



# Revisiting the near future of digital education: anticipation and acceleration

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THE UNIVERSITY of EDINBURGH

Edinburgh Model for Teaching Online Course Pack

Prepared to provide a record of your activity on this course  
Prepared by the course teaching team

**2020**

**DE** CENTRE FOR RESEARCH IN DIGITAL EDUCATION

THE UNIVERSITY of EDINBURGH Information Services Group

Digital Education Africa Research Cluster

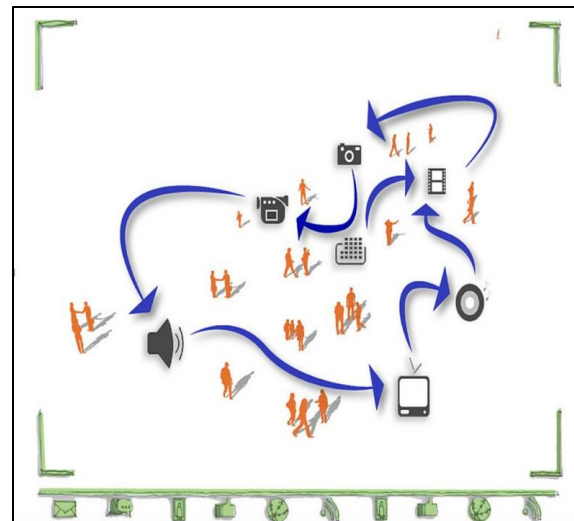
Foundations for All (FFA)

Partnerships and pathways into HE for refugees and displaced persons

HOW HAVE OTHERS DONE THIS?

**BANGLADESH**

- MAMA (a mobile maternal health program) uses mobile money to pay their rural female frontline health workers
- Improved internal efficiencies
- Increased mobile use by women



REAR: RESEARCH FOR EMERGENCY AFTERSHOCK RESPONSE

SIAN BAYNE & MICHAEL GALLAGHER  
[HTTP://WWW.DE.ED.AC.UK/PROJECT/REAR-RESEARCH-EMERGENCY-AFTERSHOCK-RESPONSE](http://www.de.ed.ac.uk/project/rear-research-emergency-aftershock-response)

# Digital transformation

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- What we missed
- Futures methods and anticipation
- Applying these methods to our most recent predicament
- Noting the institutional shifts that occurred in response to crisis: contested sites of transformation, sites of resistance
- Critiquing what these shifts laid bare as a result



# Futures approaches



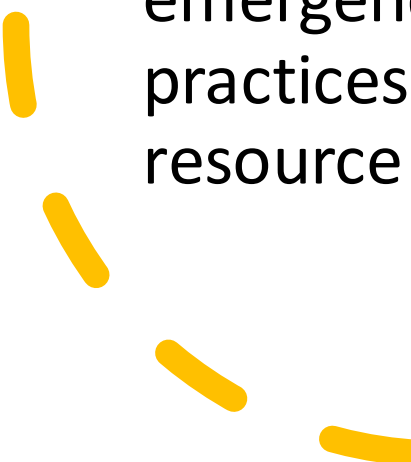
- Principle 1: educational futures work should aim to challenge assumptions rather than present definitive predictions
- Principle 2: the future is not determined by its technologies
- Principle 3: thinking about the future always involves values and politics
- Principle 4: education has a range of responsibilities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

Facer, K., & Sandford, R. (2010). The next 25 years?: future scenarios and future directions for education and technology. *Journal of computer assisted learning*, 26(1), 74-93.





