IMPERIAL

Building AI literacy into curricula

Jay DesLauriers, Senior Teaching Fellow and AI Futurist
Coco Nijhoff, Senior Teaching Fellow (Library Services) and Lead AI Futurist

WonkHE Education Espresso series
25/09/2025

Agenda

Coco

Approaches to AI Literacy

- In HE
- At Imperial – our framework

Jay

GenAI at Imperial Business School case study

- Approach
- Workshops

Imperial AI Futurists

Appointed for a second year

Developed Imperial's Generative AI principles

Developed two university-wide courses with our Interdisciplinary EdTech Lab

- Students - 2024
- Staff – 2025

The Artificial Intelligence Futurists from left to right: Rhodri Nelson, Caroline Clewley, Konstantinos Beis, Emma Blyth, Jay DesLauriers and Coco Nijhoff

Our approach to Generative AI in Education

Our vision: a values-based approach

Imperial's Generative AI Principles are based on the Imperial Values and Behaviours framework

Images courtesy of Imperial Digital Media Lab

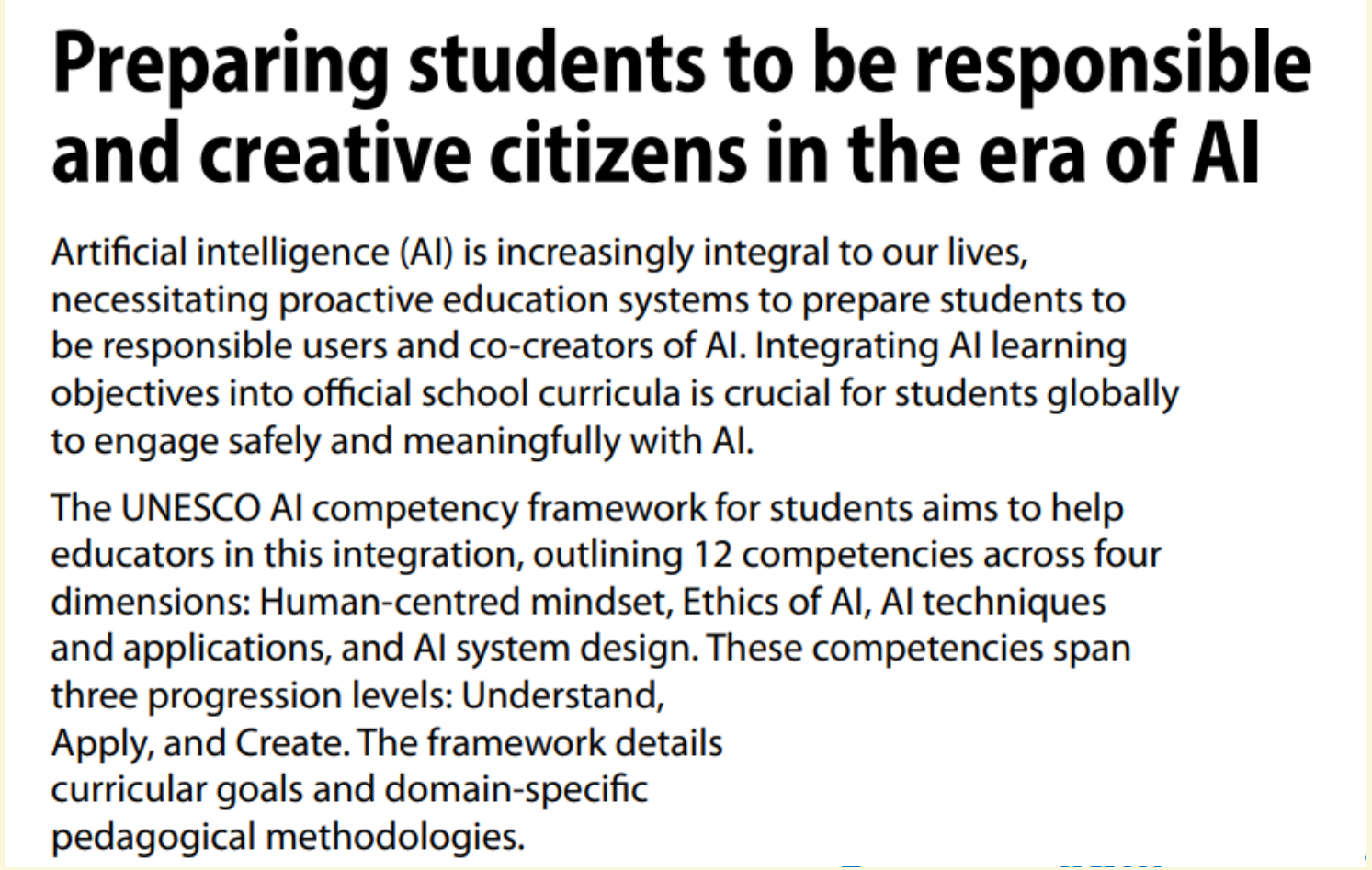
What is AI Literacy?

