

A European and Global Perspective on AI in Education: Opportunity, Risk and a Vision for the Future



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Disclaimer



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The views expressed in the first part of the session are purely my own

Technological advances often make our lives better but ...

- We need to understand how our tools shape us
- Digital transformation requires creative vision



Our current technological
landscape has been shaped by ...

Nerds!!!



Watch the video by Rens van der Vorst:

https://www.youtube.com/watch?v=90_VMUAkljo

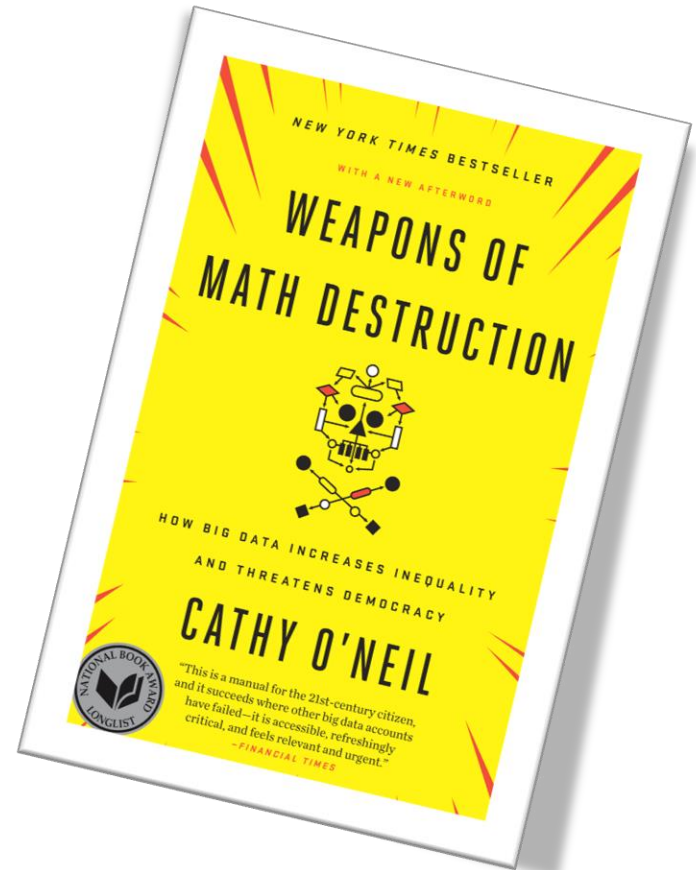
It matters because ...

'Algorithms are opinions embedded in code'

Cathy O'Neil, Data Scientist

'AI systems are not easily understood, are unpredictable, are often linked to complex risks, immature juridical regulations, and complicated ethical dilemmas'

Barbara Wasson, Professor, University of Bergen / Director Centre for the Science of Learning & Technology (SLATE) / Co-Director AI LEARN / Expert to AI and Education Group, Council of Europe