# Anticipation

- Anticipation is a perspective on the future which shifts away from prediction and forecasting, to a more critical mode which foregrounds agency, criticality and reflexivity in the face of the unknowable.
  - Amsler and Facer (2017) describe anticipation studies as being 'less concerned with the future as an object of study than [with] the emergence of new forms of time-consciousness and anticipatory practices which enable people to engage with ideas of the future as a resource to interrogate the...present'.
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# Near futures

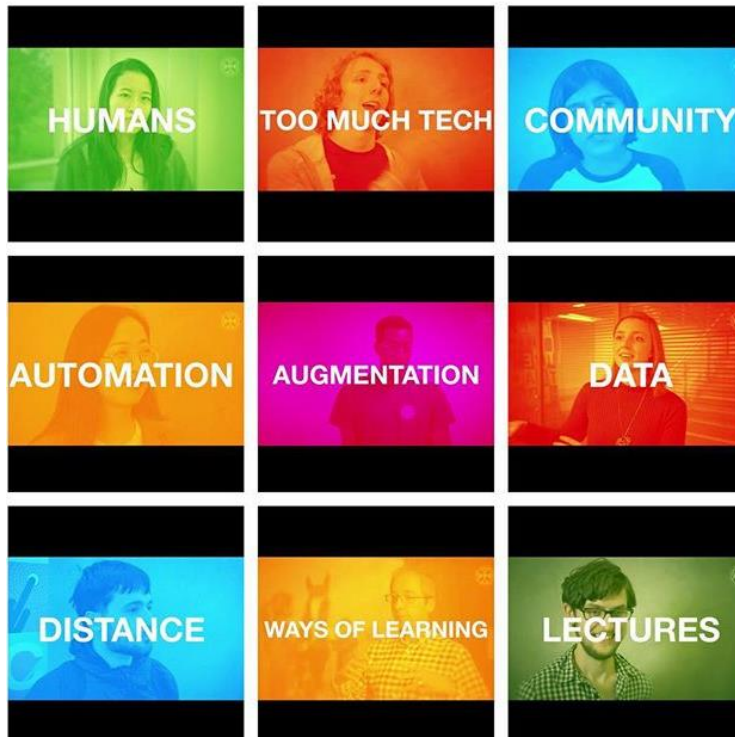
- Near Future Teaching project (2017-2019)
- 'it becomes necessary for communities of scholarship to take on the task of articulating confident, alternative imaginaries for the future of teaching in universities which re-introduce the values we wish to teach and live by' (Bayne and Gallagher 2021 Forthcoming)

<https://www.nearfutureteaching.ed.ac.uk/>



## 1a: Community engagement

- ~400 students and staff (and schools)
- Opinions to themes to values
- Edtech and datafication as provocation



"The university should be a space for learning and un-learning."

(NFT Blog, BME Liberation Group)

"The risk of reducing every aspect of learning to a form of economic capital."

(NFT Blog, Blockchain)

"Is a future without failure a good future? What is the educational value of mistakes?" (NFT Blog, NFT Think Tank: Vets)

"The opportunity to wonder about stuff... I think that if you lock that off too much you will be too deterministic." (NFT Video, Values 2)

"We resist hierarchies that defer to credentials before and above the

"For a university that is so diverse, I feel that there isn't as appreciation for the actual diverse group of people who are together." (NFT Blog, Values 2)

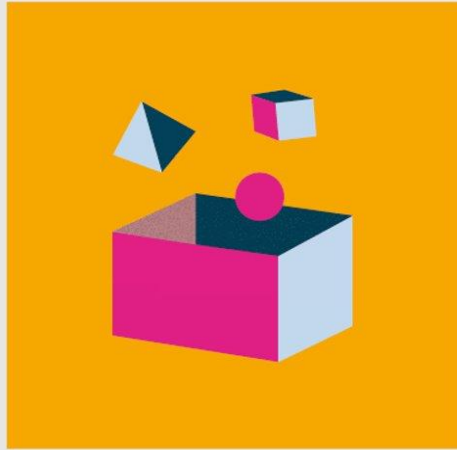
"Inherent biases and prejudice should be challenged through critical engagement with literature, which is diverse in race, gender, sexuality, ability." (NFT Blog, BME Liberation Group)

