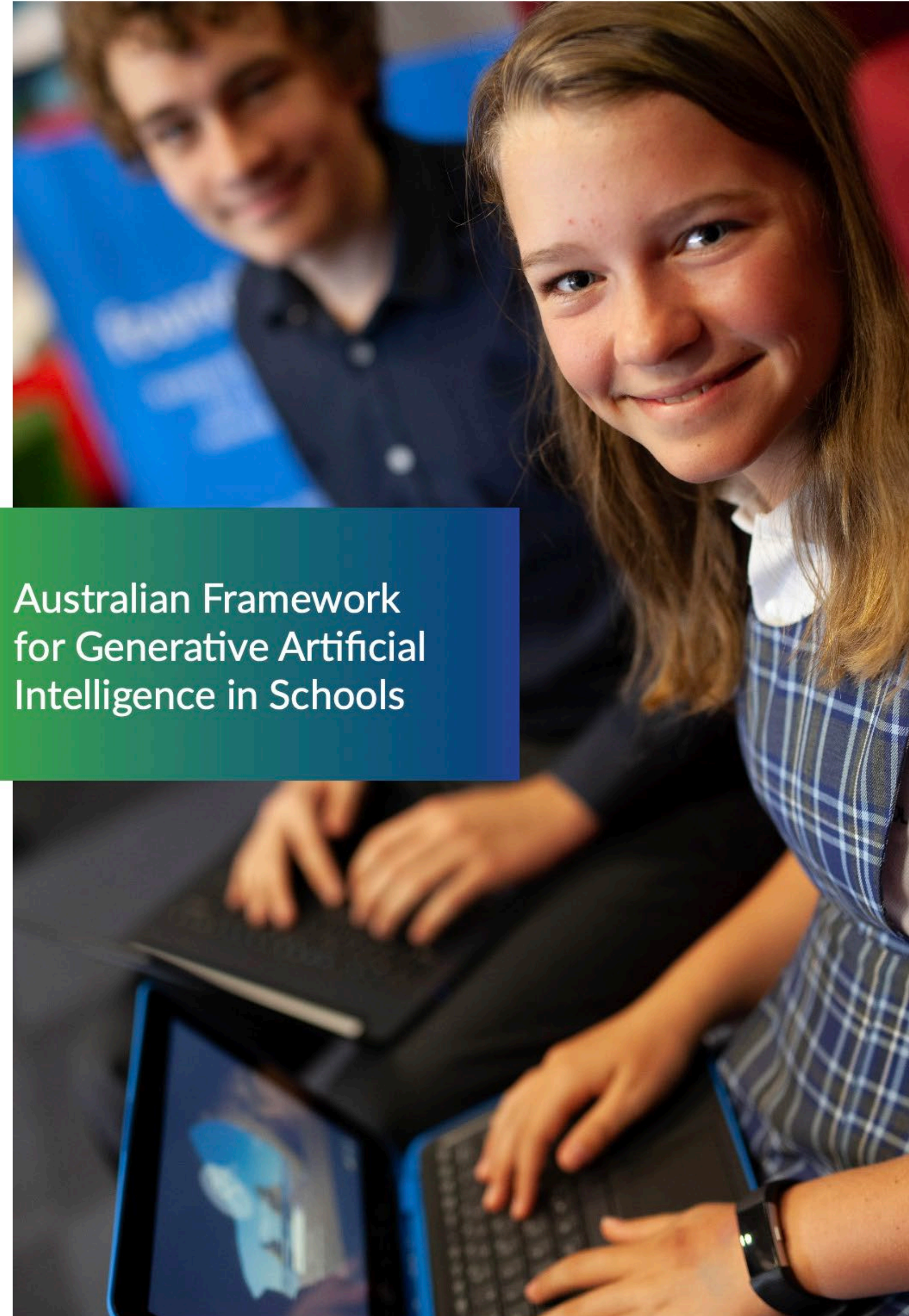
What's the time it takes to walk to several landmarks

Enter a prompt here

Gemini may display inaccurate info, including about people, so double-check its responses. [Your privacy & Gemini Apps](#)

What and how do we teach now?

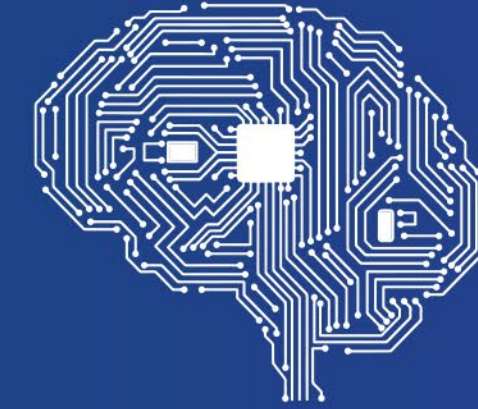
What does this mean for
organisations?