All the literacies (information, digital, media, feedback, health, financial, data, ...)

How do you define a type of 'literacy'? Who is the 'owner' of literacies?

Are we in agreement about what AI Literacy is?

The EU AI Act ch. 1 art. 4



Preparing students to be responsible and creative citizens in the era of AI

Artificial intelligence (AI) is increasingly integral to our lives, necessitating proactive education systems to prepare students to be responsible users and co-creators of AI. Integrating AI learning objectives into official school curricula is crucial for students globally to engage safely and meaningfully with AI.

The UNESCO AI competency framework for students aims to help educators in this integration, outlining 12 competencies across four dimensions: Human-centred mindset, Ethics of AI, AI techniques and applications, and AI system design. These competencies span three progression levels: Understand, Apply, and Create. The framework details curricular goals and domain-specific pedagogical methodologies.

UNESCO competency framework for students

An AI Literacy framework for Imperial

AI Literacy folded into existing Information and Digital Literacy competencies

Top-level competencies

1. **Searching for information**
2. **Critical evaluation of information**
3. **Ethical use of information**
4. **Creating and communicating information**
5. **Discipline-specific management of information**
6. **Understanding the generative AI environment**

Adapted from *A New Curriculum for Information Literacy*

Imperial Library Information and Digital Literacy

Put into context: academic databases vs LLMs

Searching for information/critical evaluation of tools and sources/ethical use of information

When would LLMs be useful?

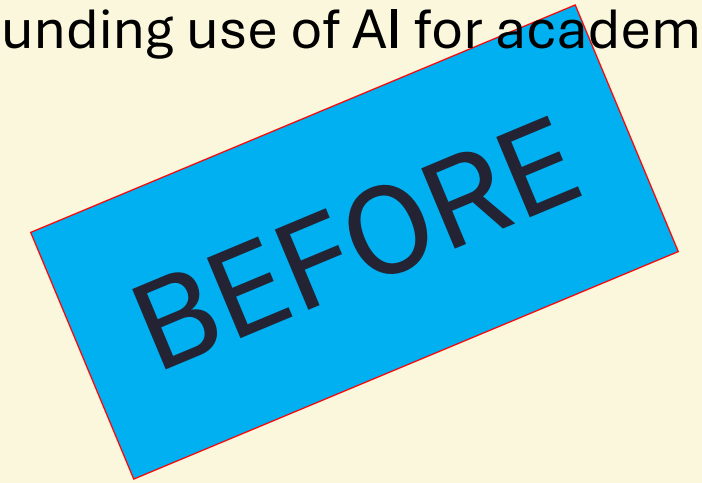
- "Our findings from the meta-analyses revealed learning with ChatGPT fosters greater student behavioral, cognitive, and emotional engagement than learning without ChatGPT" Heung YM, Chiu TK. How ChatGPT impacts student engagement from a systematic review and meta-analysis study. *Computers and Education: Artificial Intelligence*. Jan 2 2025 https://doi.org/10.1016/j.caeai.2025.100361
- Can do a natural language query search instead of a database's controlled vocabulary or specific interfaces.
- An AI generated summary can be a good starting point for understanding the topic.
- Can be used for other aspects of your research e.g. data analysis