"We resist precarious employment in all its forms - including short-term contracts, zero hour work and poverty wages." (Edinburgh Futures Institute)

"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 Blog, Values 2)



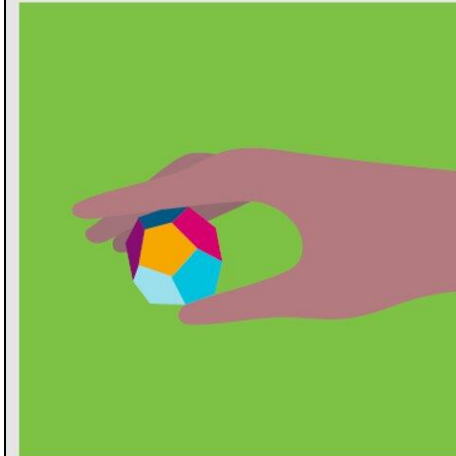
# 1b: Articulated institutional values



## Experience over assessment

Learning should not be over-assessed and instrumentalised.

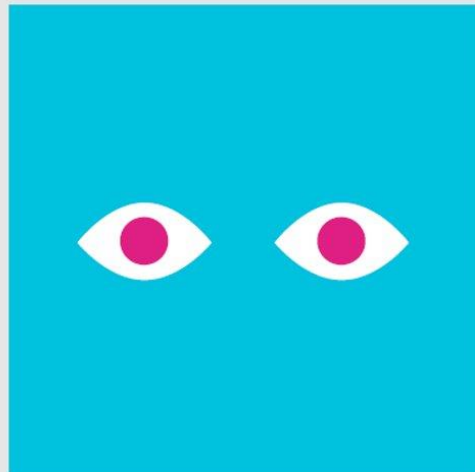
Teaching should share a focus on employability and success with an understanding of the value of rich experience, creativity, curiosity and – sometimes – failure.



## Participation and flexibility

The University community should cooperatively shape how – and what – it learns and teaches.

Flexibility for individuals, fluency across disciplines and cooperative responsibility for curricula should shape near future teaching.



## Relationships first

Relationships, dialogues and personal exchanges between students and staff build understanding in a way that is not possible via transmissive forms of teaching.

Teaching should be designed to provide the time and space for proper relationships and meaningful human exchange.



