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THE UNIVERSITY of EDINBURGH

NEAR FUTURE TEACHING

Codesigning a values-based vision for digital education at the University of Edinburgh

www.nearfutureteaching.ed.ac.uk

Anticipating the near future of teaching

Introduction: a better view on the future

Near Future Teaching: thought experiments for an anticipated university



Introduction: a better view on the future

Image: Phil Kirkland, 50watts.com

Still-dominant narratives of education and technology

Instrumentalism:

technologies are seen as neutral means employed for ends determined independently by their users.

Determinism:

technology drives social practice and change...humans must adapt to technical demands, while technology, like a Newtonian god, watches unaffected as the drama unfolds.

Hamilton, Edward C. and Norm Friesen (2013) Online Education: A Science and Technology Studies Perspective. *Canadian Journal of Learning and Technology*. 39 (2).

ARTIFICIAL INTELLIGENCE AND THE END OF THE HUMAN ERA

INVENTION

JAMES BARRAT

Erik Brynjolfsson Andrew McAfee **Race** Against The Machine



NEW YORK TIMES BESTSELLER

THE OUR FINAL INEVITABLE **UNDERSTANDING**

> THE 12 TECHNOLOGICAL **FORCES THAT** WILL SHAPE OUR

FUTURE

AUTHOR OF WHAT TECHNOLOGY WANTS

KEVIN KELLY

'Alarming and, at times, surreal... it's time to be afraid, very afraid' Sunday Times

THE RISE OF THE ROBOTS



Technology and the Threat of Mass Unemployment

MARTIN FORD

attempts to **predict** the future aspire to eliminate risks of uncertainty

foresight aims to equip actors with insights into multiple possibilities

anticipation assumes an active and critically reflective interaction with futures that are unknowable.

Amsler and Facer (2017) Learning the Future Otherwise: Emerging Approaches to Critical Anticipation in Education. *Futures*. 94.

Principles for anticipating the future

- 1: educational futures work should challenge assumptions rather than present predictions
- 2: the future is not determined by its technologies
- 3: thinking about the future always involves values and politics
- 4: education has a range of responsibilities that need to be reflected into visions of its future

adapted from Facer, K. and Sandford, R. (2010) The next 25 years?: future scenarios and future directions for education and technology. *Journal of Computer Assisted Learning*. 26.

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Near Future Teaching

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Define

What is our preferred future for digital education at our university?

Discover

What values do we want to shape this future? What are the global trends which are impacting on it?

Values and preferred future defined

Develop

What are our aims and objectives for this future?

Deliver

What actions will enable us to get there?

Defining values



Mapping trends



Future Teaching trends:

EDUCATION & SOCIETY

Michael Gallagher and Siân Bayne

Centre for Research in Digital Education Moray House School of Education The University of Edinburgh

Introduction

This review partners with Future Teaching trends: science and technology, providing a short overview of the global societal shifts likely to impact on education over the coming few decades, in order to inform the Near Future Teaching project. It is not a comprehensive review: rather it highlights a few key areas we feel are of particular relevance.



Future Teaching trends:

SCIENCE & TECHNOLOGY

Michael Gallagher and Siân Bayne

Centre for Research in Digital Education Moray House School of Education The University of Edinburgh

Introduction

This review partners with Future Teaching trends: education and society, highlighting the technological trends likely to have significant implications for the future of higher education over the medium term, and those we should attend to in thinking about near future teaching. This is not a comprehensive review of technological shifts, but rather a brief overview of a few areas chosen for their potential high impact.



