

TO-DAY

TO-MORROW
YESTERDAY

Artificial Intelligence for
Personalised Learning



ROOTS OF PEDAGOGY

ARTIFICIAL INTELLIGENCE & ADAPTIVE TECHNOLOGIES

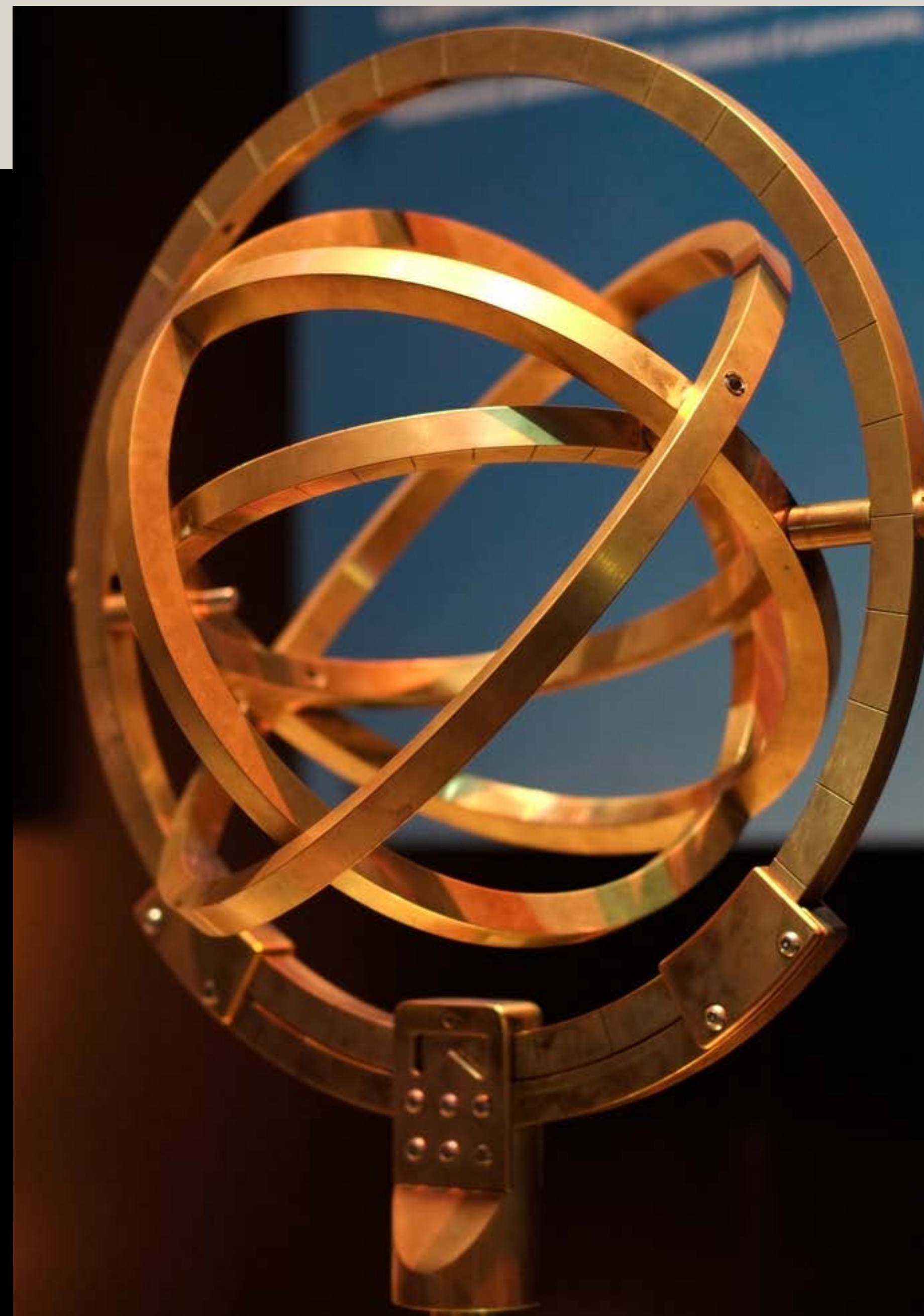
Reflecting back on the origins of pedagogy we see dialogue and the ability to connect human beings. Recognition of such relationships enables pedagogy to be conceptualized through dialogue and associated personalized learning experiences.



WAVES OF CHANGE ADAPTIVE AND PERSONAIZED

PERSONAL & PERSONALISED

Personalized learning remains focused on customizable 'choice-driven' learning and education. This solidifies the intrinsic connection between teaching and learning through personalized technologies such as generative AI.



CHARACTERISTICS OF ARTIFICIAL INTELLIGENCE EDUCATION

TODAY



INTUITION AND DIALOGUE

ITERATIVE LEARNING

The role of AI in personalised learning has the potential to enable a form of iterative learning that engages a learner with intuition and dialogue.

LEVELS OF INTELLECT

KEY INTERVENTIONS

NARRATIVES, MODELS, RESOURCES

AI machine narratives and insights into interdependence that is shaping language change.

Deep learning algorithms are shaping our use of online resources and associated societal biases driven by dominant cultures.

AI is dependent on the harvesting of online resources. Chatbots are trained on public data and often introduce exclusive practice.

Challenging to distinguish machine and human language. Challenging our awareness of whether emotions are generated by humans or machines.

NARRATIVES, MODELS, RESOURCES



10 YEARS: SYSTEMATIC REVIEW



FINDINGS



MACRO-LEVEL

Machine Learning, Learner Analytics, Data Mining.

Changing Infrastructure
Monitoring of learning and learner modeling
Student performance

MICRO-LEVEL

AI in Instruction, AI in Learning

Adaptive learning, Open Educational Resources
Evaluation and performance prediction
Teacher–student relations

PARADOX

EQUITY IN THE PERSONALISED

Shift towards the identification of learning that learners use to shaped their personalized learning experiences.

Machines will have an increasing influence on shaping our learning.

AI models, and associated tools, have the potential to manipulate the learning experience that contrasts with the concept of the personalised



EMBEDDING GENERATIVE AI

ENHANCED LEARNING EXPERIENCES

Embedding generative AI into intuitive teaching methods of the future, for many, will be underpinned by continuous tracking data, and a 'step change' in the priority being placed on enhanced personalised learning experiences for all.

PERSONALISED LEARNING & TRANSCENDING TIME

YESTERDAY



*"Language is designed to make lies sound truthful...
and to give an appearance of solidity to pure wind."*
G. Orwell

*"If we reject as 'mere philology' every attempt to
restore for us his real poem, we are safeguarding the
deceit".* C.S. Lewis

ENDURING LANGUAGE AND AC-



INSIGHTS FOR THE FUTURE

*"Let no one say, and say it to your
shame, that there was meaning here
before you came"*

C.S. Lewis

AI EMBEDDED
TEACHING
AND LEARNING
PROCESS

01

AI FACILITATING
BIG DATA FOR
OPEN EDUCATION
RESOURCES

02

AI ENABLER
INTELLIGENT
TEACHING AND
TUTORING

03

AI PARADOX FOR
PERSONALISED
LEARNING

04

AI ACADEMIC
PERFORMANCE
PREDICTION

05

AI CREATING
BEHAVIOURAL
MODIFICATION
EMPIRES

06

TO-DAY, TO-MORROW, YESTERDAY