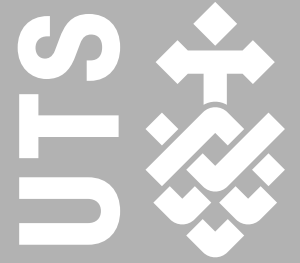


1st March 2023, TEQSA/CRADLE webinar
– *ChatGPT: How should educators respond?*



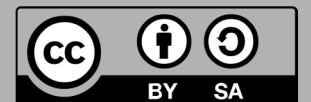
Effective Ethical Engagement: from aspiration to evidence

Simon Buckingham Shum

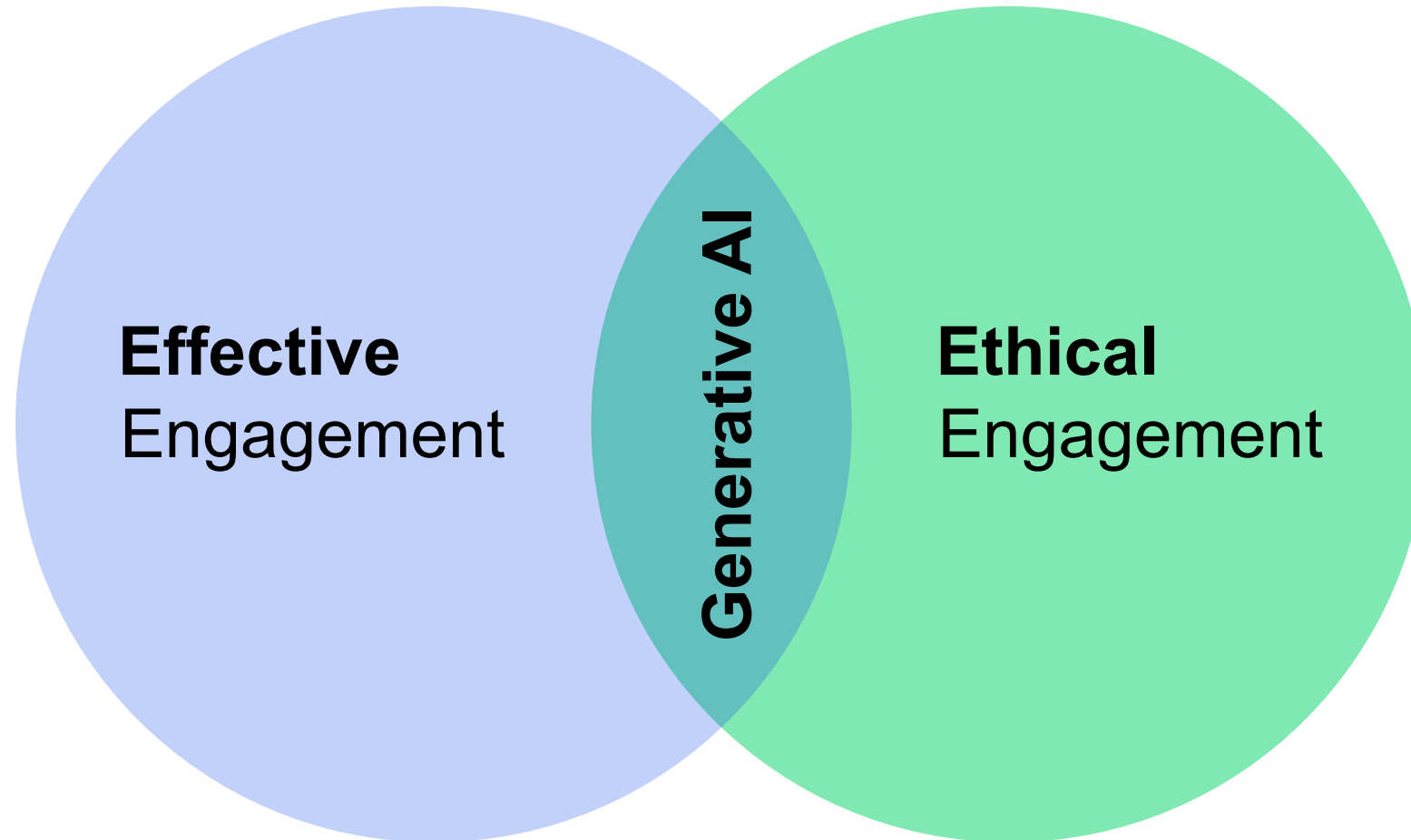
Professor of Learning Informatics & Director, Connected Intelligence Centre

