

Productive and ethical use of AI?

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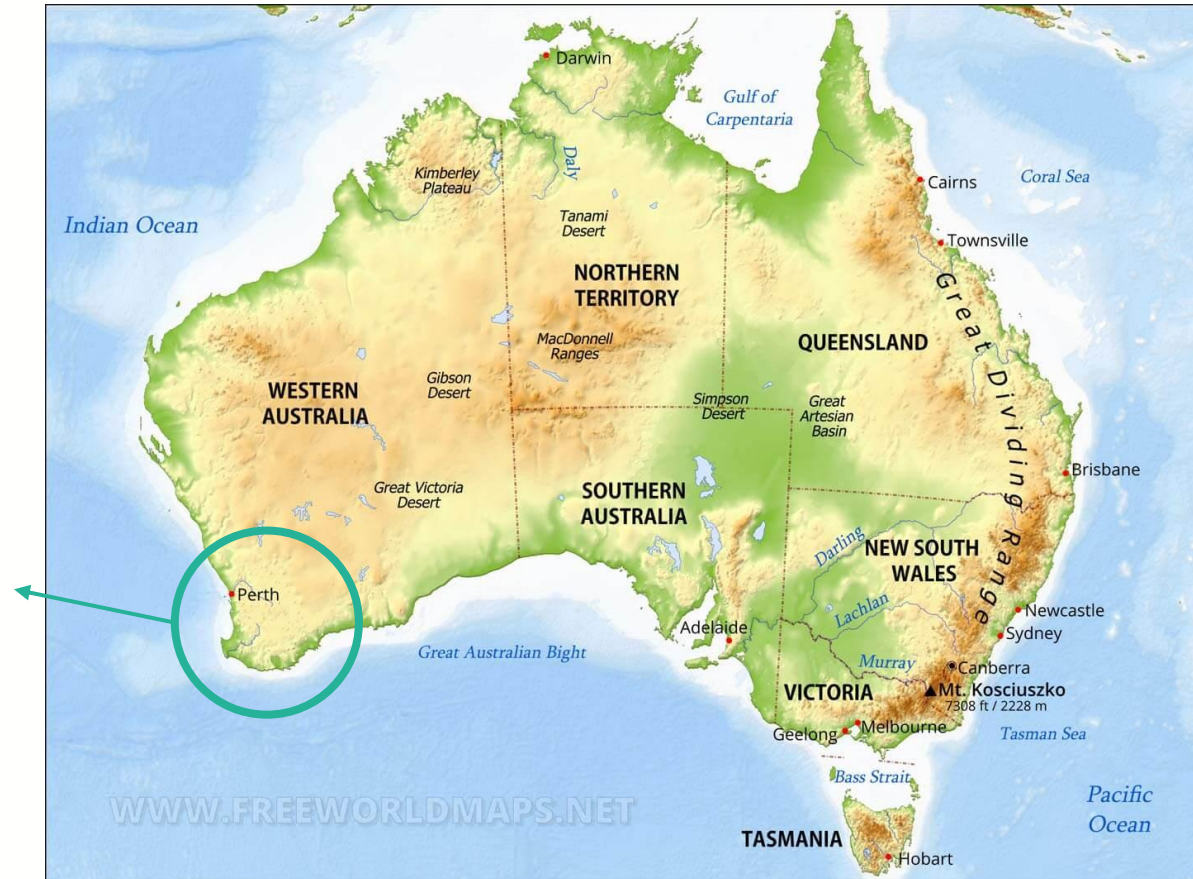
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Acknowledgement of Country

Whadjuk Noongar boodjar



Source: <https://noongarboodjar.com.au/>



Source: <https://www.freeworldmaps.net/australia/>

My goal today

- You are working towards registration as a provider with SITESA
- You are working towards a set of academic policies to ensure the university has an agreed approach to meeting standards and ensuring consistency for students
- This is a great opportunity for SINU to embed very contemporary responses to AI that will position you and your students well

I hope I can inform your thinking about:

- What steps you could be taking next in your responses to AI
- What role technologies might play in your response

What is AI?

My summary, as a non-expert in the technology

Artificial Intelligence

AI is an umbrella term for systems that are designed to perform tasks usually associated with human intelligence

Systems that can:

- Perceive their environment, which might include text, data, images, video etc., and
- Use ‘learning’ and ‘intelligence’ to make sense of those inputs and,
- Take actions to achieve defined goals

Generative Artificial Intelligence

GenAI is a subset of these systems designed to *generate* outputs that include text, computer code, images, videos and audio...

... outputs that are just like the kinds of artefacts that universities have always used to assess what students have learned.

Agentic AI is also an emerging problem for universities. These are autonomous tools that can perform tasks with little or no human involvement (ie. act as a person's agent)...

... from one prompt they can log into Moodle, read assignment instructions or test questions, do the work, and submit it.

How does GenAI work?