Courtesy Rebecca Jones, Liaison Librarian, Imperial Library

Our information and digital literacy framework

Ethical use of information theme

- Understand how to avoid plagiarism, deliberate or inadvertent
- Use correct academic practice in quoting, referencing, citing and paraphrasing
- Understand how copyright and intellectual property rights (IPR) issues impact your work
- Understand ethical and legal sharing and use of information
- Understand key ethical issues surrounding use of AI for academic work



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How to work toward a (generative) AI-Literate community

As a university – policy/guidance/strategy and Vision for Imperial class of 2030

Skills for staff

- Departmental approaches to generative AI in learning and teaching
- Developing students' AI literacy, and defining what this means
- Authentic assessment and gen AI
- Generative AI as an assistive technology
- Ethical, sustainable education

Skills for students

- Within individual disciplines (interdisciplinarity?)
- Use of generative AI and academic responsibility
- Lifelong learning

Gen AI at the Imperial Business School

Case Study

Some ideas:

AI Literacy as fundamental to improving the student experience

- Training needed for faculty, students and staff

Updated guidance as the starting point

- Less proscription, more motivation
- Focusing on labour market demand, skill acquisition, degree recognition

Workshop sessions as solidifying

- An opportunity for tell (sharing guidance) & show (inductive, self-discovery)

Gen AI at the Imperial Business School

Workshops

Format

- 90 min, 80 – 120 students, in-person; different format for online/smaller groups
- Ideally during induction week; mandatory attendance
- Uptake from all departments (majority mandatory in-person)

Intro, drawing on guidance (15 mins)

- Gen AI in HE; Gen AI in industry
- What is *Responsible Use*, What is *Thinking Critically*

Rest of session, interactive

- Working with Gen AI (Microsoft Copilot)
- Individually (5 mins), in pairs (5 mins), in groups (20 mins)
- Followed by facilitated discussion (30 mins)

Gen AI at the Imperial Business School

Workshops

Task A : Brainstorm	Task B : Summarise	Task C : Create
Brainstorm 10 ideas each to help students settle into Imperial student life. Critically review, compare and refine the ideas.	Draft 150-word summaries for each of two open-access academic articles. Critically review. Compare your understanding.	Design a creative revision or learning activity in which a student uses Microsoft Copilot. Test and critically assess the activity.
As a larger group, compare ideas and decide on the three (3) most important ideas.	**In your larger group, compare and choose one (1) article to recommend as reading to the rest of your peers.**	**As a larger group, choose the most effective one (1) activity.**
Prepare on flipchart paper, with reasons why you chose them.	**Prepare your recommendation on flipchart paper, along with reasons why you think others should read this article.**	**On flipchart paper, prepare the activities along with reasons why you believe they are effective.**