Viewpoints on AI



**Mhairi
Aitken**
Alan Turing Institute



**Dominik
Lukeš**
*University of
Oxford*



**Mirko
Stanić**
IBM



**Helen
Beetham**
*University of
Manchester*



**Lawrie
Phipps**
Jisc



**Rens
van der Vorst**
Fontys University



**Janja
Komljenovic**
*University of
Edinburgh*



**Ben
Williamson**
*University of
Edinburgh*



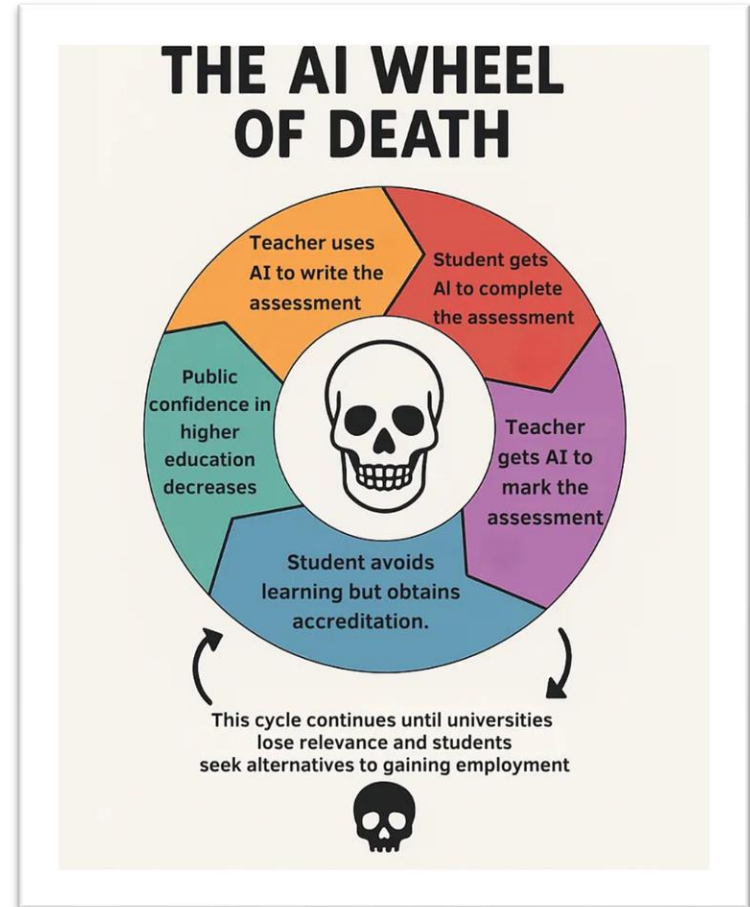
**Barbara
Wasson**
*University of
Bergen*

Will we achieve **Hybrid Intelligence**?

‘Hybrid intelligence seeks to create sociotechnical ensembles in which human and machine capabilities are meaningfully integrated and mutually enhancing.’

Barbara Wasson

Or ...



Could AI be the Trojan Horse that improves learning design?

- Learning design is often ad hoc rather than strategic
- We may be forced to rethink assessment
- And by the way ... humans aren't always great at evaluation!



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Let's rethink assessment

- Avoid 'knee jerk' reactions to AI
- Rapidity of feedback matters even if it's imperfect
- Scaling approaches such as vivas
- Acknowledge role of AI
- Make assessment authentic and Ipsative

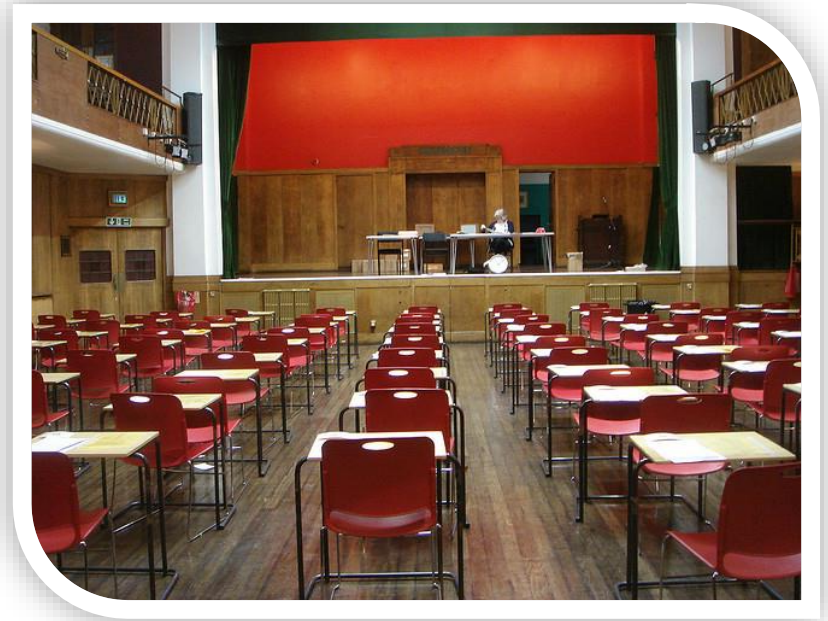


Image credit: CC BY-NC 2.0 russell davies

We need to talk about data

- What data relates to real learning?
Link to threshold concepts, self-study activities, 'critical path' through the learning
- Answer specific questions instead of looking for patterns
- Move from engagement to attainment



