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Aim: not to predict, but to co-design a values-based future for digital education at Edinburgh

Social futures

Global and local demographic shifts Ageing population and lifelong learning Automation of work 'Unbundling' of HE Urbanisation Inclusion Trust in public institutions **Technological futures** Datafication of society Surveillance AI Educational neurotechnology **Cognitive enhancement** Virtual realities New forms of value

Near Future Teaching: principles

Principle 1: educational futures work should aim to challenge assumptions rather than present definitive predictions

Principle 2: the future is not determined by its technologies

Principle 3: thinking about the future always involves values and politics

Principle 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.

Near Future Teaching: process

1 Foresight:

Taking the community pulse Reviews and projections (scientific/technical; educational/social)

2 Scenario development:

Defining values Scoping plausible future worlds Designing educational futures for each

3 Testing:

Student panel Academic expert panel Children's panel

4 Surfacing challenges, insights and recommendations

5 Translation into policy and action

1 Foresight: taking the community pulse – events



Near Future Teaching Collider





Near Future Library Competition



Digital and material design, the uCreate Studio, and Near Future Teaching



Future Fictions Texts: Works Emerging from a Recent Workshop Imagining the Future of the University



Blockchain: designing the future of value and credit



What the future of teaching should look like: discussions with the BME Liberation Group at Edinburgh University



The student occupation: near future teaching at the real Edinburgh Futures Institute



Internet of (Campus) Things: summary of a recent Festival of Creative Learning event



Learning Analytics: What has data ever done for me?



Near Future Teaching Focus Group: Medical Students



AUTOMATION

CREANIVITY

LECTURES



COMPUNITY

TOO MUDH TECH AUGMENTATION



DISTENCE

WAYS OF EARNING

HUNDANS



1 Foresight: reviews and projections



Future Teaching trends: science and technology

Michael Gallagher and Siân Bayne Centre for Research in Digital Education Moray House School of Education 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 t future teaching. This is not a comprehensive review of technological s brief overview of a few areas chosen for their potential high impact.



Future Teaching trends: education and society

Michael Gallagher and Siân Bayne Centre for Research in Digital Education Moray House School of Education 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.

2 Scenario development:

Defining values Scoping plausible future worlds Designing educational futures for each

andthen

Mapping and driving change

Andthen is a consultancy which marries Design Research and Futures Thinking to help organisations with early-stage innovation.





Too much technology can threaten wellbeing

OUTLYING OPINIO



Learning experiences should be more tailored to the individual

VALUE OF OPP



Education is enhanced

"Always being online and available, students have less separation between university and home." (NFT Blog, Pilot Workshop 2)

"As technology changes, you have to evolve instead of letting tech take you over... 5 o'clock on Friday you have to say no more emails." (NFT Video, No More Tech)

"The university should be teaching students how to separate work and non-work time, and time management skills."

OUTLYING OPINION 02

(NFT Blog, Pilot Workshop 2)



Diversity enhances education



VALUE OZ. OPIN

Students should have the opportunity to shape their own learning paths

VALUE OF C

Disciplinary silos should

"Inherent biases and prejudice should be challenged through critical engagement with literature, which is diverse in race, gender, sexuality, ability." (NFT Blog, BME Liberation Group)

"One of my lecturers and I had a discussion about the content being quite difficult to discuss... pretty much everyone bar the four of us are very middle class." (NFT Video, Values 2)

"How does what we see feed into what we believe to know, how that confirms existing biases." (NFT Blog, Virtual Reality @ uCreate Studio)



Education should not be treated like a commodity

VALUE 01, OPINION 01



Students and staff should be more involved in decision making

VALUE 02, OPINION OF



Exchanges Over Instructions

Relationships, dialogues and personal exchanges between students and staff enhance learning in a way that instructional forms of teaching can't. Universities should act towards strengthening relationships and dialogue in favour of bespoke, humancentred teaching methods over nondiscursive, instructional ones.



Experiences Over Measurements

As universities take a role in shaping the thoughts and behaviours of students, there is a risk of reducing learning to a form of economic capital that values one-dimensional certificates, promoting competition over cooperation.

Instead, creativity, curiosity and failure should be encouraged, promoting the value of experiences over formal academic outcomes.





Participatory and Transparent

Students and staff feel powerless against the opaque and hierarchical governance of educational institutions. Students and staff should be involved as partners who can directly and cooperatively influence their learning and teaching. Through increased participation, learning pathways and experiences can be more tailored to suit individual needs.



Diverse and Inclusive

d

VALUE CARD 02

Diversity enhances education by exposing learners to diverse perspectives and experiences. However, financial barriers lower accessibility to education; students are living under debt and increasingly high living and course costs, while many staff face precarity due to zero-hour contracts or poverty wages. Where possible, education should be inclusive and promote forms of diversity.



World 1. Data, data everywhere

World 2. A new ecology

World 3. Human and machine co-dependence

World 4. Uberfication from cradle to grave

World 1. Data, data everywhere

Datafication Marketisation Tight borders Increased competition

World 2. A new ecology

Climate change Data-driven decision making Compulsory renewability Compassion and global justice

World 3. Human and machine co-dependence

Automation Human-machine hybridity Personal missions Leisure

World 4. Uberfication from cradle to grave

Ageing population Sharing economy Consumer power Unbundling World 1. Data, data everywhere

World 2. A new ecology

World 3. Human and machine co-dependence

World 4. Uberfication from cradle to grave

World 1. Data, data everywhere

Datafication – Marketisation – Tight borders – Increased competition

THE UNIVERSITY of EDINBURGH LATEST NEWS DEAD STUDENT COMPLETES DEGREE BY NOT LOGGING OUT "He was my Favourite student." UOG

World 2. A new ecology

Climate change – Data-driven decision making – Compulsory renewability – Compassion and global justice



World 3. Human and machine co-dependence

Value 1: experience over assessment

Unlimited time for study emphasises the importance of a quality experience, but maintaining student motivation and sense of direction is a key issue for universities. Ennui has become a common feature of the human condition.

Value 3: relationships over instruction

Gaining basic knowledge through instruction is considered archaic in this world, though some continue to see it as a necessary grounding for meaningful, impactful human work.

Value 2: diversity and inclusion

Human-machine hybridity is so accepted in this world that those who are excluded - for self- or societally-determined reasons experience massive inequality. This is challenging for institutions. Automation – Human-machine hybridity – Personal missions – Leisure

Value 4: participation and transparency

Societal aspirations for meaningful transparency have disappeared as massively complex hybrid systems maintain social order: transparency is no longer considered a positive term.

World 4. Uberfication from cradle to grave

Ageing population – Sharing economy – Consumer power – Unbundling





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What futurists can do is to facilitate the development and application of individual, organizational and collective foresight.

One result of good foresight work is a well-developed decision context embracing aspects of past, present and possible futures.

Slaughter, R. (1996) The knowledge base of futures studies as an evolving process. *Futures*. 28:9.

Outputs

Co-produced values- and evidence-based position on futures for: Investment in (educational) technology Investment in people/culture Nature and development of future curriculum



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