## Diversity and justice

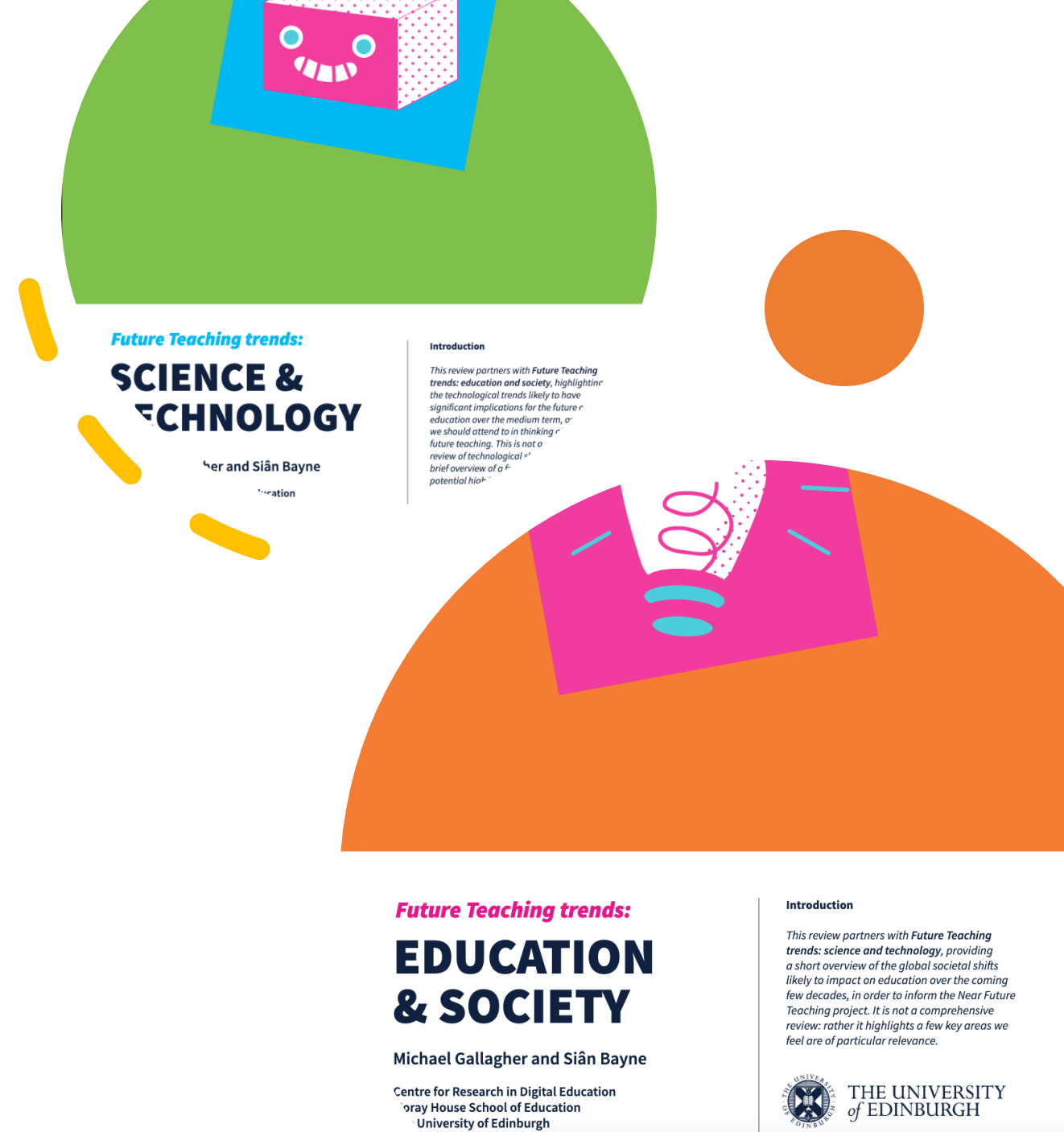
Education should design-in meaningful diversity and real inclusion across all areas of activity.

All near future teaching should further social responsibility and global justice.



## 2: Future forecasting

- Distilling megatrend reports, horizon scanning documents, key trends barometers, policy documents and foresight analyses
- focused on aligning the analysis of key trends with the insights coming out of our work with the students and staff who constitute the university



## 2: Future forecasting



Education and Society	Science and Technology
Recruitment demographics: Increased competition for international students globally Declining numbers in domestic groupings traditionally attending university (young, full-time, middle class)	Datafication Of society Of education
Lifelong learning: Ageing population Emergence of alternative providers of education	Artificial intelligence In society In education
Unbundling and new degree models	Neuroscience and cognitive enhancement Educational neurotechnology
Automation of teaching, automation of work	Virtual and augmented realities
Urbanisation	New forms of value Blockchain and distributed ledgers
<b>Climate change/destabilisation</b>	
Wealth and inclusion Widening participation	
Trust and precarity Collapse of trust in institutions Academic precarity and casualisation	

The dramatic effects of climate change have reached to global natural disaster increasing land and water scarcity has accelerated movements of populations from the southern hemisphere towards Europe.

The global crisis has changed the mindset of businessmen, with emphasis now on responsible, sustainable action. Solid associations between research and education is critical to better understand and design our economic impact towards global solutions.

International are placed under government policy define their distinctive contribution and to cover up greater stress to structure. There is greater differentiation between their regional operations with strong links to companies and international based customers with strong bilateral links to other global brands.