Training data	The HUGE database of material from which an AI model 'learns' (e.g. the open web)
Algorithm	Describes the model's goals – what the model is supposed to do
Machine learning	The processes used to teach the model to recognize patterns and relationships within the database, which often involves humans
Natural language processing	The ability for an AI model to understand and generate natural language (ie. respond to and answer 'prompts')

Ethical implications of GenAI

Its training data, while immense, is an **incomplete** (ie. not representative), **popular** (ie. not scholarly), and **hegemonic** (ie. Western) capture of human knowledge, which leads to **biased** and **inaccurate** outputs.

Ethical implications of GenAI

AI is a product of **exploitation**, based on what Naomi Klein has called “the largest and most consequential **theft** in human history”, and on the so-called “ghost work” (Gray & Suri, 2019) of a vast **global underclass** of data labellers and moderators.

Ethical implications of GenAI

Its algorithms and learning techniques are **opaque**, meaning that users cannot verify the means by which it has generated its outputs (ie. its methodology).

Ethical implications of GenAI

It routinely generates “**bullshit**”, a term that Hicks, Humphries and Slater (2024) argue is a more accurate term than ‘hallucinations’ for the content that AI tools are programmed to make up. This bullshit can also include references to **sources that simply don’t exist**.

Ethical implications of GenAI

AI may **accelerate climate change**. Some prompts generate 50x more CO₂ emissions than others (Dauner & Socher 2025). Data centres are expanding, with the largest approved centre set to consume energy equivalent to 5 million households (International Energy Agency).

Ethical implications of GenAI

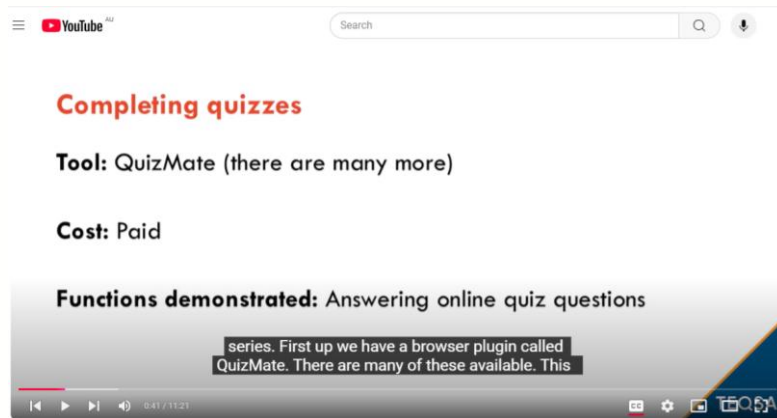
Modelling published by the International Monetary Fund (Rockall, Tavares, & Pizzinelli 2025) predicts that “amplified adoption” practices that focus on maximising productivity gains will also **amplify wage and wealth inequality**.

What impact is Gen AI having?

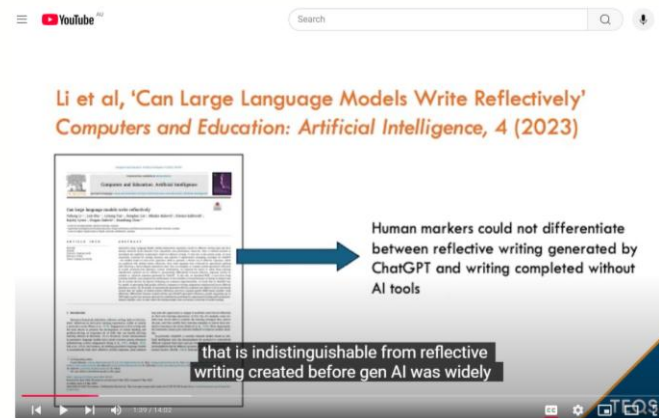
What AI can do now...

Gen AI: Transforming higher education assessments videos

TEQSA website or YouTube: <https://www.youtube.com/playlist?list=PLSCV2cpLC993mqkxonbvO1yKZmmByJoKi>



Gen AI and Student Learning
(11 mins)



Generative AI and Reflective Writing
(14 mins)



Multiple modalities and generative AI
(10 mins)

Produced by Professor Danny Liu and Dr Ben Miller from the University of Sydney

Opportunities

The opportunities of AI vary by discipline and they're still being explored.

- Accelerating medical research and improving medical imaging
- Speeding up a range of tasks across professions

In the hands of **discipline experts** and **skilled AI users**, there are examples of AI doing some amazing things.

All academics need to be engaging with their disciplines and professions to understand how AI is being adopted.

... but our students aren't discipline experts, they're learners. And many are not skilled users of AI. So the impacts on learners and their learning are very different.

Academic Integrity

Cases of academic misconduct have risen significantly

- **Falsified references:** students basing their work on fabricated material from fake sources, all generated by AI
- **Contract cheating:** AI has made it far cheaper and easier for students to hire someone to complete assignments, or log into the learning management system and do their work for them
- **Unacknowledged AI use:** dozens of assignments that all look the same or similar, but almost impossible to prove whether AI was used

Will this exacerbate ‘workslop’?

