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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



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



Blockchain: designing the future of value and credit



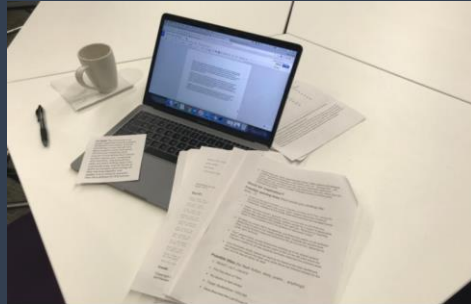
What the future of teaching should look like: discussions with the BME Liberation Group at Edinburgh University



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



Near Future Library Competition



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



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



DATA



AUTOMATION



CREATIVITY



LECTURES



VALUES
DIVERSE, SAFE, AFFORDABLE



COMMUNITY



TOO MUCH TECH



AUGMENTATION



VALUES
MORE THAN A BUSINESS



DISTANCE



WAYS OF LEARNING



HUMANS



LECTURES



2:56 / 2:56



1x



1 Foresight: reviews and projections



Future Teaching trends: science and technology

Michael Gallagher and Siân Bayne
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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 the future of teaching. This is not a comprehensive review of technological trends, but a brief overview of a few areas chosen for their potential high impact.



Future Teaching trends: education and society

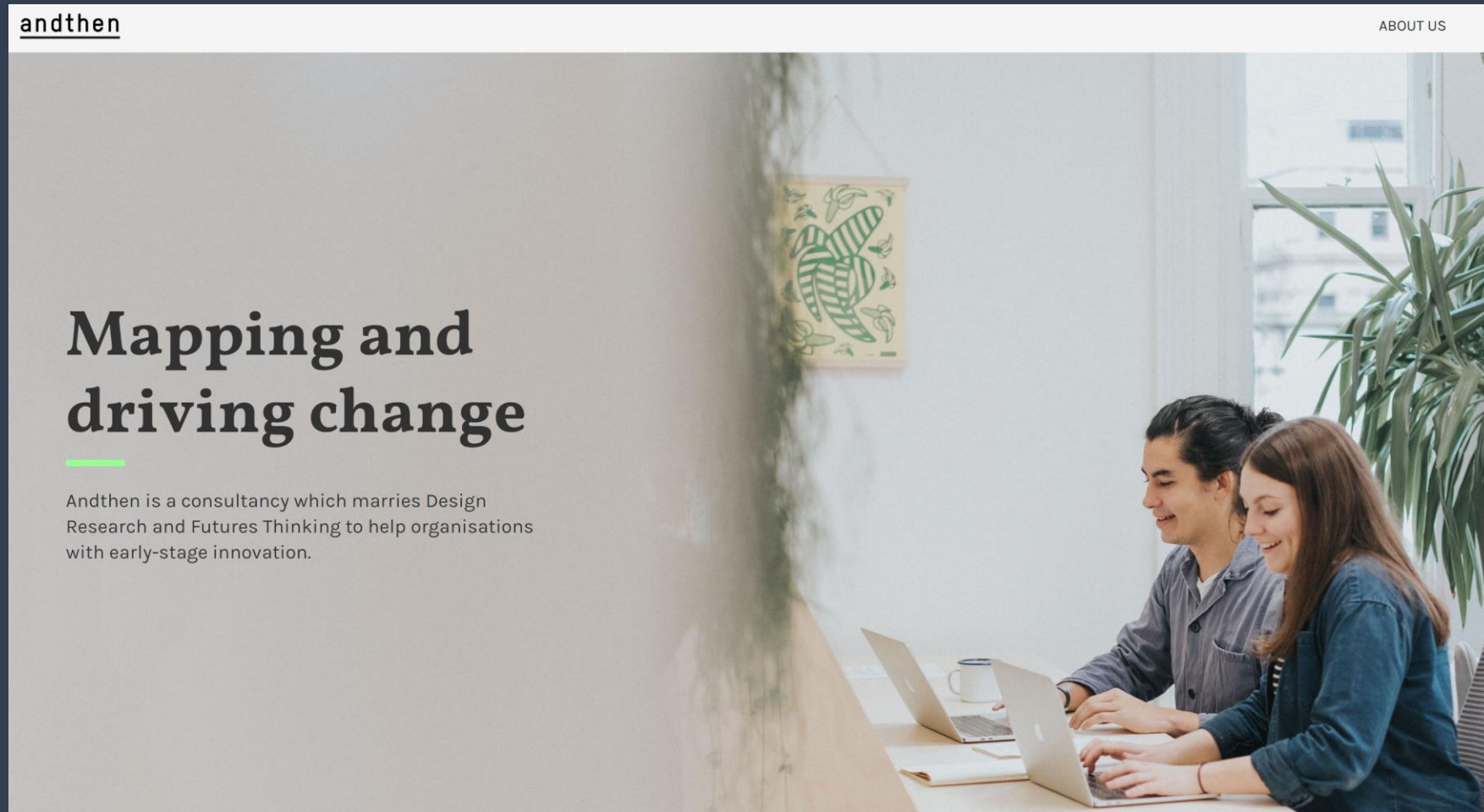
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Introduction