The catastrophe of climate change forces the world to respond on a global scale. Moving to larger scale, instead, Europe operates according to an 'as best as we can' which makes sustainability and renewability the new indicators of human advancement.

humanity is able to wipe its slate clean and start a new chapter, one where a global environmental mindset prevails. The world takes its response to this disaster as an opportunity to begin a second chance, learning significantly from past mistakes.

This new mindset is anchored through a global citizen wage that recognizes inequality and honors global justice. Europe rejects ideas of sovereignty and opens its borders to support immigration. The systems in place to manage national assets, such as land registries, are subverted and global assets are redistributed to empower sustainable local management.

Have the Vespertines within educational institutions been damaged? what does this look like?

How is the value of  $\beta$  determined in this model?

The new global mindset filters down into education and research. Countries no longer compete for funding or prestige. Instead, there is more intercontinental collaboration between researchers to solve global crises. Regulatory goals mark the collaborative society that has formed.

Research and education is driven by the need for sustainable global solutions. Research becomes closer aligned to teaching and there is no longer distance between lecturing and research. Everybody is researching while teaching and lessons are connected to the places where this research is happening instead of ethics approval, there is now environmental approval, and this is a requirement of all work taking place in education and industry.

data becomes a tool to repress power structures and as a result there is a reconfiguration of these systems and a collapse of national hierarchies. Data analysis drives the redistribution of resources, empowering and giving voice to citizens who weren't previously valued.



Year	Number of cases	Percentage of cases
1990	10	10.0
1991	15	15.0
1992	20	20.0
1993	25	25.0
1994	30	30.0
1995	35	35.0
1996	40	40.0
1997	45	45.0
1998	50	50.0
1999	55	55.0
2000	60	60.0
2001	65	65.0
2002	70	70.0
2003	75	75.0
2004	80	80.0
2005	85	85.0
2006	90	90.0
2007	95	95.0
2008	100	100.0
2009	105	105.0
2010	110	110.0
2011	115	115.0
2012	120	120.0
2013	125	125.0
2014	130	130.0
2015	135	135.0
2016	140	140.0
2017	145	145.0
2018	150	150.0
2019	155	155.0
2020	160	160.0
2021	165	165.0
2022	170	170.0
2023	175	175.0
2024	180	180.0
2025	185	185.0
2026	190	190.0
2027	195	195.0
2028	200	200.0
2029	205	205.0
2030	210	210.0
2031	215	215.0
2032	220	220.0
2033	225	225.0
2034	230	230.0
2035	235	235.0
2036	240	240.0
2037	245	245.0
2038	250	250.0
2039	255	255.0
2040	260	260.0
2041	265	265.0
2042	270	270.0
2043	275	275.0
2044	280	280.0
2045	285	285.0
2046	290	290.0
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2063	375	375.0
2064	380	380.0
2065	385	385.0
2066	390	390.0
2067	395	395.0
2068	400	400.0
2069	405	405.0
2070	410	410.0
2071	415	415.0
2072	420	420.0
2073	425	425.0
2074	430	430.0
2075	435	435.0
2076	440	440.0
2077	445	445.0
2078	450	450.0
2079	455	455.0
2080	460	460.0
2081	465	465.0
2082	470	470.0
2083	475	475.0
2084	480	480.0
2085	485	485.0
2086	490	490.0
2087	495	495.0
2088	500	500.0
2089	505	505.0
2090	510	510.0
2091	515	515.0
2092	520	520.0
2093	525	525.0
2094	530	530.0
2095	535	535.0
2096	540	540.0
2097	545	545.0
2098	550	550.0
2099	555	555.0
2100	560	560.0

Student's personal info:  
Date: \_\_\_\_\_

La ley de...

*Journal of Management Education*, 20(6), 709-728  
© 1996 Sage Publications  
10.1177/1053426996288166



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# Does any of this still matter?

Accelerated inequalities, accelerated divides, accelerated marginalisation. There are many that have been left behind, rendered invisible.

