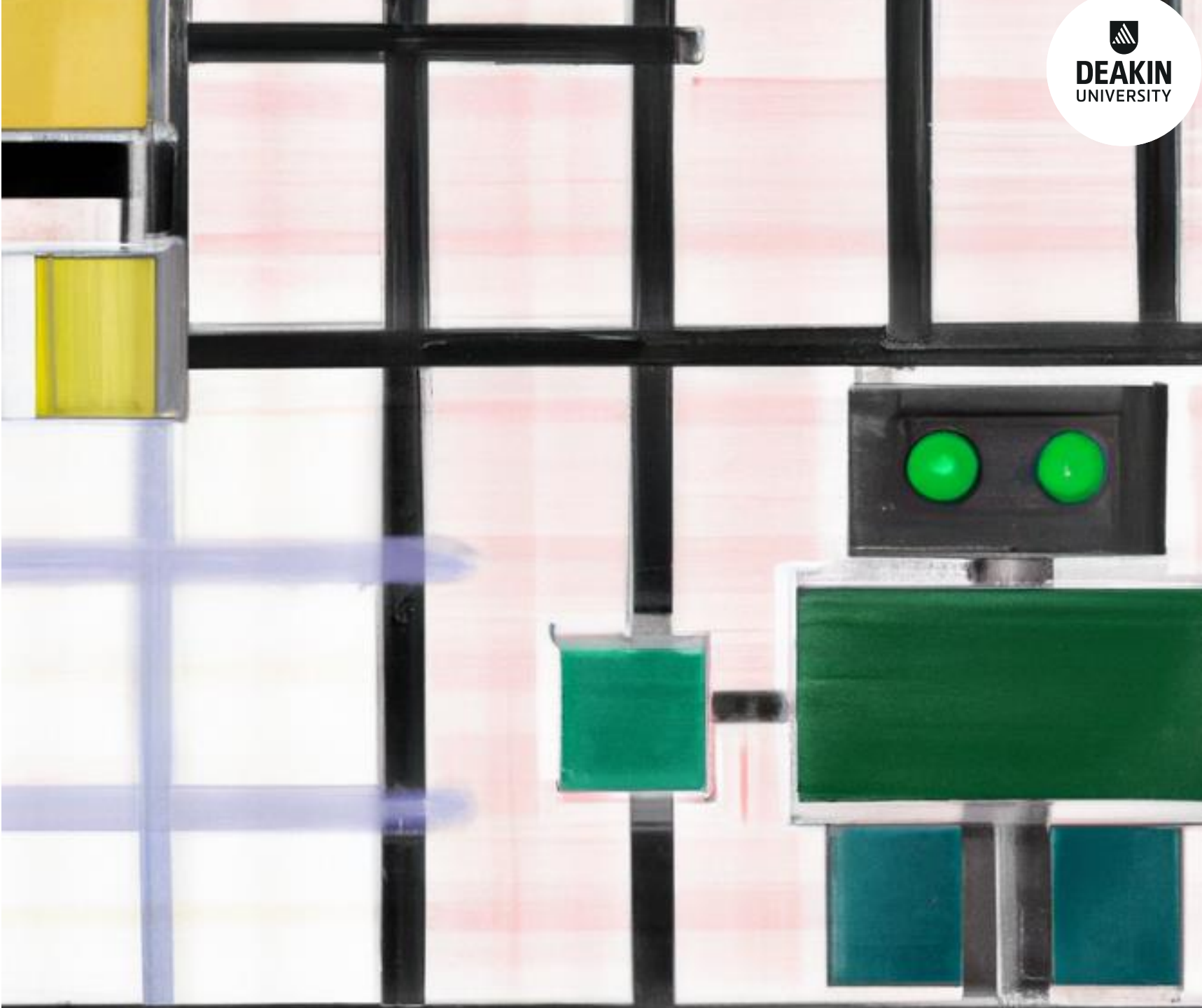


Generative AI – the issues right here, right now

Professor Margaret Bearman
Deakin University

Assessment in the Age of AI
NZQA 31st May 2023

DALL-E prompt: robots making rubrics
in the style of Mondrian impressionist



Acknowledgement of country

We acknowledge the Traditional Custodians of all the unceded lands, skies and waterways on which Deakin students and teachers come together. As we learn and teach through virtually and physically constructed places across time, we pay our deep respect to the Ancestors and Elders of Wadawurrung Country, Eastern Maar Country and Wurundjeri Country, as well as the Traditional Custodians of all the lands on which you may be learning and teaching, where education has taken place for many thousands of years.