AI-Generated “Workslop” Is Destroying Productivity

by Kate Niederhoffer, Gabriella Rosen Kellerman, Angela Lee, Alex Liebscher, Kristina Rapuano and Jeffrey T. Hancock

September 22, 2025, Updated September 25, 2025



While employees are using AI, as per their company directives, AI isn’t always proving to be valuable

People are using AI to generate “low effort, passable looking work that ends up creating more work for their coworkers” who need to fix or redo the work to advance a task.

Niederhoffer et. Al (2025) *Harvard Business Review*. Source: <https://hbr.org/2025/09/ai-generated-workslop-is-destroying-productivity>

Academic Integrity

Research was conducted in the UK

- Academics marking student work were provided with assignments containing AI outputs (they didn't know)
- 94% of the AI submissions were **undetected** by the markers
- Across five subjects at different year levels there was an 83.4% chance that **the AI submissions would outperform students**

Scarfe et al. (2024) 'A real-world test of artificial intelligence infiltration of a university examinations system: A "Turing Test" case study' in PLoS ONE 19(6)

What are Australian universities doing?

Advice from our regulator, 2023



The Tertiary Education Quality and Standards Agency (TEQSA) require the following:

1. Assessment and learning experiences equip students to participate ethically and actively in a society where AI is ubiquitous (Principle 1)
2. Forming trustworthy judgements about student learning in a time of AI requires multiple, inclusive and contextualised approaches to assessment. This means:

‘Programmatic/Systemic Assessment’

- Moving away from the assessment of individual units and towards programme-level assessment systems
- A system of assessment that promotes trustworthiness of the overall award rather than relying on a series of singular, uncoordinated judgements.

How are universities in Australia thinking about their roles and responsibilities in AI education?

AI and higher education's social purpose

Knowledge of:

- What is AI, how is it made, and how does it work?
- Incompleteness and bias
- Poor quality inputs
- Exploitation in its production
- Hidden operations
- Inaccuracy and fake outputs
- Inequality and climate impacts

AI and higher education's social purpose

AI, in and of itself, is just a technology. But **no technology is neutral** ideologically or ethically (Hare 2022).

It's only through *use* and *application* that its potentially positive opportunities can be explored.

Before we consider its use, AI as technology has to be understood as deeply problematic for people and planet.

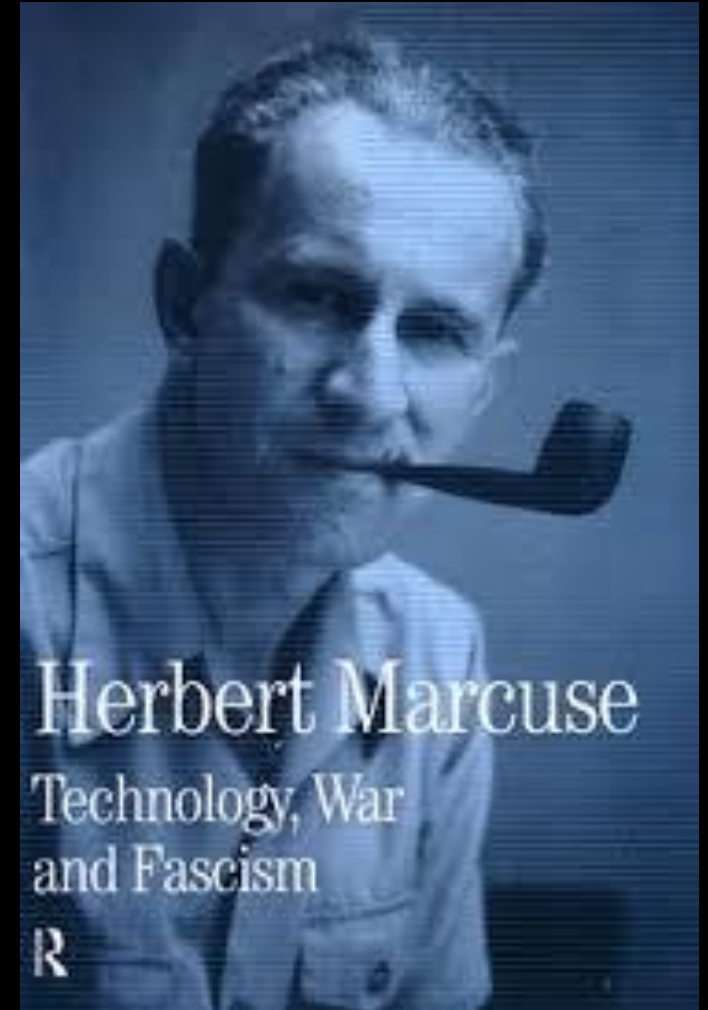
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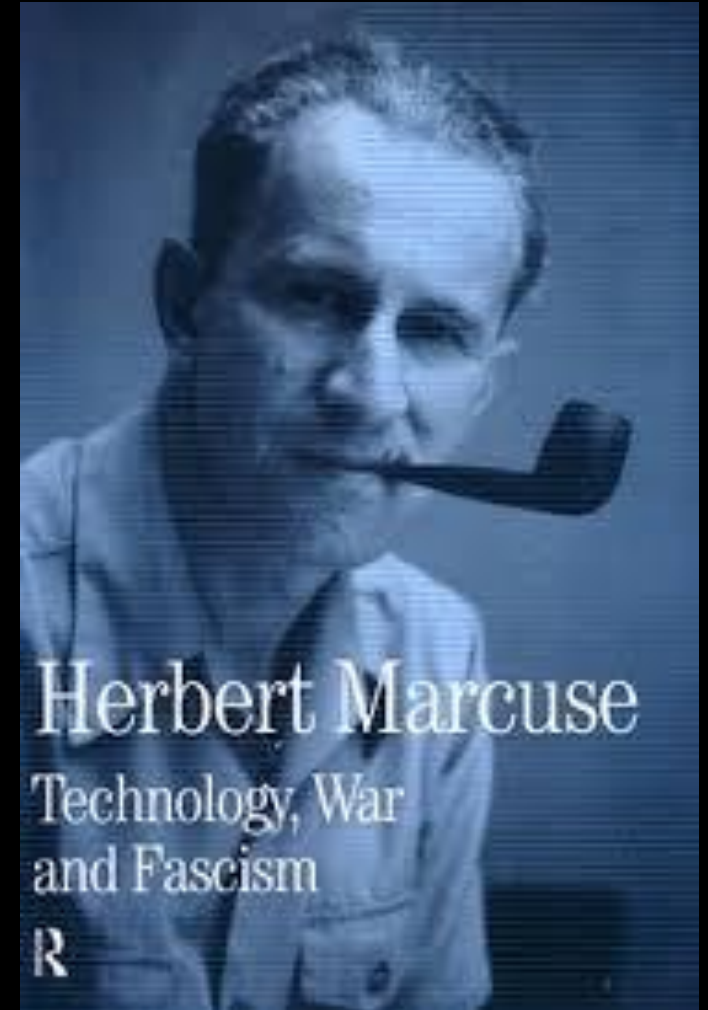
‘Some Social Implications of Modern Technology’