University of Technology Sydney

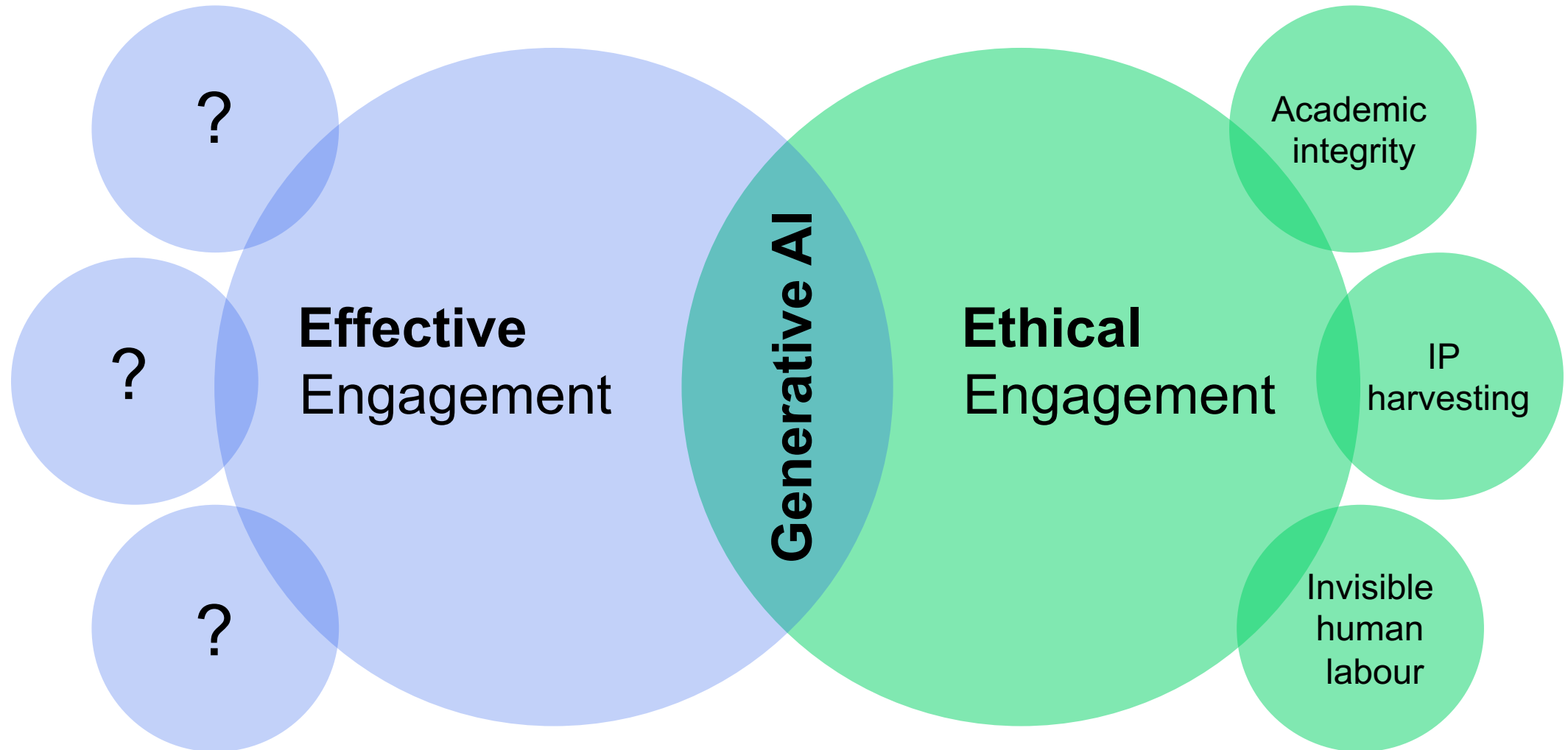
[@sbuckshum](https://twitter.com/sbuckshum) / <https://Simon.BuckinghamShum.net>



GenerativeAI@UTS: Effective Ethical Engagement



GenerativeAI@UTS: Effective Ethical Engagement



It may feel as though we've entered uncharted waters with ChatGPT

but extensive research on...

Automated Writing Feedback
Conversational User Interfaces
Pedagogical Agents

UTS

**Framing
Generative AI
as EdTech**

Simon Buckingham Shum
Baki Kocaballi
Antonette Shibani

<https://bit.ly/genai-as-edtech>

Mindful vs mindless engagement with intelligent technologies?