Purpose of today

Shine a little light on the implications of generative artificial intelligence (genAI) for (university) assessment from a design perspective

Explore implications for the short term

As well as the need to reframe more broadly for the longer term

“...the graded and non-graded tasks, undertaken by an enrolled student as part of their formal study, where the learner’s performance is judged by others (teachers or peers).”

(Bearman et al 2016)

The inherent tension

Assessment both:

- assures learning
- promotes learning



How are educational institutions responding to genAI?

Ignore

Ban

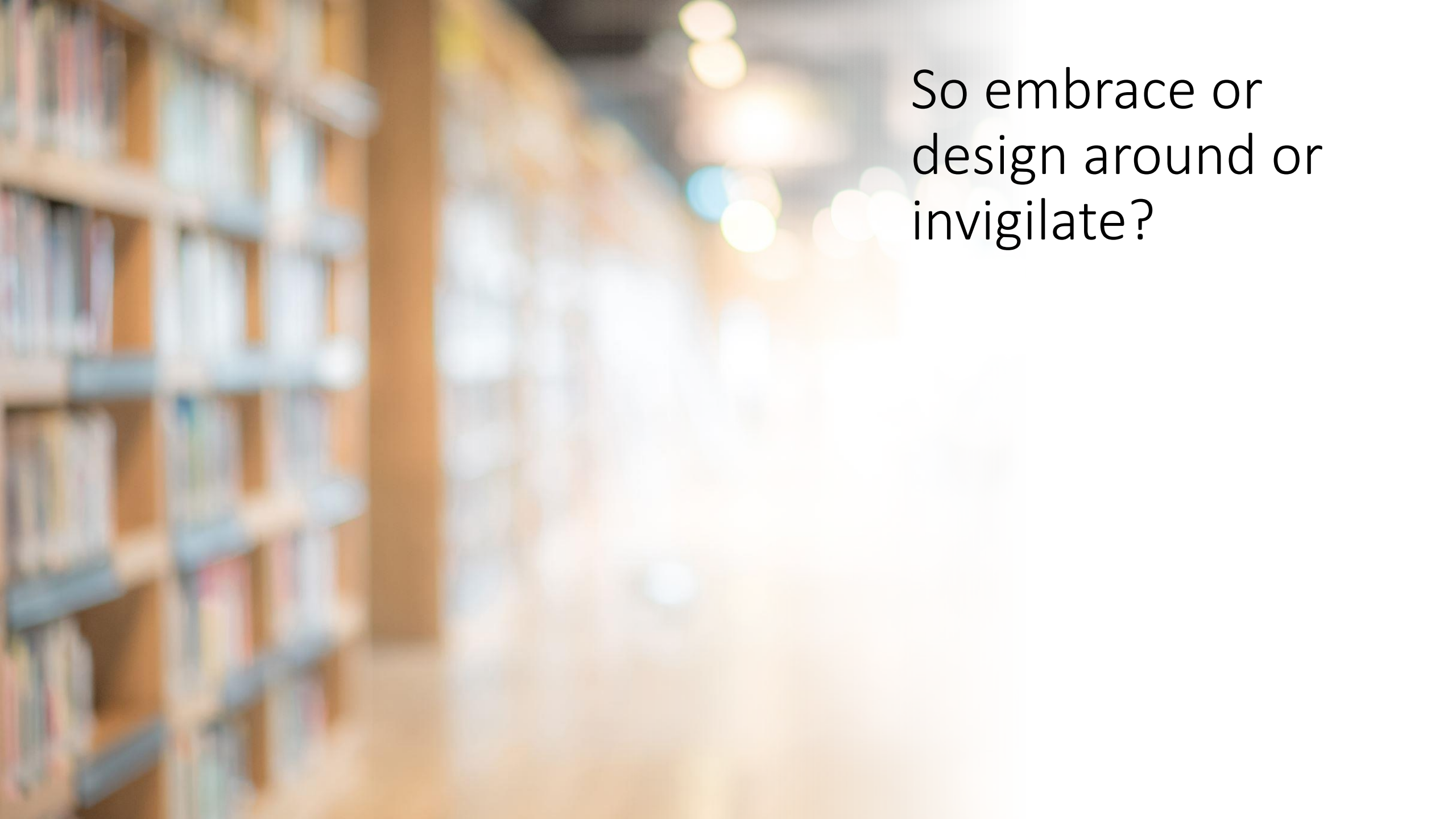
Invigilate

Embrace

Design around

Rethink

Lodge, Broadbent & Howard 2023 - <https://www.linkedin.com/pulse/assessment-redesign-generative-ai-taxonomy-options-viability-lodge/>



So embrace or
design around or
invigilate?