Source: <https://www.marcuse.org/herbert/publications/1990s/1998-technology-war-fascism.html>

AI and higher education's critical purpose

AI is not a disruption, nor is it progress. It is an intensification of the same 'machine rationality' that has long underpinned industrialisation and capitalism.

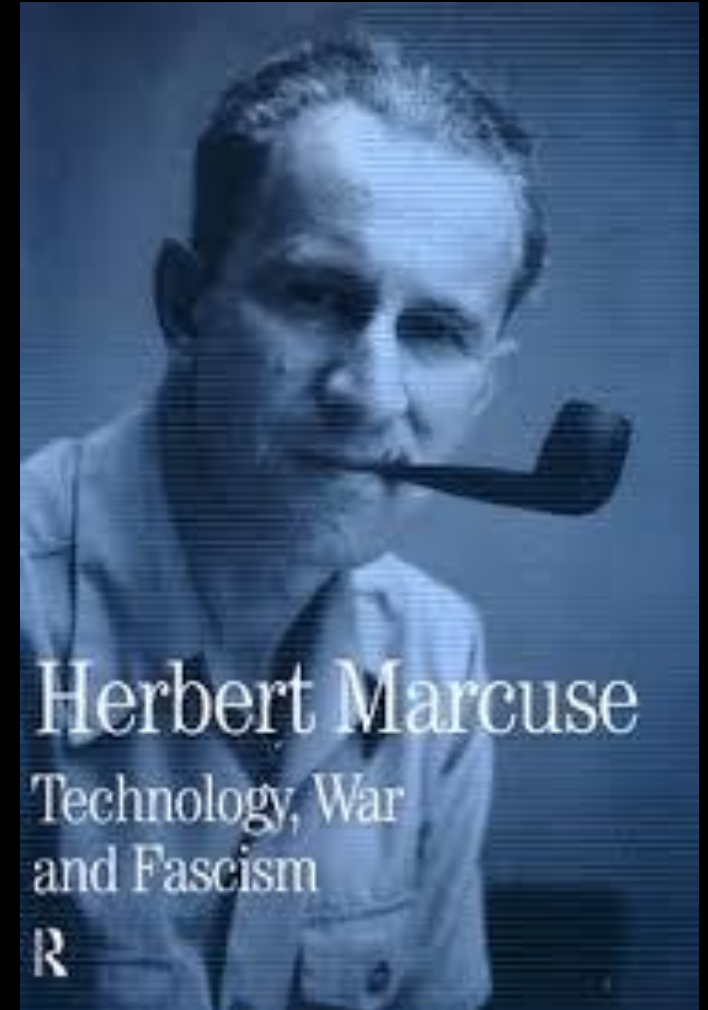


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'Machine rationality' is the underlying logic of our system which imbues technologies with a "matter-of-factness", such that the pursuit of human spontaneity, need, and potentiality is subordinated to the pursuit of efficiency or productivity, which then become inalienable values.