Image credit: CC BY-NC-ND 2.0 iandolphin

AI has consequences for the labour market:

- Competences and academic standards in need to be in machine readable & mappable format
- Compelling case for verifiable digital credentials



Image credit: CC BY-NC 2.0 pondspider

AI as part of a learning future

- Learning remains a **(social)** process: struggle and setbacks are part of the process; 1:1 support doesn't replace cohort and community
- We don't need tools to be anthropomorphic or sycophantic
- Likely to see smaller, specialist models based on domain-specific knowledge bases and high-quality training datasets

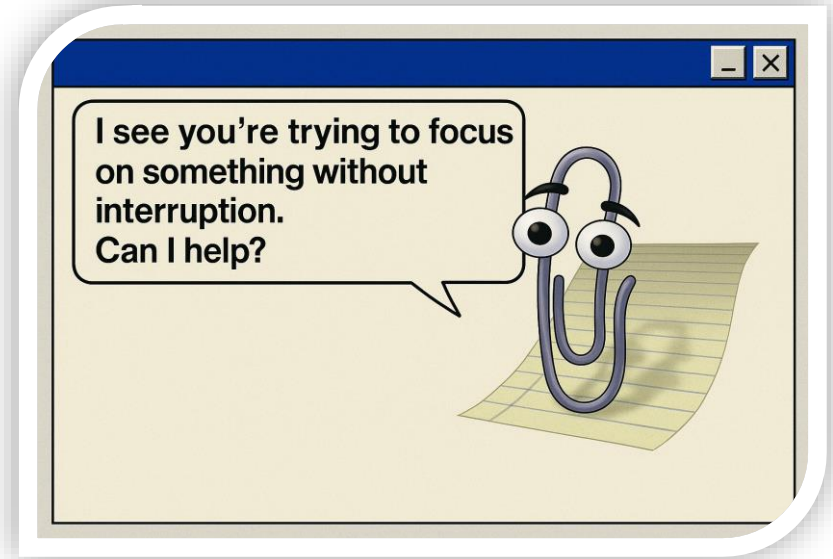


Image credit: via Magnus Hedemark origin unknown

Why AI in Learning needs Standards

- Shortcut to digital sovereignty
- Closing the trust gap: auditable governance; data access rules; privacy; security; accountability that educators can **verify**
- AI needs learning context



Without Learning Context

- Can't see what learner already knows
- Feedback isn't grounded in learning outcomes and assessment design
- Course rules, policies, allowed practices unknown
- Inconsistent AI behaviour
- This is not AI failure – it's context failure



Image credit: CC0 1.0 Universal blind fields

What is Learning Context?

- Is it a standard? Is it data? Where does it belong?
- A learning context describes a learning situation for a specific moment and purpose
- Learning context should describe just enough - not the whole system
- The 1EdTech community is evolving a path towards shared, portable, governable context

Who the learner is
What they are doing
Why they are doing it
When it is happening
Which information is relevant
Any constraints

Qualities of Context

Context is time-bound

It reflects a specific moment, not a permanent state

Context is situation-bounded

It is defined by what is happening, not by a data standard or the system that produced it

Context is broad, not deep

It spans many kinds of information, *but* only the relevant parts of each

Context is only relevant information

It captures what matters for a situation - *not* everything a system knows

Context is dynamic and event-driven

Every interaction creates a new context

Learning Context needs ...

Data	Source	Standards & Data Models
Learner information	SIS IAM LMS	LTI Advantage Edu-API OneRoster
Course & Content information	Course Catalogue Curriculum Management LMS Timetabling	LTI Advantage Edu-API OneRoster Common Cartridge
Skills, Competencies, Curriculum	Curriculum Management Regional Standards Documents	CASE (Competences & Academic Standards Exchange)
Grades, Progress, Performance	SIS LMS Assessment Tools Portfolios	LTI Advantage Edu-API OneRoster Common Cartridge QTI (Question & Test Interoperability)
Achievements, Transcripts	Credential Platforms SIS LMS	Open Badges CLR (Comprehensive Learner Record Standard)
Personal needs, Accessibility	SIS LMS Spreadsheets	QTI PNP (Personal Needs & Preferences) AccessForAll

