

Designing assessments that AI can't fake

Authentic, adaptive learning in the MA Digital Innovation





AI can write –but it can't *reflect*.

As artificial intelligence becomes increasingly sophisticated in generating text, images, and even code, educators face a fundamental challenge: how do we design assessments that measure genuine learning rather than AI-assisted performance?

The answer lies not in policing technology, but in shifting our focus to the distinctly human elements of learning, the metacognitive processes, reflective thinking, and adaptive reasoning that algorithms cannot authentically replicate.

This approach requires us to move beyond traditional product-based assessments and embrace methods that capture the messy, iterative, deeply personal nature of human learning.

A different kind of assessment

Reflection

Students articulate their thinking processes, examine their assumptions, and demonstrate metacognitive awareness throughout their learning journey.

Dialogue

Learning becomes visible through conversation, questioning, and collaborative sense-making that reveals authentic understanding.

Adaptation

Learners show how they respond to feedback, iterate on ideas, and apply learning in novel contexts, demonstrating genuine cognitive flexibility.

These three pillars form the foundation of assessment practices that value human cognition over mere content production. By foregrounding these elements, we create evaluation frameworks that are inherently resistant to AI shortcuts whilst simultaneously promoting deeper, more meaningful learning.



Process over product

Traditional Assessment

- Focuses on final outputs
- Values polished deliverables
- Obscures learning journey
- Easy to outsource to AI

When students must show *how* they arrived at their solutions – evidencing decisions, justifying tool choices, and explaining their thinking – they engage in metacognitive processes that AI cannot convincingly simulate. This approach transforms assessment from a gatekeeping mechanism into a learning opportunity.

Process documentation might include annotated drafts, decision logs, tool justification statements, or reflective commentary on choices made throughout a project. The key is making thinking visible.

Process-Oriented Assessment

- Documents decision-making
- Reveals iterative thinking
- Demonstrates tool justification
- Requires authentic reflection



The Learning Conversation as assessment

01

Students present their work

Learners walk through their prototypes, designs, or projects in real-time, demonstrating ownership and understanding.

02

Instructors probe thinking

Through strategic questioning, educators explore the reasoning behind choices, revealing depth of understanding.

03

Dialogue reveals learning

The conversation itself becomes evidence of authentic learning, adaptation, and critical thinking.

Assessment as dialogue rather than declaration fundamentally shifts the power dynamic. Students become active participants in demonstrating their learning, whilst instructors gain nuanced insight into genuine understanding that no written submission could provide. This conversational approach is inherently AI-resistant because it requires spontaneous explanation, justification, and response to unpredictable questions.



Examples in practice

Annotated process Evidence Decks

Learners document their iterative design process with commentary explaining why certain paths were pursued or abandoned.

Each of these approaches privileges the human elements of learning – voice, spontaneity, reflection, and adaptive thinking – that remain beyond AI's authentic reach.

Live project defence

Students present their work and respond to questions, demonstrating deep understanding through dialogue and spontaneous explanation.

AI can mimic style.

It can't simulate *self-awareness*.

Why AI can't fake this



AI lacks genuine experience

Algorithms cannot authentically reflect on lived learning experiences, struggles, or personal breakthroughs because they haven't experienced them.



Metacognition requires consciousness

Self-awareness about one's own thinking processes , understanding how and why you learned something, demands consciousness that AI doesn't possess.