Australian Framework
for Generative Artificial
Intelligence in Schools

Australian Framework for Generative Artificial Intelligence in Schools

The Australian Framework for Generative Artificial Intelligence (AI) in Schools (the Framework) seeks to guide the responsible and ethical use of generative AI tools in ways that benefit students, schools and society. It was developed on behalf of all Education Ministers by the National AI in Schools Taskforce, which includes representatives from all jurisdictions, education sectors and the national education agencies.



Teaching and Learning

Generative AI tools are used to support and enhance teaching and learning.

- 1.1 Impact:** generative AI tools are used in ways that enhance and support teaching, school administration, and student learning.
- 1.2 Instruction:** schools engage students in learning about generative AI tools and how they work, including their potential limitations and biases, and deepen this learning as student usage increases.
- 1.3 Teacher expertise:** generative AI tools are used in ways that support teacher expertise, and teachers are recognised and respected as the subject matter experts within the classroom.
- 1.4 Critical thinking:** generative AI tools are used in ways that support and enhance critical thinking and creativity, rather than restrict human thought and experience.
- 1.5 Learning design:** work designed for students, including assessments, clearly outlines how generative AI tools should or should not be used and allows for a clear and unbiased evaluation of student ability.
- 1.6 Academic integrity:** students are supported to use generative AI tools ethically in their schoolwork, including by ensuring appropriate attribution.



Human and Social Wellbeing

Generative AI tools are used to benefit all members of the school community.

- 2.1 Wellbeing:** generative AI tools are used in ways that do not harm the wellbeing and safety of any member of the school community.
- 2.2 Diversity of perspectives:** generative AI tools are used in ways that expose users to diverse ideas and perspectives and avoid the reinforcement of biases.
- 2.3 Human rights:** generative AI tools are used in ways that respect human and worker rights, including individual autonomy and dignity.



Transparency

School communities understand how generative AI tools work, how they can be used, and when and how these tools are impacting them.

- 3.1 Information and support:** teachers, students, staff, parents and carers have access to clear and appropriate information and guidance about generative AI.
- 3.2 Disclosure:** school communities are appropriately informed when generative AI tools are used in ways that impact them.
- 3.3 Explainability:** vendors ensure that end users broadly understand the methods used by generative AI tools and their potential biases.



Fairness

Generative AI tools are used in ways that are accessible, fair, and respectful.

- 4.1 Accessibility and inclusivity:** generative AI tools are used in ways that enhance opportunities, and are inclusive, accessible, and equitable for people with disability and from diverse backgrounds.
- 4.2 Equity and access:** regional, rural and remote communities are considered when implementing generative AI.
- 4.3 Non-discrimination:** generative AI tools are used in ways that support inclusivity, minimising opportunities for, and countering, unfair discrimination against individuals, communities, or groups.
- 4.4 Cultural and intellectual property:** generative AI tools are used in ways that respect the cultural rights of various cultural groups, including Indigenous Cultural and Intellectual Property (ICIP) rights.



Accountability

Generative AI tools are used in ways that are open to challenge and retain human agency and accountability for decisions.

- 5.1 Human responsibility:** teachers and school leaders retain control of decision making and remain accountable for decisions that are supported by the use of generative AI tools.
- 5.2 Reliability:** generative AI tools are tested before they are used, and reliably operate in accordance with their intended purpose.
- 5.3 Monitoring:** the impact of generative AI tools on school communities is actively and regularly monitored, and emerging risks and opportunities are identified and managed.
- 5.1 Contestability:** members of school communities that are impacted by generative AI tools are actively informed about, and have opportunities to question, the use or outputs of the tools and any decisions informed by the tools.



Privacy, Security and Safety

Students and others using generative AI tools have their privacy and data protected.

- 6.1 Privacy and data protection:** generative AI tools are used in ways that respect and uphold privacy and data rights, comply with Australian law, and avoid the unnecessary collection, limit the retention, prevent further distribution, and prohibit the sale of student data.
- 6.2 Privacy disclosure:** school communities are proactively informed about how and what data will be collected, used, and shared while using generative AI tools, and consent is sought where needed.
- 6.3 Protection of student inputs:** students, teachers and staff take appropriate care when entering information into generative AI tools which may compromise any individual's data privacy.
- 6.4 Cyber-security and resilience:** robust cyber-security measures are implemented to protect the integrity and availability of school infrastructure, generative AI tools, and associated data.
- 6.5 Copyright compliance:** when using generative AI tools, schools are aware of, and take measures to comply with, applicable copyright rights and obligations.



Principles

Guiding Statements

1. Teaching and Learning

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1.1 Impact: generative AI tools are used in ways that enhance and support teaching, school administration, and student learning.

