

A Three-Pillar Framework for Responsible, Fluent, and Inclusive Generative AI Integration in Higher Education

Research, Agency, and the Future of Human–AI Collaboration

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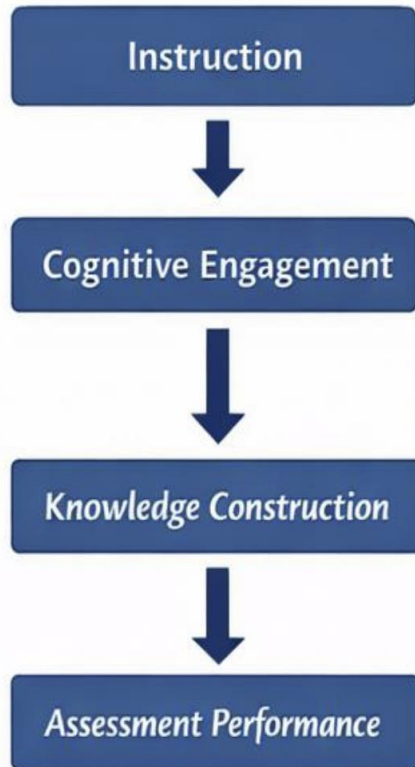


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Generative AI ... disrupted the assessment process

Pre-Generative AI (Cognitive Necessity)

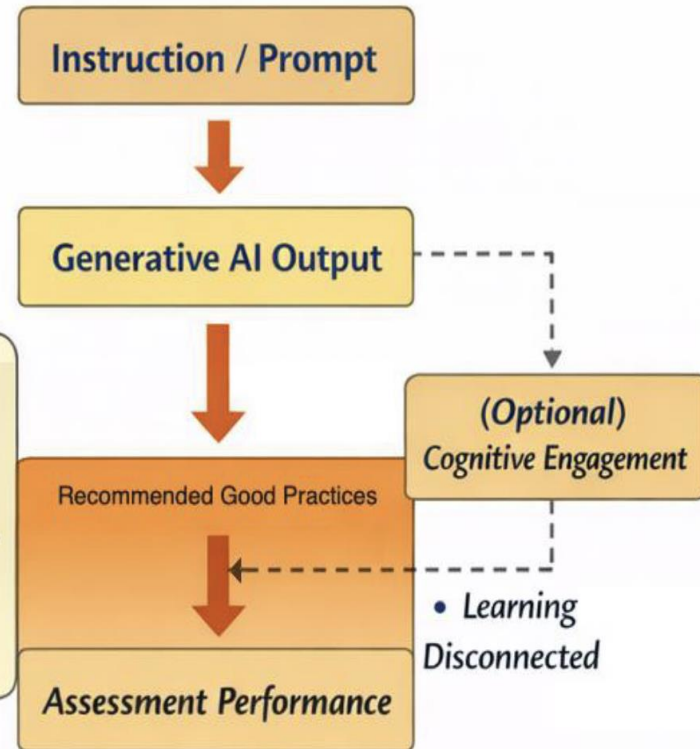


Cognitive Engagement Gap

Decoupling of Assessment from Cognitive Processing

• Learning Implied

Generative AI Era (Cognitive Choice)



The Cognitive Divide

AI-guided thinkers

- control, critique, steer

AI-dependent users

- accept, submit, reproduce

Two emerging learner profiles ...

Critical AI Users

Understand, configure
& govern AI systems

Passive AI Users

Rely on AI without
awareness or control

This gap is growing ... and largely unexamined.

A THREE-PILLAR FRAMEWORK

FOR RESPONSIBLE AND TRANSFORMATIVE GENAI IN HIGHER EDUCATION



Guiding the meaningful and ethical integration of Generative AI into teaching, learning, and research to empower learners, support staff, and advance inclusive and sustainable educational transformation.



1 RESPONSIBLE USE

- Uphold academic integrity, transparency, and accountability
- Design assessments and policies that promote ethical use
- Protect data privacy and institutional security
- Foster a culture of trust, dialogue, and shared responsibility

Build the guardrails and values that ensure GenAI is used ethically and responsibly.

2 DIGITAL FLUENCY

- Develop the knowledge and skills to use GenAI effectively
- Critically evaluate AI outputs and recognize limitations
- Use GenAI to enhance creativity, inquiry, and higher-order thinking
- Engage with GenAI as a cognitive partner, not a substitute

Empower students and staff with the digital and critical literacies to learn, teach, and innovate with GenAI.

3 EQUITY-MINDED DEPLOYMENT

- Ensure equitable access to tools, training, and support
- Design with inclusivity and cultural responsiveness in mind
- Proactively address bias and promote fair outcomes
- Continuously evaluate impact and advance digital justice

Advance inclusion and fairness so GenAI benefits all learners and strengthens educational equity.



THREE ACTIONABLE RECOMMENDATIONS



1. Use multiple GenAI engines to avoid bias and over-reliance.



2. Use GenAI to generate ideas, not answers.



3. Engage with GenAI as a cognitive partner, not a substitute.



ILLUSTRATED THROUGH PRACTICE & CASE STUDIES



Cross-disciplinary faculty workshops



AI-enhanced course design



Applied institutional experiences and lessons



A PATHWAY TO SUSTAINABLE TRANSFORMATION

Empowering learners. Supporting educators. Strengthening higher education for the future.

Research Landscape

Educational Design

AI literacy, adaptive learning, pedagogy

Ethics & Governance

Transparency, accountability, policy

Technical Innovation

Explainable & trustworthy AI systems

Domain Applications

Cross-disciplinary AI-augmented contexts

Human-Centred AI

Autonomy, creativity, human judgement

Policy Development

Frameworks safeguarding cognitive agency

Key Themes



AI & Human Cognition

How AI shapes learning, reasoning, and creativity



Power & Autonomy

Who controls AI — and who is controlled by it



Responsible Governance

Ethics, accountability, and regulatory frameworks



Human-AI Partnership

AI as accountable, explainable collaborator



A Collaborative Vision

AI is not a replacement for human intelligence ... it is a partner.

- Research shapes AI ecosystems that empower individuals and societies
- Technological progress must strengthen ... not erode ... cognitive autonomy
- Diverse disciplines, united by a common challenge, can bridge the divide

Invited to reflect: How can research shape AI that works for humanity?