AI changes the Tools not Rules

- After 25 years of collaborative development we already have the vocabulary
- Any learning situation can be described using a subset of our shared vocabulary
- Shared context requires new patterns of use



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Common Use Cases

1. AI-Powered Learning Assistants

- Students want intelligent help that understands their progress and context
- Educators want AI tools that personalize support based on up-to-date learning data

3. Privacy-First AI & Analytics

- Institutions want to protect student privacy while still enabling insights
- Teachers need data tools that are role-aware and expose only what's necessary

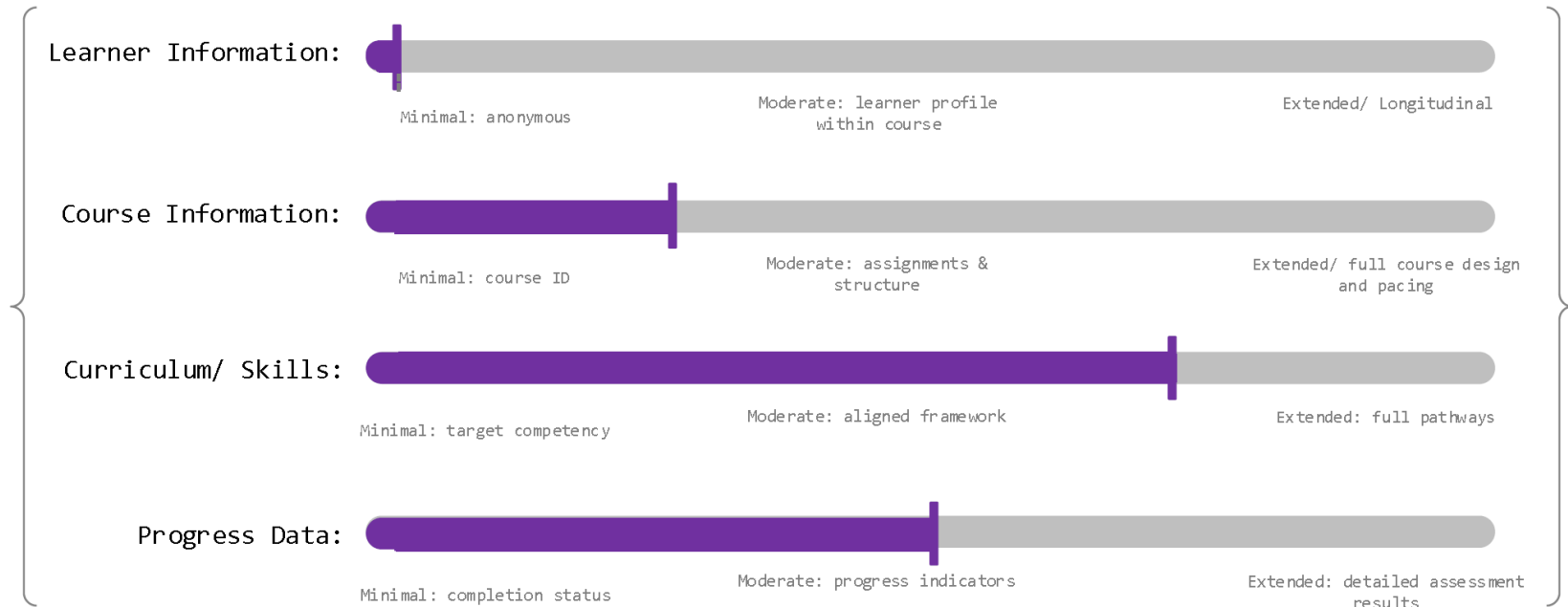
2. Institution-Wide Insights

- Leaders want a clear, unified picture across all platforms
- Educators want to spot trends and challenges without pulling data manually