Imaginariness of seamless edtech consumption and data-driven decision making are framing institutional practice. Educational continuity in the wake of disruptions difficult to counter in its unassailability.

Increasingly commercial actors having say in how we teach, how we structure curricula, how we govern and accredit, how we frame the academic experience.

The unbundled university (potentially) accelerates in the wake of digital transformation. What aggregation of these unbundled parts proxy as institutional identity?



# Does any of this still matter?

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1. Sites of transformation and resistance matter
2. Institutional identities: values matter
3. Sector imaginaries: capturing the imagination of what digital transformation should be matters
4. Narratives of equity: how we use the digital matters



# Transformation, resistance, and metastability



- an unending process of adjustment in the pursuit of equilibrium, a process historically shared structurally amongst larger “relatively fixed and self-correcting social structures” (Urry, 2016: 59)
- The capacity of systems to generate a metastability “cannot be reduced either to the actions of individual actors or to persisting social structures” (Urry, 2016: 59).
- Present and near futures emerging through sites of resistance and sites of transformation





# Sites of transformation and resistance: assessment



**Experience over assessment**

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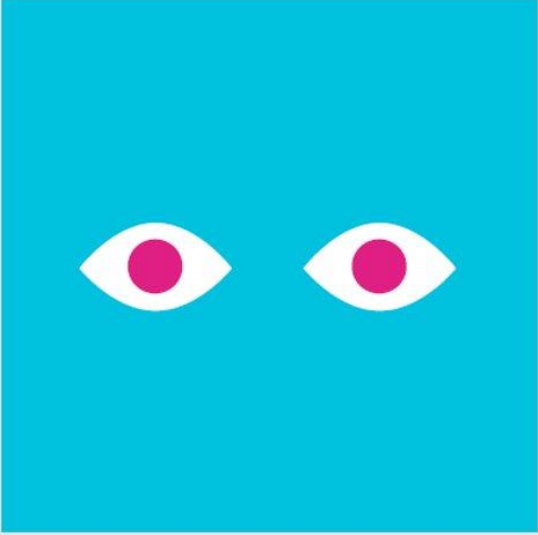
Learning should not be over-assessed and instrumentalised.

Teaching should share a focus on employability and success with an understanding of the value of rich experience, creativity, curiosity and – sometimes – failure.

- Surfaced assessment practices institutionally: reification and reimagining
- Provocation: remote invigilation: 'on top of the stress of taking a high-stakes exam (currently under extremely difficult conditions for many), students are surveilled in their own homes, by strangers and/or software, whose sole purpose is to catch them cheating.' (Fawns and Ross, 2020).
- Sympathetic grading
- Artefacts and actors: invigilation, institutional memory, inclusion, policy



# Sites of transformation and resistance: relationships



**Relationships first**

Relationships, dialogues and personal exchanges between students and staff build understanding in a way that is not possible via transmissive forms of teaching.

Teaching should be designed to provide the time and space for proper relationships and meaningful human exchange.

- Routine narratives and burgeoning practices of 'contact'
- Emphasis on care, contact, and community and broadening discussions of how that is expressed in the digital
- Artefacts and mobilising actors: synchronous and asynchronous practices, supported technologies vs practices of individual staff, GDPR, student support, accessibility





# Sites of transformation and resistance: participation



**Participation and flexibility**

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The University community should cooperatively shape how – and what – it learns and teaches.

Flexibility for individuals, fluency across disciplines and cooperative responsibility for curricula should shape near future teaching.