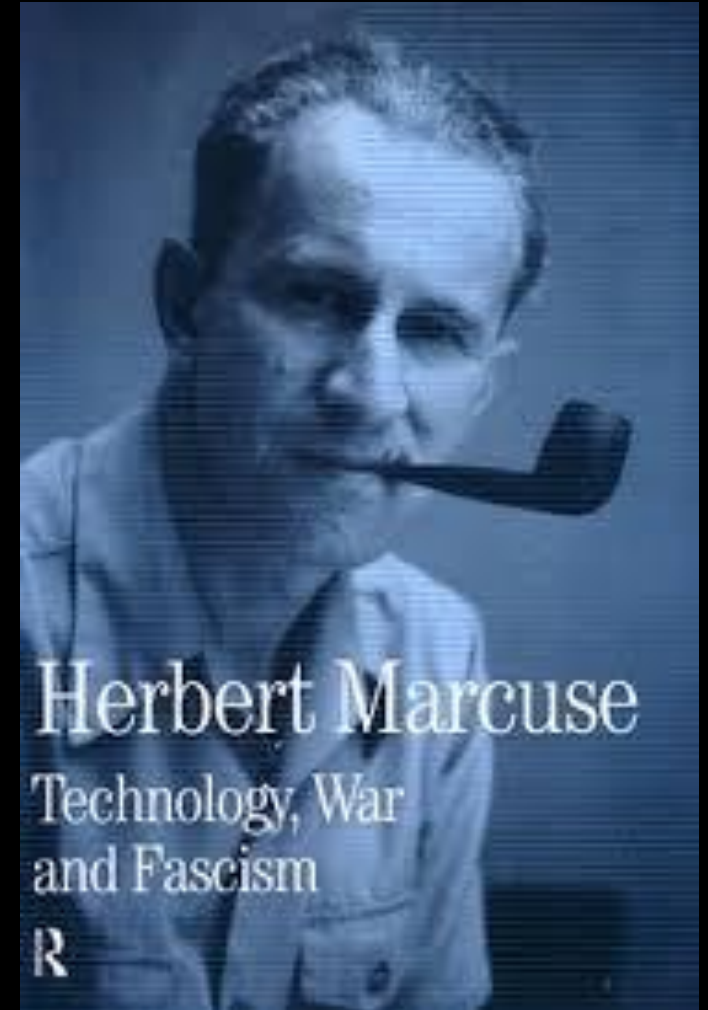
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AI is an efficiency machine, what Marcuse may call "the embodiment of rationality and expediency" (p.46).



Source: <https://www.marcuse.org/herbert/publications/1990s/1998-technology-war-fascism.html>

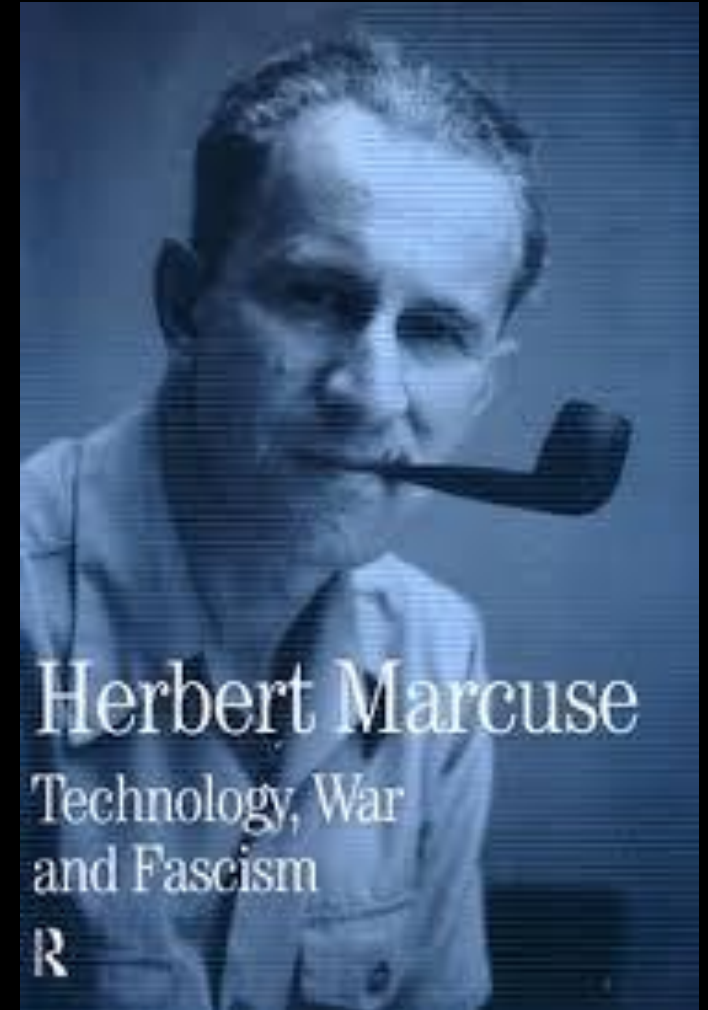
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“Artificial general intelligence ... [means] highly autonomous systems that outperform humans at **most economically valuable work**”

(Open AI Charter, April 2018)

AI and higher education's critical purpose

Precisely because the mechanistic search for greater efficiency and productivity seems so rational, to critique machine rationality seems *irrational*.