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





Too much
technology
can threaten
wellbeing

OUTLYING OPINION



Education
is enhanced



Diversity
enhances
education

VALUE 02, OPINION



Disciplinary
silos should
be broken



Education
should not be
treated like a
commodity

VALUE 01, OPINION 01



Learning
experiences
should be more
tailored to the
individual

VALUE 04, OPINION 03



"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."

(NFT Blog, Pilot Workshop 2)

OUTLYING OPINION 02



Students
should have the
opportunity to
shape their own
learning paths

VALUE 04, OPINION



"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)

VALUE 02, OPINION 01



Students and
staff should be
more involved in
decision making

VALUE 04, OPINION 02

Exchanges Over Instructions

VALUE CARD 01

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, human-centred teaching methods over non-discursive, instructional ones.



Experiences Over Measurements

VALUE CARD 01

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.

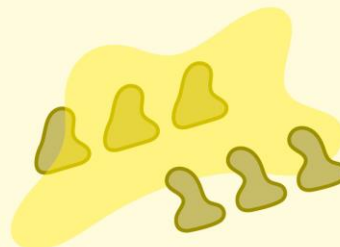
Instead, creativity, curiosity and failure should be encouraged, promoting the value of experiences over formal academic outcomes.



Participatory and Transparent

VALUE CARD 04

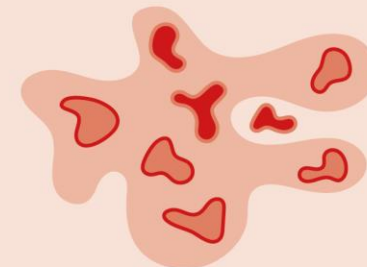
Students and staff feel powerless against the opaque and hierarchical governance of educational institutions. Students and staff should be involved as partners who can directly and cooperatively influence their learning and teaching. Through increased participation, learning pathways and experiences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