**Partners in Cognition:
Extending Human Intelligence with
Intelligent Technologies**
GAVRIEL SALOMON DAVID N. PERKINS TAMAR GLOBERSON

True partnerships require
agency and effort.

**Do students have the capacity
not to be dominated by the tech?**

Competent!

“Human-in-the-loop”

Students ≠ Professionals

— we must equip students with the
knowledge, skills and dispositions
to critique AI contributions

One form of AI literacy: Automated Feedback Literacy

(with acknowledgements to CRADLE 😊)

UTS [Academic Writing Analytics](#) (2015 – present)

We know students don't always engage effectively with automated writing feedback

Explicit scaffolding to promote critical engagement can have significant effects

Feedback literacy with ChatGPT must be **demonstrated**



Feedback with Annotations

What does 'performance' mean for Lululemon?

EXECUTIVE SUMMARY

This provides background information about Lululemon
Lululemon Athletica ("Lululemon") is an athletic apparel brand that produces high-end products and has expanded globally since its establishment in 1998. Commercial performance is important for the company however Lululemon's success relies on providing a "consistent, high quality product and guest experience" (Lululemon Athletica 2017 p.5). Therefore, performance for Lululemon can be defined by two factors:

1. producing high quality merchandise
2. continuous innovation

I INTRODUCTION

Lululemon is a premium fitness brand that designs and retails 'healthy lifestyle inspired' athletic apparel for women, men and children (Lululemon Athletica 2017). Lululemon is a commercial success as attested to in its current operation of 406 stores in over 12 countries. This global expansion has resulted in the continuous increase of net revenue in recent years, with FY17 seeing a 15% rise to \$2.3bn from FY16 (Lululemon Athletica 2017). **P E**

However, academic theory holds that while financial measures are important, organisational performance can be defined through a range of methods as organisations will have different objectives (Rasula, Vuksic & Stemberger 2012). **E** Therefore, to effectively measure 'performance' for the Canadian Head Office of Lululemon it is essential to consider how the transformational self-improvement ethos of the company is achieved by analysing non-traditional metrics. **S**

insight into what Lululemon does
Defining the perspective of Lululemon's performance
States the goal and focus of the report
The report will first examine Lululemon's overall objectives and how the company achieves these through business strategies and activities. **S** Drawing from the company's objectives, the report will then define performance for Lululemon using non-traditional metrics. Ultimately, the report will comment on why the aforementioned definition of performance is appropriate for Lululemon.

II ORGANISATIONAL ANALYSIS

Lululemon's organisational objective is to "produce products which create transformational experiences for people to live happy, healthy, fun lives" (Lululemon Athletica 2017 p.2). **N** This aim is achieved by a threefold competitive strategy of differentiation through quality, innovation and supply chain sustainability. These strategies are achieved through the company's corporate strategy of a single business with a vertical retail and distribution structure.