trust in public institutions

ageing population and lifelong learning

'unbundling' of universities

urbanisation

automation of work

climate change equity and inclusion

mapping trends

surveillance

alternate realities

artificial intelligence

datafication

cognitive enhancement neurotech for education

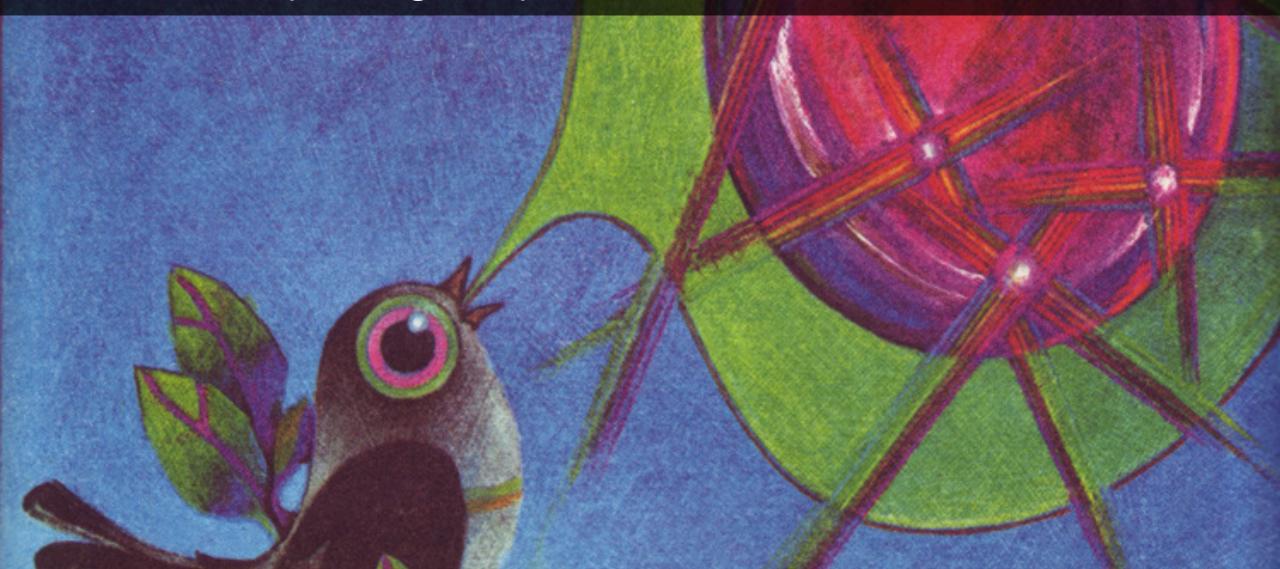
new forms of

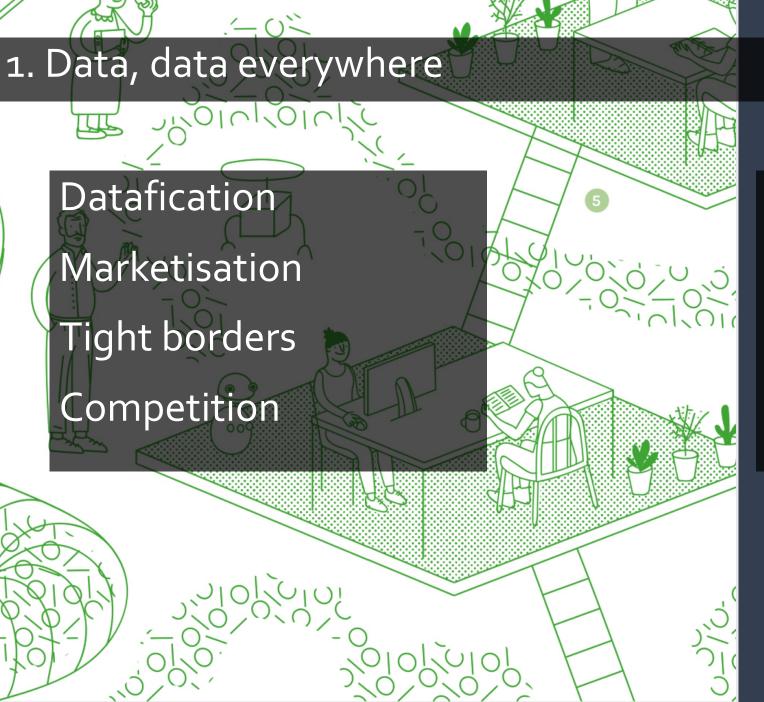
money



What would a near future for teaching look like, built on these values and influenced by these trends?