Source: <https://www.marcuse.org/herbert/publications/1990s/1998-technology-war-fascism.html>

Principle 1: Assessment and learning experiences equip students to participate ethically and actively in a society where AI is ubiquitous

Lodge et al. (2023) Assessment reform for the age of artificial intelligence, TEQSA

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Lodge et al. (2023) Assessment reform for the age of artificial intelligence, TEQSA

Using AI is not presumed.
Principle 1 holds open the vital space in which to be *critical of AI itself*, not just its outputs.

How, then, might universities design a course of learning that includes AI?

For universities

Before we set about determining *what* students are learning, we need to ensure *that they are learning*.

For universities

Students need a learning environment that first does no harm: one which is capable of **engaging students in the learning that matters** by managing the corrosive effects of AI on that learning, and also developing students' capabilities to identify and manage those effects themselves.

For universities

Institutions will need to look **beyond assessment** as the focus of reform and look at how higher education is provided. Delivery modes, learning environments, and teaching approaches have to reflect that **the conditions in which students are learning** have fundamentally changed.

For Course Leads

What should students learn?

Practical

Qualification

Discipline knowledge, general capabilities, and digital literacy: the ability to use technologies (including AI), and evaluate their quality and value for the discipline and profession.

For Course Leads

What should students learn?

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Discipline knowledge, general capabilities, and digital literacy: the ability to use technologies (including AI), and **evaluate their quality and value** for the discipline and profession.

Engaging in 'critique' of AI outputs is 'small c' critical and not 'BIG C' Critical. This alone doesn't achieve higher education's Critical purpose.

If workplaces simply want an AI operator, then they don't want a university graduate.

For Course Leads

What should students learn?

Practical

Qualification

Discipline knowledge, general capabilities, and digital literacy: the ability to use technologies (including AI), and evaluate their quality and value for the discipline and profession.

Social

Socialisation

Knowledge about what AI is, how it's made, how it works, its implications across diverse local and global contexts, and how it's viewed from different perspectives.

Critical

Subjectification

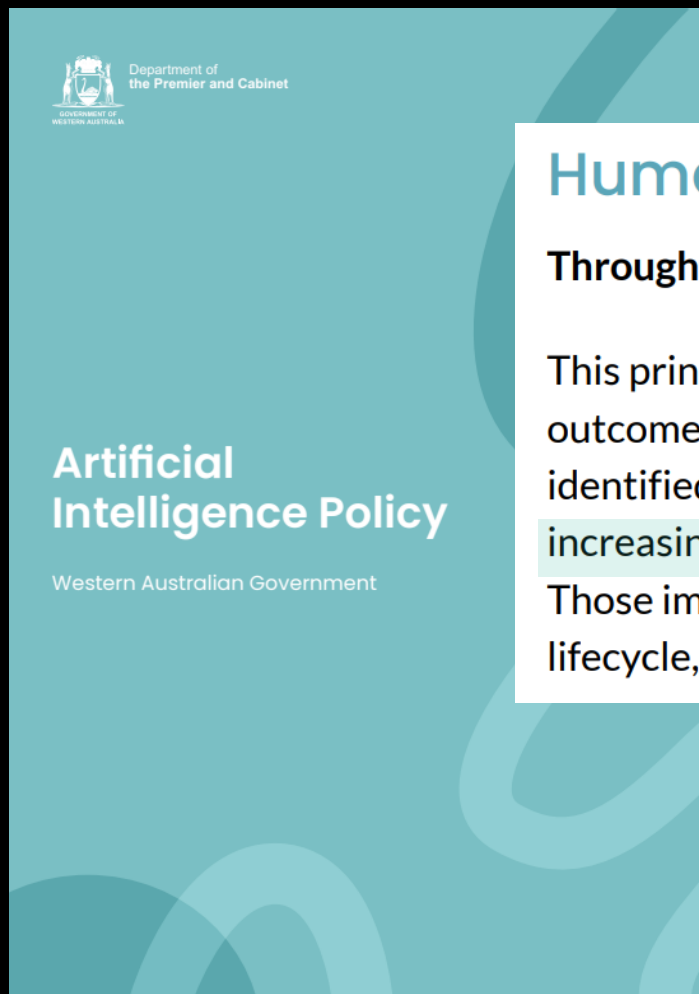
The disposition and capability to critique AI itself and its implications for individuals, for humanity, for communities and for the environment.