Diverse and Inclusive

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

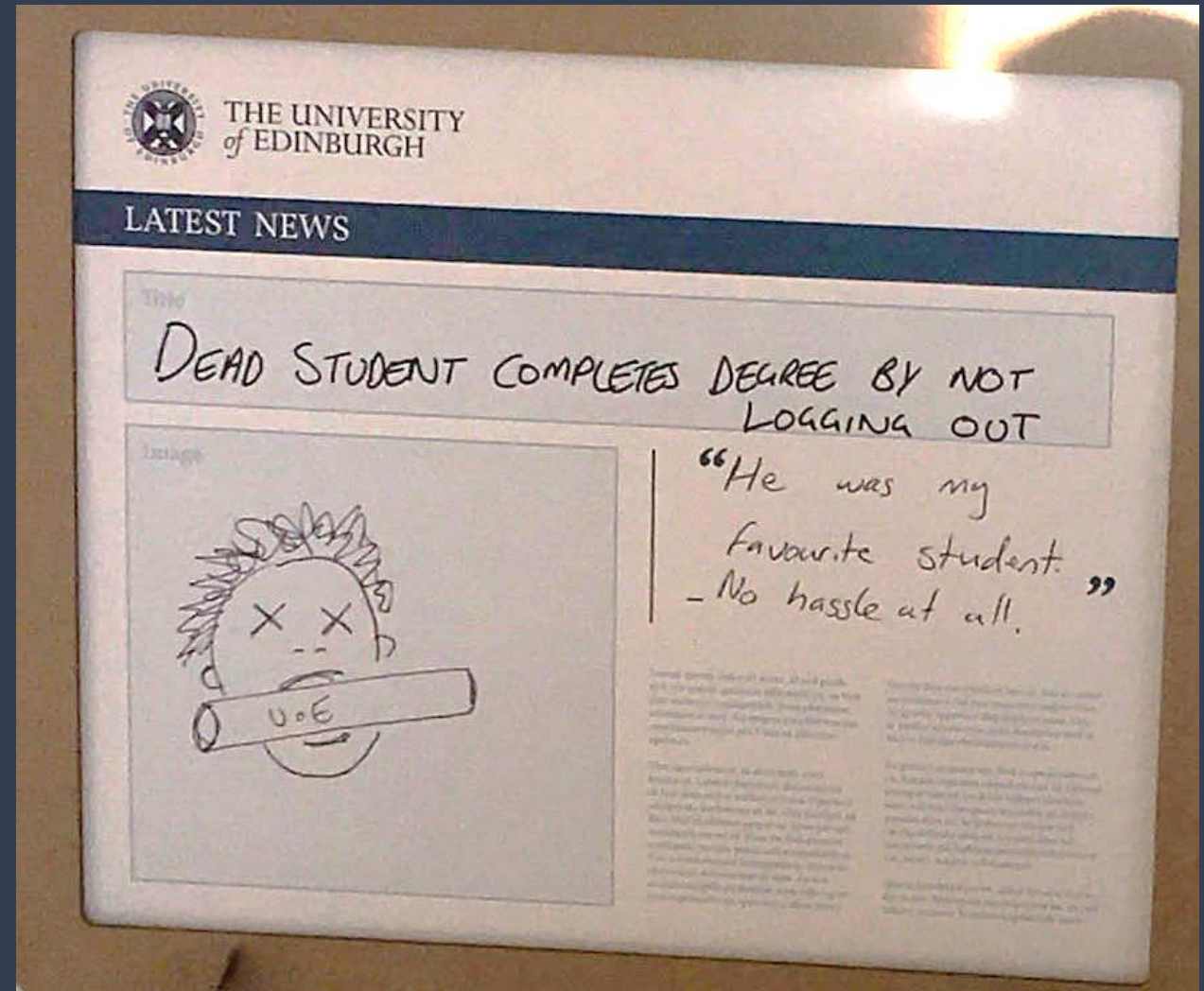
World 2. A new ecology

World 3. Human and machine co-dependence

World 4. Uberfication from cradle to grave

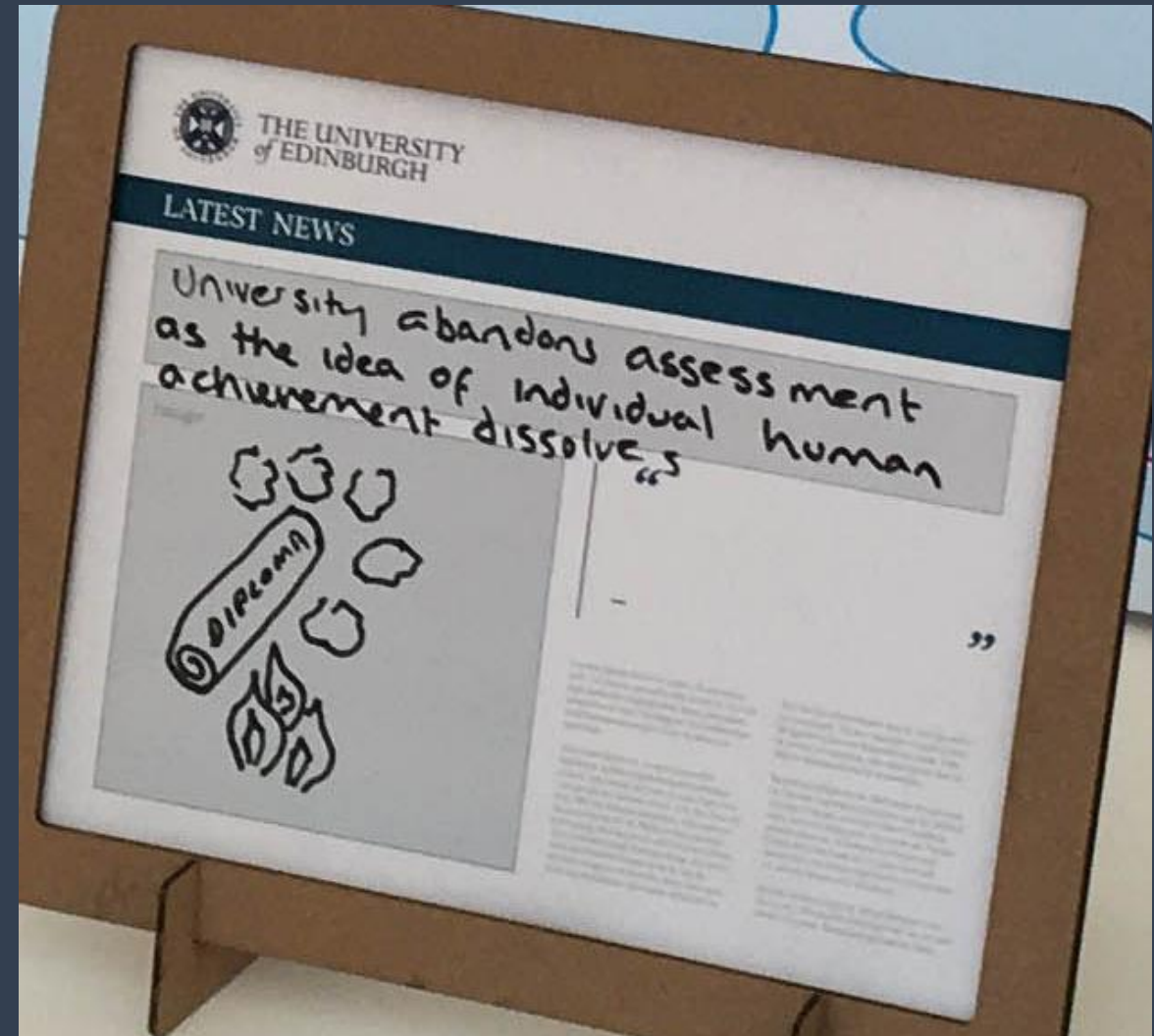
World 1. Data, data everywhere

Datafication – Marketisation – Tight borders –
Increased competition