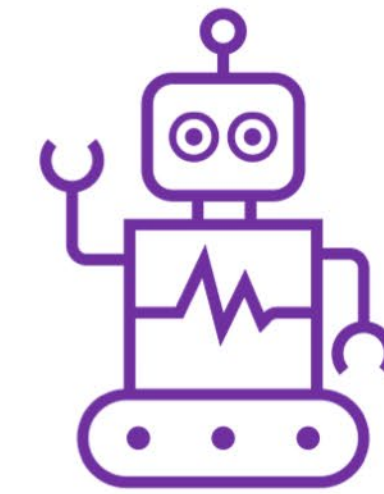
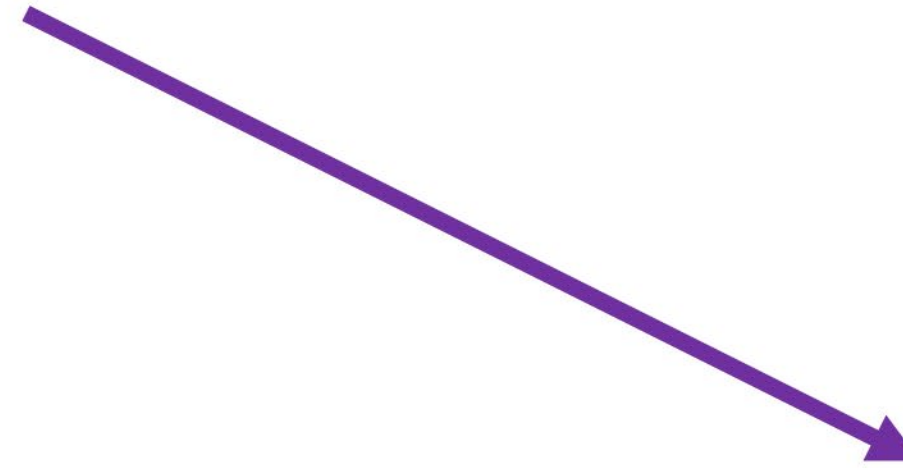
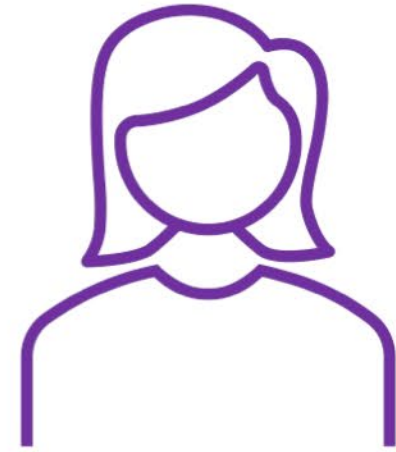
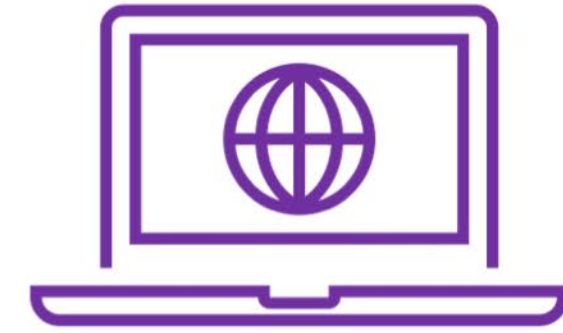
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1.6 Academic integrity: students are supported to use generative AI tools ethically in their schoolwork, including by ensuring appropriate attribution.



Critical thinking?

Computer Science > Artificial Intelligence

[Submitted on 20 Jun 2024]

How critically can an AI think? A framework for evaluating the quality of thinking of generative artificial intelligence

[Luke Zaphir](#), [Jason M. Lodge](#), [Jacinta Lisec](#), [Dom McGrath](#), [Hassan Khosravi](#)

Generative AI such as those with large language models have created opportunities for innovative assessment design practices. Due to recent technological developments, there is a need to know the limits and capabilities of generative AI in terms of simulating cognitive skills. Assessing student critical thinking skills has been a feature of assessment for time immemorial, but the demands of digital assessment create unique challenges for equity, academic integrity and assessment authorship. Educators need a framework for determining their assessments vulnerability to generative AI to inform assessment design practices. This paper presents a framework that explores the capabilities of the LLM ChatGPT4 application, which is the current industry benchmark. This paper presents the Mapping of questions, AI vulnerability testing, Grading, Evaluation (MAGE) framework to methodically critique their assessments within their own disciplinary contexts. This critique will provide specific and targeted indications of their questions vulnerabilities in terms of the critical thinking skills. This can go on to form the basis of assessment design for their tasks.

Subjects: **Artificial Intelligence (cs.AI)**

Cite as: [arXiv:2406.14769](#) [cs.AI]

(or [arXiv:2406.14769v1](#) [cs.AI] for this version)

<https://doi.org/10.48550/arXiv.2406.14769> 

	Humans	Robots
Interpretation		
Analysis		
Evaluation		
Inference		
Explanation		
Self-regulation		

3

3

Evaluation/judgement

Sensemaking

Self-regulated learning

(motivation and emotion)

Abductive reasoning?

Knowing things

Knowing how I know things

Knowing how to use that knowledge
meaningfully in a human, social world



Thank you



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