Embracing...

Inevitable – and in our enterprise software - the launch of Bard means that Google has just transformed, Microsoft not far behind...

But still uncertain
(possibly for a year or two)

Uncertainties around ChatGPT (and other genAI)

Legal uncertainties:

- eg who owns prompts
- eg who owns the source material, is copyright being contravened?

Ethical uncertainties:

- eg issues of bias in the corpus, issues of truth, epistemic colonialism...

Access uncertainties

Without enterprise models, there are cost concerns – can we immediately assume everyone can afford it? What if it falls over during assessment?

And we don't quite yet know how anyone is using it?

What are students/educators/workplaces doing?

So, to a certain extent, **large scale** embracing is difficult to do **right now**.



Design around at
task/unit level

Most sensible 'right now'
option for many assessment
tasks.

You may wish to design in genAI use as part of your assessment task. This makes immediate sense in certain disciplines.

Or, more likely, you are concerned about inappropriate use of AI, so you may shift your task to try and avoid students passing off AI work as their own.

Lots of suggestions – no evidence (yet)

- **Proposition: if the knowledge is common, then the task's integrity may be under threat.**
- Most suggestions of changes to assessment adjust this – so that the student has to represent knowledge is not commonly available or possibly even known.
- This also aligns with the need for assessment to promote learning.

Possibilities?

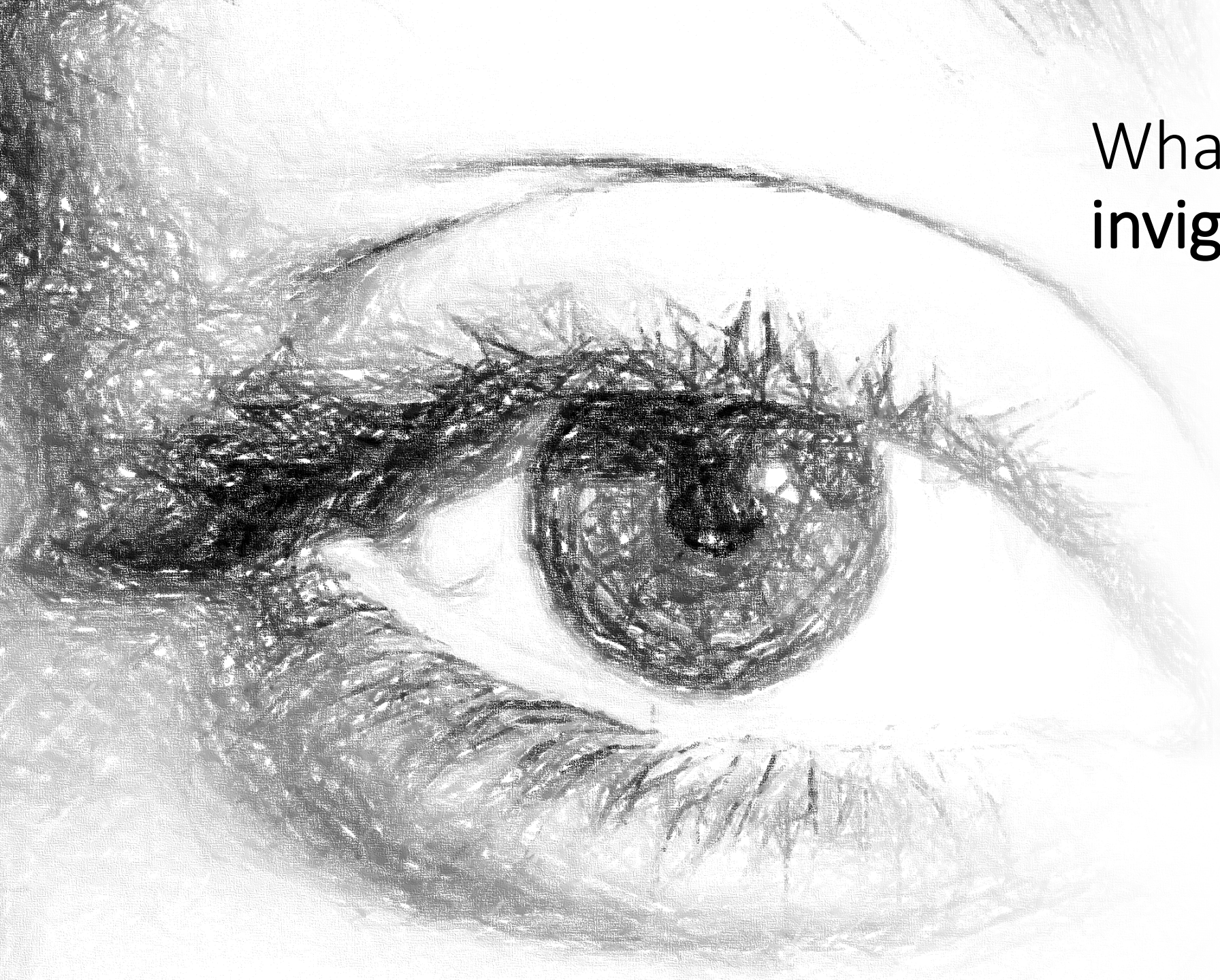
- Ways of making the knowledge requirements more specific include
 - Leaning into the relational – knowing your students
 - Specifically requiring the assessment task to reference something that happened in class
 - Rewarding originality
 - Making the task more “authentic” ie design something to a specific time and place
 - Making sure the rubric rewards the situational/relational in the success criteria
- In no way cheat proof.