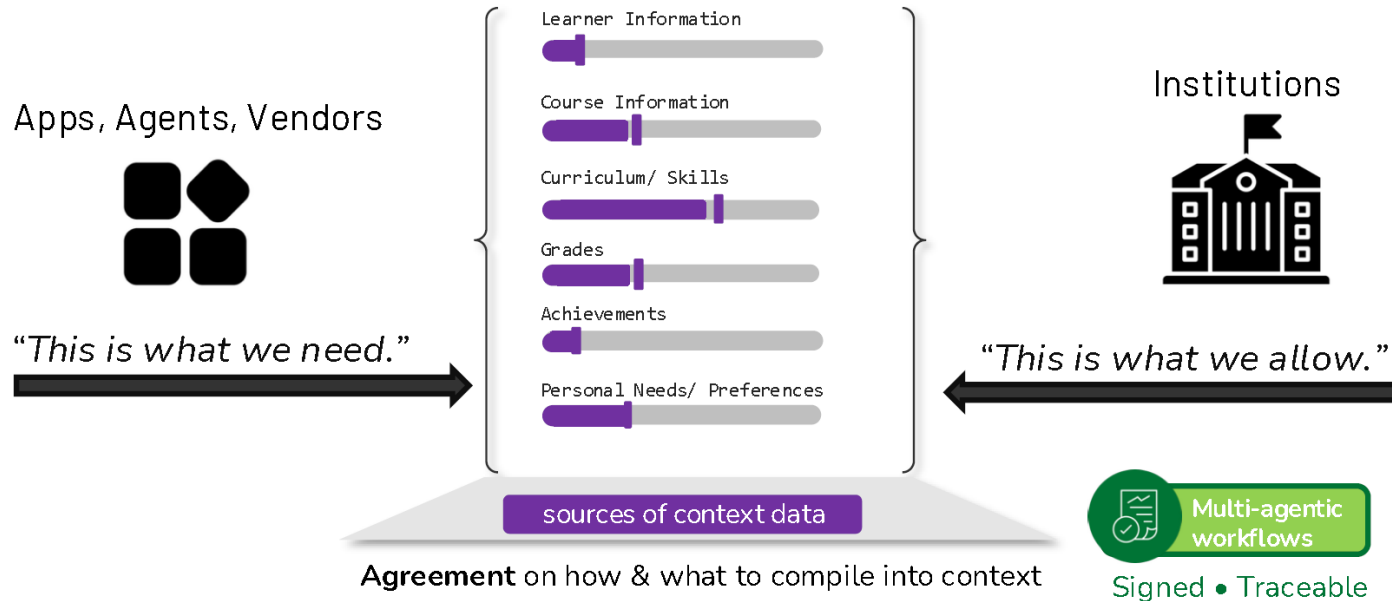
4. Standards for Accessing Data

- Developers and platforms want a common, secure way to connect to educational data
- Students and schools want learning tools that “just work” across systems and schools

Structure provides a backbone for Governance



Shared Context: Intent, Consent and Trust travel together





1EdTech direction of travel toward responsible use of AI

We don't want this choice: Refuse • Generalise • Hallucinate

We want AI to operate in a learning context

Shared • defined • controlled • governed

Shared context is a new class of opportunity

Learning platforms • services • agentic workflows

Open Standards are more critical than ever

Providing the shared vocabulary and structure that make context portable and governable.

The community is already moving

Near-term innovation • Emerging context services • Longer-term shared context infrastructure

1EdTech around the world

'Done right, standards become a shortcut to technological sovereignty. They let countries and institutions build dependable systems without having to reinvent every layer from scratch. They also make AI more inclusive and scalable by enabling interoperability across educational systems and true data portability—reducing vendor lock-in, lowering switching costs, and keeping institutions in control of their decisions.'

The window to establish these standards is now. Without them, the ecosystem stays fragile—prone to lock-in, data chaos, and widening inequality. With them, Latin America can build a standards-based learning infrastructure that stays modular, multilingual, and locally relevant—while still being governable and scalable across the region.'

1EdTech LATAM

'For AI to be trusted, inclusive, and scalable, we must shift our focus from generic models to domain-specific knowledge bases and high-quality training datasets. Standards provide the 'common language' that makes this data verifiable and safe.'

I am confident that the future of AI in education depends not on the size of the model, but on how well we apply standards to make that AI accurate and pedagogically sound.'

1EdTech Korea

1EDTECH LEARNING IMPACT EUROPE 2026

15-17 September 2026
Thessaloniki, Greece

1edtech.org/event/europe/2026

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Thank you!

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