For Course Leads

What should students learn?

Drawing the three purposes together, courses need to equip students to recognise and navigate the intersections and conflicts between their social, practical and critical responsibilities as university graduates in relation to AI.

A practical example



Human, social and environmental wellbeing

Throughout their lifecycle, AI systems must benefit individuals, society and the environment.

This principle aims to clearly indicate from the outset that AI systems must be used for beneficial outcomes for individuals, society and the environment. AI system objectives must be clearly identified and justified. AI systems designed for legitimate internal business purposes, like increasing efficiency, can have broader impacts on individual, social and environmental wellbeing.

Those impacts, both positive and negative, must be accounted for throughout the AI system's lifecycle, including impacts outside the organisation.

WA Government AI Policy, 2025

<https://www.wa.gov.au/system/files/2025-06/aipolicy.pdf>

For Course Leads

What should students learn?

1. Curriculum includes **knowledge about AI** as a technology, and varied experiences and perspectives across diverse contexts
2. Learning experiences scaffold **reflective engagement with AI**, and include **scrutiny of AI outputs** for their quality and value in relation to both learning and professional purposes
3. Learning experiences engage students in grappling Critically with AI itself, and its **significant ethical issues**
4. Assessments require students to **make choices about AI** that weigh up their responsibilities to people, place and planet

For Course Leads

What should students learn?

Drawing the three purposes together, courses need to equip students to **recognise and navigate the intersections and conflicts** between their social, practical and critical responsibilities as university graduates in relation to AI.

For Subject leads and tutors
How might students learn?

We need to stop detecting cheating and start detecting learning (Ellis and Lodge, 2024)

Consider – the events of instruction

1. Gain attention
2. Inform learners of objectives
3. Activate prior learning
4. Present content
5. Provide guidance
6. Learner practice
7. Provide feedback
8. Assess performance
9. Enhance retention and transfer

A practical example

1	NO AI	The assessment is completed entirely without AI assistance in a controlled environment, ensuring that students rely solely on their existing knowledge, understanding, and skills You must not use AI at any point during the assessment. You must demonstrate your core skills and knowledge.
2	AI PLANNING	AI may be used for pre-task activities such as brainstorming, outlining and initial research. This level focuses on the effective use of AI for planning, synthesis, and ideation, but assessments should emphasise the ability to develop and refine these ideas independently. You may use AI for planning, idea development, and research. Your final submission should show how you have developed and refined these ideas.
3	AI COLLABORATION	AI may be used to help complete the task, including idea generation, drafting, feedback, and refinement. Students should critically evaluate and modify the AI suggested outputs, demonstrating their understanding. You may use AI to assist with specific tasks such as drafting text, refining and evaluating your work. You must critically evaluate and modify any AI-generated content you use.
4	FULL AI	AI may be used to complete any elements of the task, with students directing AI to achieve the assessment goals. Assessments at this level may also require engagement with AI to achieve goals and solve problems. You may use AI extensively throughout your work either as you wish, or as specifically directed in your assessment. Focus on directing AI to achieve your goals while demonstrating your critical thinking.
5	AI EXPLORATION	AI is used creatively to enhance problem-solving, generate novel insights, or develop innovative solutions to solve problems. Students and educators co-design assessments to explore unique AI applications within the field of study. You should use AI creatively to solve the task, potentially co-designing new approaches with your instructor.



Perkins, Furze, Roe & MacVaugh (2024). The AI Assessment Scale

Unenforceable
conditions = invalid and
unfair assessment

BUT

How could this *stage*
students' engagement
with AI via learning
activities?