Spontaneous dialogue reveals authenticity

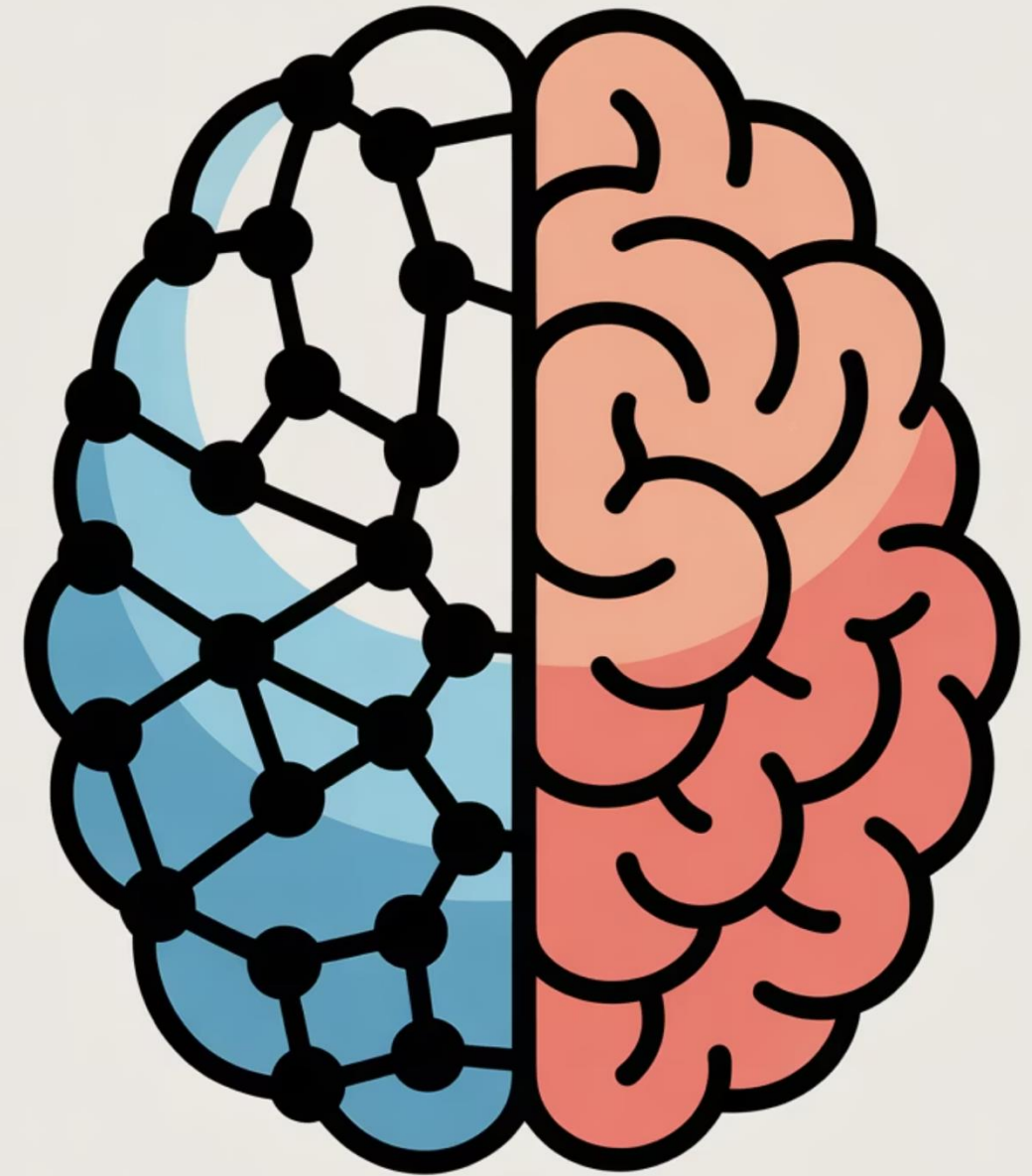
Real-time responses to unexpected questions expose genuine understanding in ways that scripted or generated text cannot replicate.



Adaptation demonstrates learning

Showing how thinking evolved over time, incorporating feedback, and applying learning in new contexts requires genuine cognitive engagement.

By designing assessments around these inherently human capacities, we create evaluation frameworks that resist AI shortcuts whilst simultaneously promoting deeper, more meaningful learning outcomes.



The Human Outcome

Real Learning Is:

Owned

Students can articulate their unique learning journey and claim genuine authorship of their growth.

Explained

Learners possess the ability to justify decisions, describe reasoning, and make their thinking visible to others.

Embodied

Understanding is integrated into students' cognitive frameworks, influencing how they approach future challenges and opportunities.

"That's what makes it human. That's what makes it matter."

When we design assessments that honour these human dimensions of learning, we do more than resist AI — we create educational experiences that are fundamentally more meaningful, more authentic, and more transformative for our students.



Moving Forward

1

Audit current assessments

Review existing evaluation methods to identify opportunities for incorporating reflection, dialogue, and process documentation.

2

Pilot new approaches

Experiment with conversational assessments, reflective portfolios, or live project defences in selected modules.

3

Gather feedback

Listen to student experiences and refine approaches based on what genuinely promotes deeper learning and authentic demonstration of understanding.

4

Share practices

Build a community of practice amongst faculty to exchange insights, challenges, and innovations in AI-resistant assessment design.

The challenge of AI in education is ultimately an invitation, to reclaim what's most human about learning, and to design assessment practices that honour the messy, iterative, deeply personal work of genuine intellectual growth.