Future university: thought experiments





STEM and data science Skills focus Diversified sector Unbundling 2. A new ecology

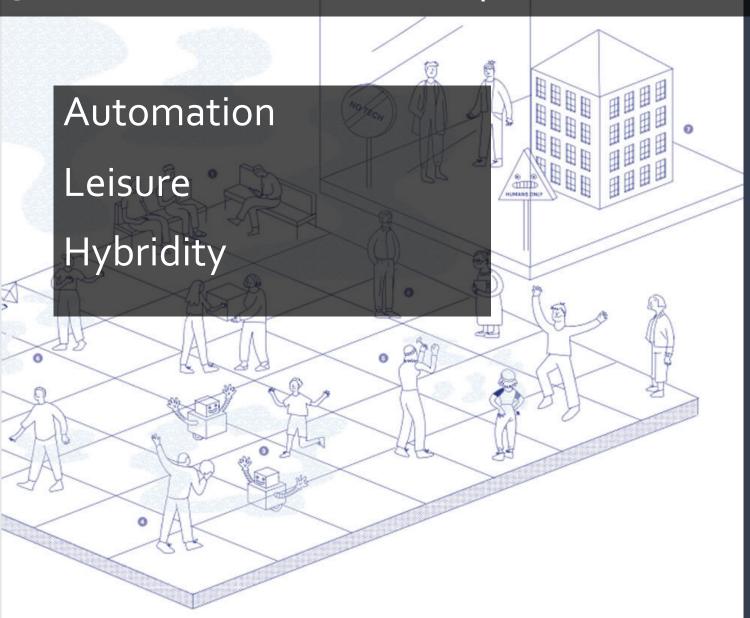
Climate crisis

Data-driven decision making Eco-bottom line



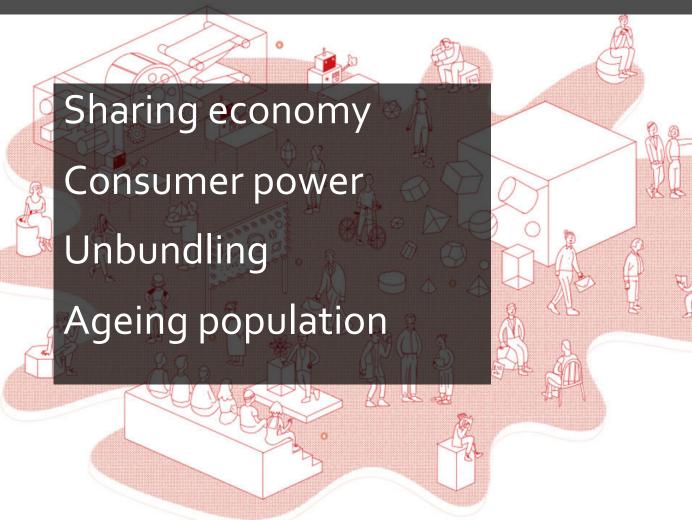
All activity focused on addressing crisis **Practical solutions** Global alliances for research Local networks for teaching

3. Human-machine interdependence



Teaching focused on student experience Time-intensive, student led, lifelong Resurgence of humanities Human-agent co-teaching Ennui

4. 'Uberfication'



Commodified learning: micro-credits built through life

Students purchase services from academic freelancers

Universities shift from campus to platform

Aims for a preferred future



The future is a murky world but it is one that we have to enter, interrogate and hopefully re-shape. John Urry 2016 What is the Future? Polity





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- https://www.nearfutureteaching.ed.ac.uk/outcomes/
- references and links: https://tinyurl.com/yda23p83