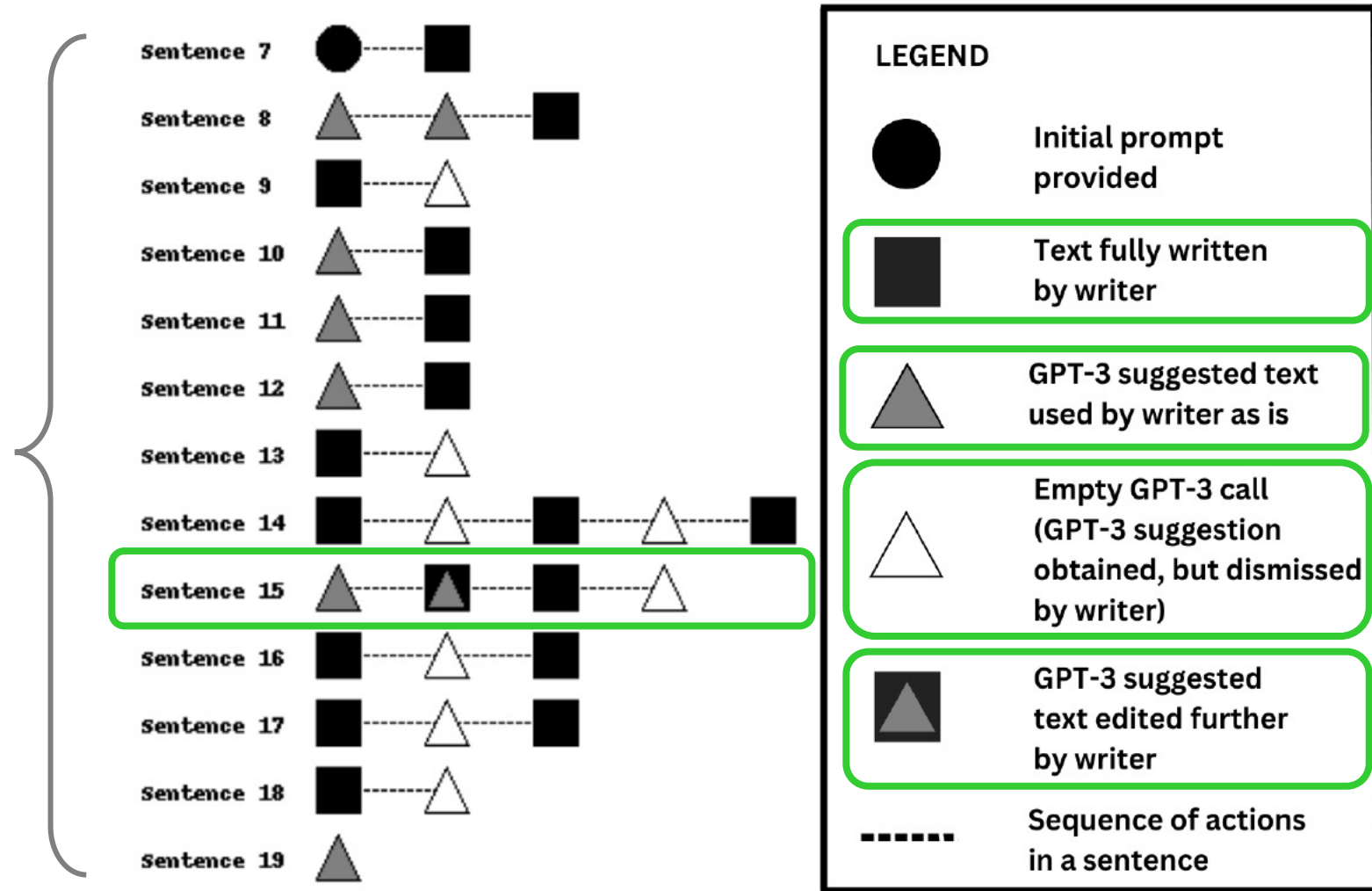
Shibani, A., Knight, S., & Buckingham Shum, S. (2022). Questioning learning analytics? Cultivating critical engagement as student automated feedback literacy. *Proc. LAK22: 12th International Learning Analytics & Knowledge Conference*: <https://doi.org/10.1145/3506860.3506912>

Future implication? Meaningless to ask students to declare (far less evidence) how they used every AI suggestion: there may be hundreds...

Instead, sessions can be replayed (cf. recording studio) with reflection on critical moments

Analytics summarise and visualize student/AI interaction (academic integrity diagnostics)

Human/AI flow state analytics
<https://bit.ly/h-ai-flow-analytics>



Are we designing for **Systemic** or **Analytical** performance?

**Partners in Cognition:
Extending Human Intelligence with
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GAVRIEL SALOMON DAVID N. PERKINS TAMAR GLOBERSON

Performance of the whole
Human/AI system?

VS.

**Student's analytical ability
with no tech support?**

Or both?

ChatGPT...
Many hopes.
Many fears.
Little evidence.

Universities must fill this vacuum, this year,
with research into **Generative AI Pedagogy**

Until then...

ChatGPT prompts an academic to hallucinate plausible references...



What empirical evidence is there about whether I enhance or impair student learning?

A

Here are three peer reviewed sources:



1. Fernandez, et al. (2024) report that 87% of first year science undergraduates were unable to critically appraise ChatGPT-4's literature summaries. However, after 1 hour's coaching in Prompt Engineering and Critical Thinking, this dropped significantly to 42%.
2. Akamura (2025) asks if ChatGPT-5 "levels the playing field" for international students, enabling them to focus on their ideas. They enjoy writing more, and their grades increase — but they're dependent on using ChatGPT. She asks, is this now acceptable?
3. Using writing analytics, DiVessi (2023) found that students with high self-efficacy (SE) adapted 87% of ChatGPT suggestions, medium SE (65%) and low SE (32%).

|



3 key things for educators to consider

Scaffold variable
student capacity
to critique
ChatGPT

Guide students
on how to evidence
critical engagement
with ChatGPT

Help fill the
evidence vacuum
with quality
research