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 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.

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.

Automation – Human-machine hybridity –
Personal missions – Leisure

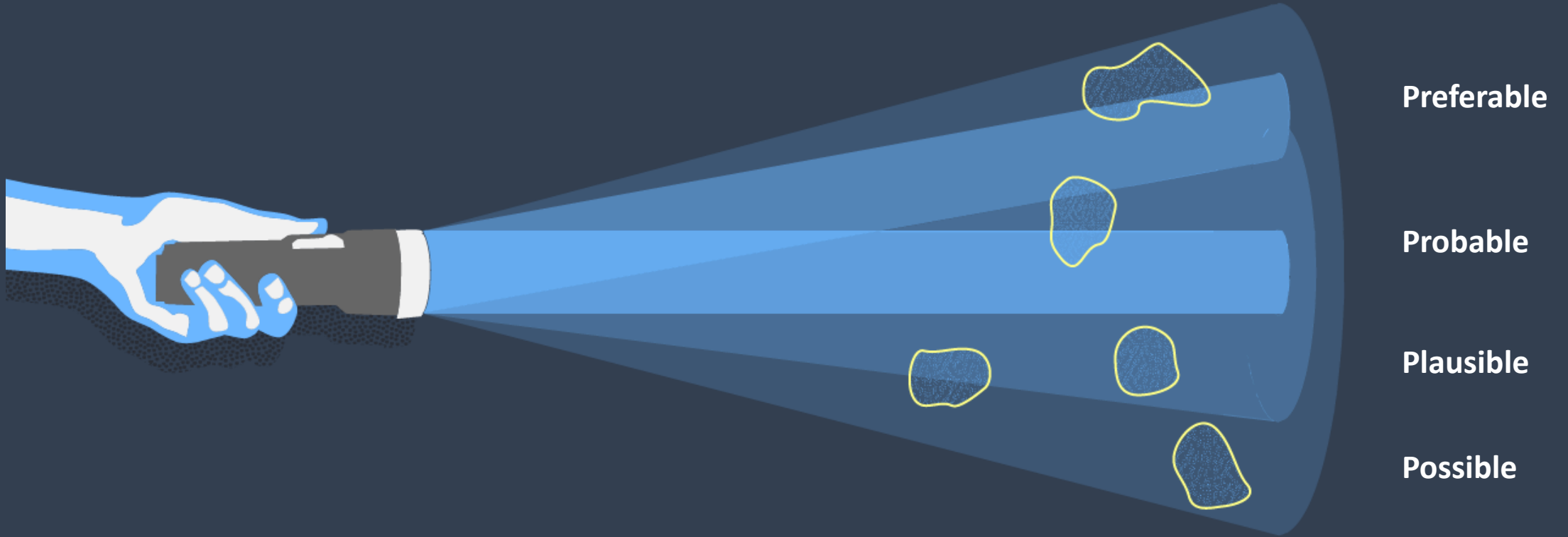
Value 4: participation and transparency

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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