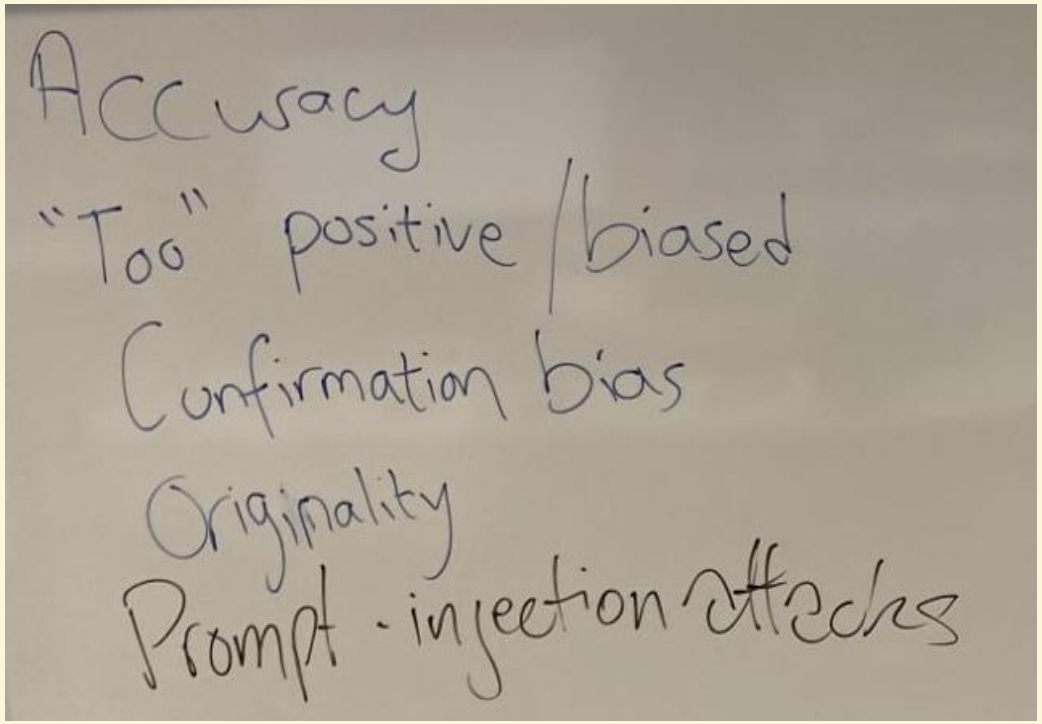
Prepare for discussion

- What does **responsible** use look like for your task?
- What does a student using AI in this way need to consider, check or otherwise be aware of?
- What best practices should a student apply when undertaking similar tasks?

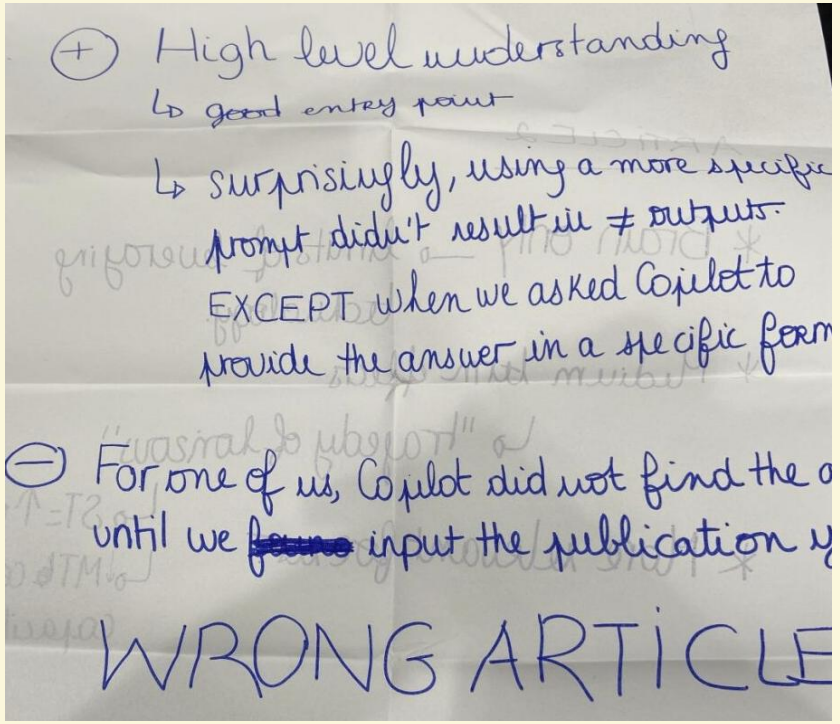
Gen AI at the Imperial Business School

Workshops

Facilitators capture ideas on the board



Students capture ideas on flipchart



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Thank you

Jay DesLauriers, j.deslauriers@imperial.ac.uk
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