Can a design be cheat proof?

Seems unlikely.

Intentional cheating is very pervasive and pernicious.

What we want is to make it difficult ...




What about
invigilation?

What's wrong with invigilation?

There are many negative effects to invigilated timed exams:

- Costly
- Stressful
- Tests capabilities unrelated to tasks (ie short time period and response) which is problematic in terms of assessment validity and inclusion
- Only a narrow band of capabilities can be tested
- Cheating still goes on, possibly at high rates (Dawson 2020)

A blurred night street scene with bokeh lights and a building facade on the left. The text is overlaid on the right side of the image.

Therefore
rethinking
invigilation
may be key

Early thoughts?

- A move towards **prioritising what needs to be invigilated across a program?**
 - In first year, common sorts of knowledge/skills required for more complex skills?
 - Plenty of other opportunities to demonstrate knowledge without invigilation
 - At the point of graduation, where outcomes must be assured?
- **A move towards orals** – and possibly **dialogic**, rather than surveilling?
- A move towards assessment of **learning outcomes across tasks** rather than just within them.

CRADLE suggests generative AI (2023)

<https://blogs.deakin.edu.au/cradle/wp-content/uploads/sites/188/2023/06/CRADLE-Suggests-Assessment-and-genAI.pdf>

Rethinking the curriculum to account for AI

.... Attuning to quality standards – what counts as good

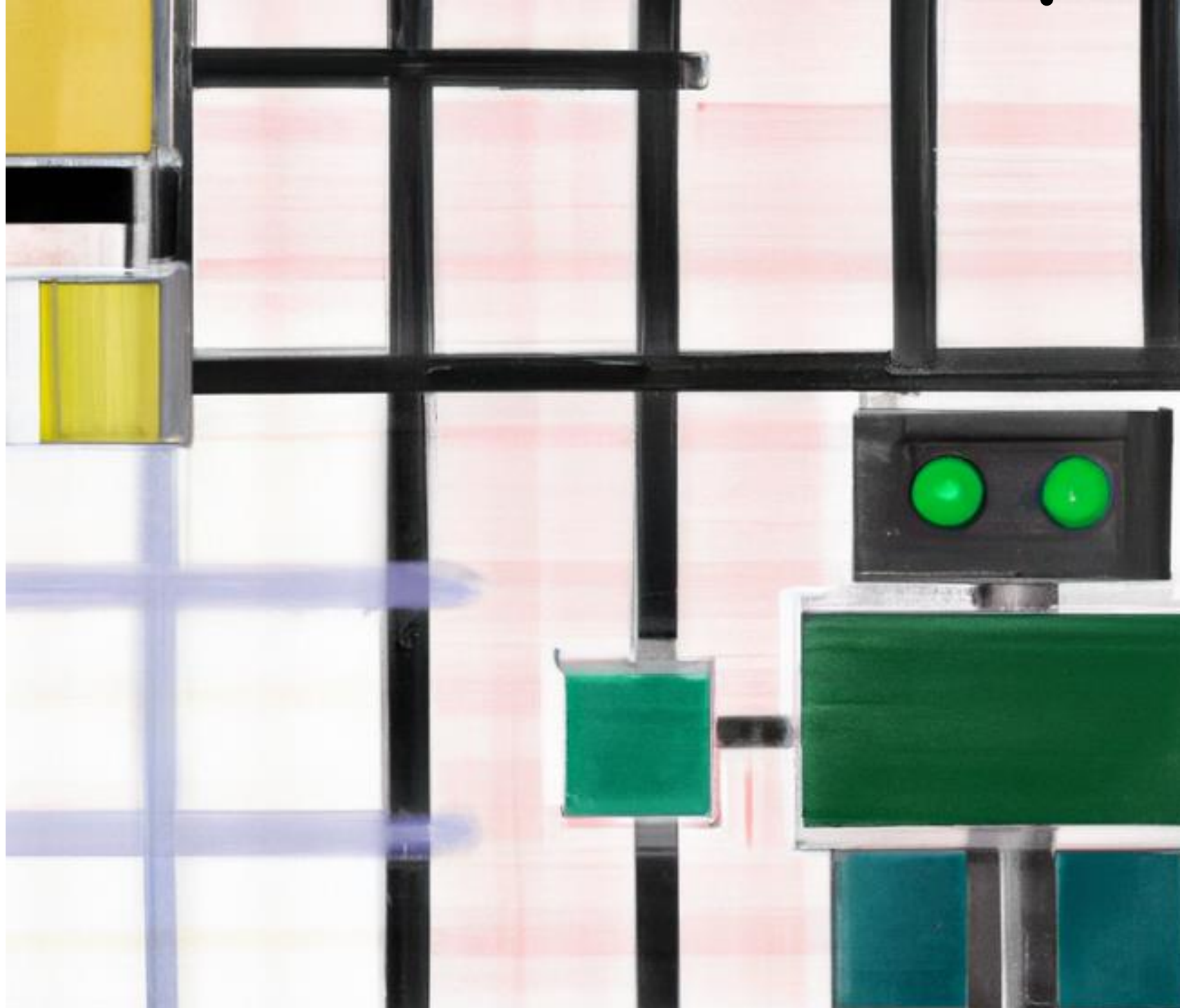
Through *evaluative judgement* – *capability to judge quality of work of self and others*