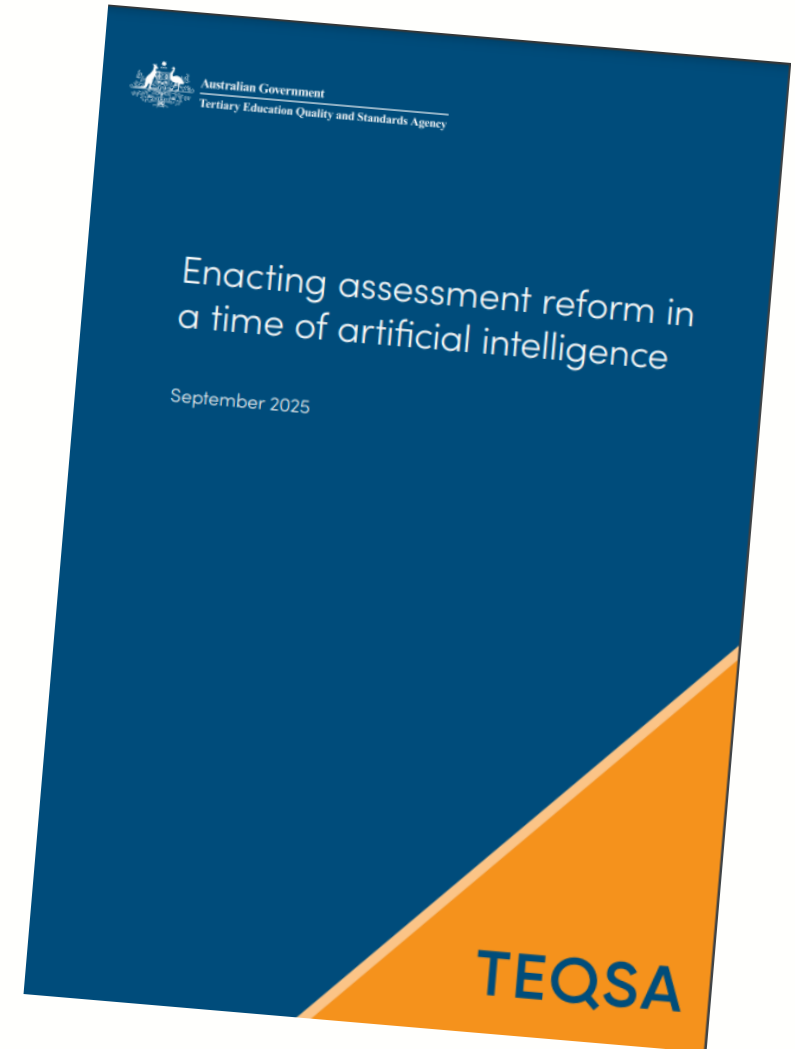
Perkins, Furze, Roe & MacVaugh, 2024, The AI Assessment Scale

Source: <https://leonfurze.com/2024/08/28/updating-the-ai-assessment-scale/>

Update from our regulator, 2025

There are 3 primary approaches to assessment reform that institutions have taken:

- Pathway 1: Assuring learning across the whole degree program
- Pathway 2: Assuring learning by unit/subject
- Pathway 3 (hybrid): Assurance of learning occurs across degree structures, but some assurance remains within units only





Pathway 1 example: ECU's Curriculum Transformation Program (CTP)

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Programme integrity through relational learning

Programme integrity and the assurance of learning will be achieved through knowing our students and observing their learning, rather than through the control of singular assessment task conditions.

Programme integrity through progressive design

The progressive development of each Programme Learning Outcome will be described for each stage in the Programme. All assessment will be mapped to these progressive descriptions.

Programme integrity through integrative, applied tasks

Not all units will contain assessment.

Some units will be responsible for developing one or more learning outcomes, focusing on teaching, learning and feedback.

Other units will be responsible for assessment, integrating and applying learning from other units at each stage of the Programme.

Assessment validity through increased authenticity

Assessment will be designed to assess Programme Learning Outcomes in increasingly integrated and authentic contexts, e.g. simulations and WIL, and include the navigation of AI as appropriate for the discipline or profession.

Assessment validity through qualitative judgements

The assessment process will make a qualitative judgement about whether a student is progressively meeting each learning outcome at each stage of the Programme.

Pathway 2 example: University of Sydney's 'two-lane' approach

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	Lane 1	Lane 2
Role of assessment	Assessment <i>of</i> learning	Assessment <i>for</i> and <i>as</i> learning
Assessment security	Secured, in person	‘Open’ / unsecured
Role of generative AI	May or may not be allowed by examiner	As relevant, use of AI scaffolded & supported
<u>TEQSA alignment</u>	Principle 2 – forming trustworthy judgements of student learning	Principle 1 – equip students to participate ethically and actively in a society pervaded with AI
Examples	In person interactive oral assessments; viva voces; contemporaneous in-class assessments and skill development; tests and exams.	AI to provoke reflection, suggest structure, brainstorm ideas, summarise literature, make content, suggest counterarguments, improve clarity, provide formative feedback, etc

Technology considerations

The fact that on-campus learning is core at SINU is a strength – you can design learning experiences where you're observing student's learning

For students learning remotely, at a distance, how will they be supported to interactive learning?

Moodle and other technologies might be used to support *learning*

Using technology to assess (e.g. with digitised assignments) creates integrity challenges – how do you know the students have done the work?

Technology considerations

Do students have access to AI tools?

If some students have access and others don't, it leads to unfair assessment

Most experts do not support so-called 'AI detection' tools. BUT one of the biggest problems of AI is falsified references, which Turnitin can help to easily identify.

- Turnitin is only worthwhile if you are systematically asking for digitised assessments, and academics commit to using it
- Otherwise it's costly

Other considerations

Leadership

- Who will lead and design the response to this challenge? Someone needs to conceptualise and lead the changes?

Programme and assessment design

- What's the best approach to curriculum and assessment to support learning in SINU's disciplines and for your students?
- How can you build from your existing strengths?

What are the most valuable technologies?

- Learning and feedback tools
- Video conferencing (e.g. Zoom)
- Academic integrity tools

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Thank You

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