- Flexibility largely emphasized in school level responses and often phrased through the language of inclusion
- Considerable impact on synchronous and asynchronous practice
- Mobilising actor: internationalisation



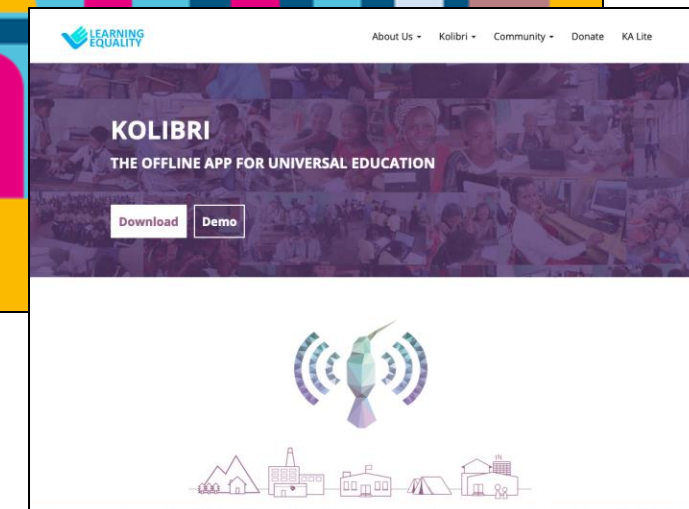
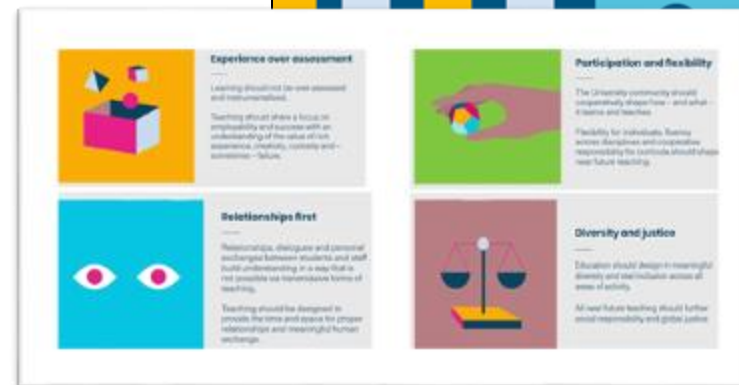
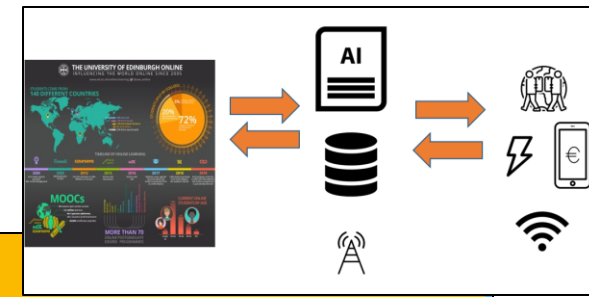
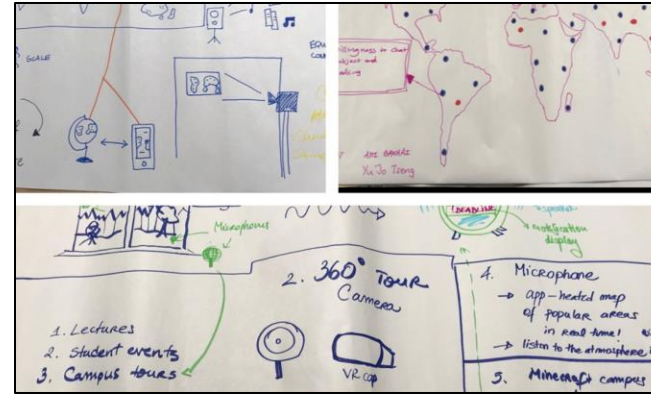
# Sites of transformation and resistance: diversity and justice



- Equity
- Visibility and invisibility: the marginalising realities of connectivity
- Tendency to cast gaze 'over there'
- Care and the performance of academic work

# Where do we go from here?

1. Sites of inspiration and reimagining: learn from our colleagues
2. Note cascading complexity and impact on institutional futures
3. Persistent and participatory community-led R&D
4. Find a model that acknowledges the values of the institution





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