Treating AI as ambiguous rather than accurate -

Bearman, M., & Ajjawi, R., (online 2023) Learning to work with the black box: pedagogy for a world with artificial intelligence. British Journal of Educational Technology <https://doi.org/10.1111/bjet.13337>

Conclusions

DALL-E prompt: robots making rubrics
in the style of Mondrian impressionist





Ignore

Ban

Invigilate

Embrace

Design around

Rethink

Artificial intelligence has already made huge inroads into our society

It remains an evolving and uncertain presence

How we chose to address its presence in our assessment designs
requires thinking broadly, not narrowly

And remembering assessment is not just about testing, it is always an
intervention into learning



References

Bearman, M., Dawson, P., Boud, D., Bennett, S., Hall, M., & Molloy, E. (2016). Support for assessment practice: developing the Assessment Design Decisions Framework. *Teaching in Higher Education*, 21(5), 545-556.

Bearman, M., & Ajjawi, R., (online 2023) Learning to work with the black box: pedagogy for a world with artificial intelligence. *British Journal of Educational Technology* <https://doi.org/10.1111/bjet.13337>

Bearman et al CRADLE suggests... generative AI (in press)
<https://blogs.deakin.edu.au/cradle/wp-content/uploads/sites/188/2023/06/CRADLE-Suggests-Assessment-and-genAI.pdf>

Dawson, P. (2020). *Defending assessment security in a digital world: preventing e-cheating and supporting academic integrity in higher education*. Routledge.

Lodge, Broadbent & Howard 2023 - <https://www.linkedin.com/pulse/assessment-redesign-generative-ai-taxonomy-options-viability-lodge/>