



Digital Education Futures at the University of Edinburgh

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THE UNIVERSITY of EDINBURGH
Moray House School
of Education



CENTRE FOR RESEARCH
IN DIGITAL EDUCATION



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PROJECTS

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DIGITAL CULTURES



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LALA: Learning Analytics in
Latin America

Move2Learn

Work with Syrian refugee
academics

How technology, culture, learning and policy intersect within research and practice
in digital education.

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

Digital Cultures

The Digital Cultures research theme pays close attention to the interconnections between digital technologies, practices, environments and a range of cultural contexts. Countries and regions around the world, and their education, knowledge, labour, creative industry and heritage systems, are being re-shaped by digital and data technology.



Children & Technology

We explore the role of technology in the everyday lives of young children. Whether it's at home with their families and other caregivers, in educational settings such as preschools and schools, or in and around their neighbourhood we think it's important to know more about living and learning with technology.



Data Society

Key directions for research involve examining the relationships between technical areas such as artificial intelligence (AI), machine learning, algorithms, and 'big data', and educational issues such as curricular and policy development, classroom practices, educational theory, the learning sciences, and education technology development.

"How technology, culture, learning and policy intersect within research and practice in digital education"



Academic

Near Future Teaching

Distance Learning at Scale (DLAS)

MSc in Digital Education

Centre for Research in Digital Education

Digital Education with Cara (Syrian refugee academics)

UKRI GCRF Urban Disaster Risk Hub

Digital Education in Nigeria

Digital Education in Nepal

Digital Education in Tanzania

Practitioner

UN Habitat

The World Bank

GSMA

USAID

DfID

Gates Foundation

British Council

GIZ

**What is the (likely) future
of digital education?**

1a: Increasingly datafied and data-defined

1b: Increasingly uneven





**1c: increasingly competitive
and distributed**

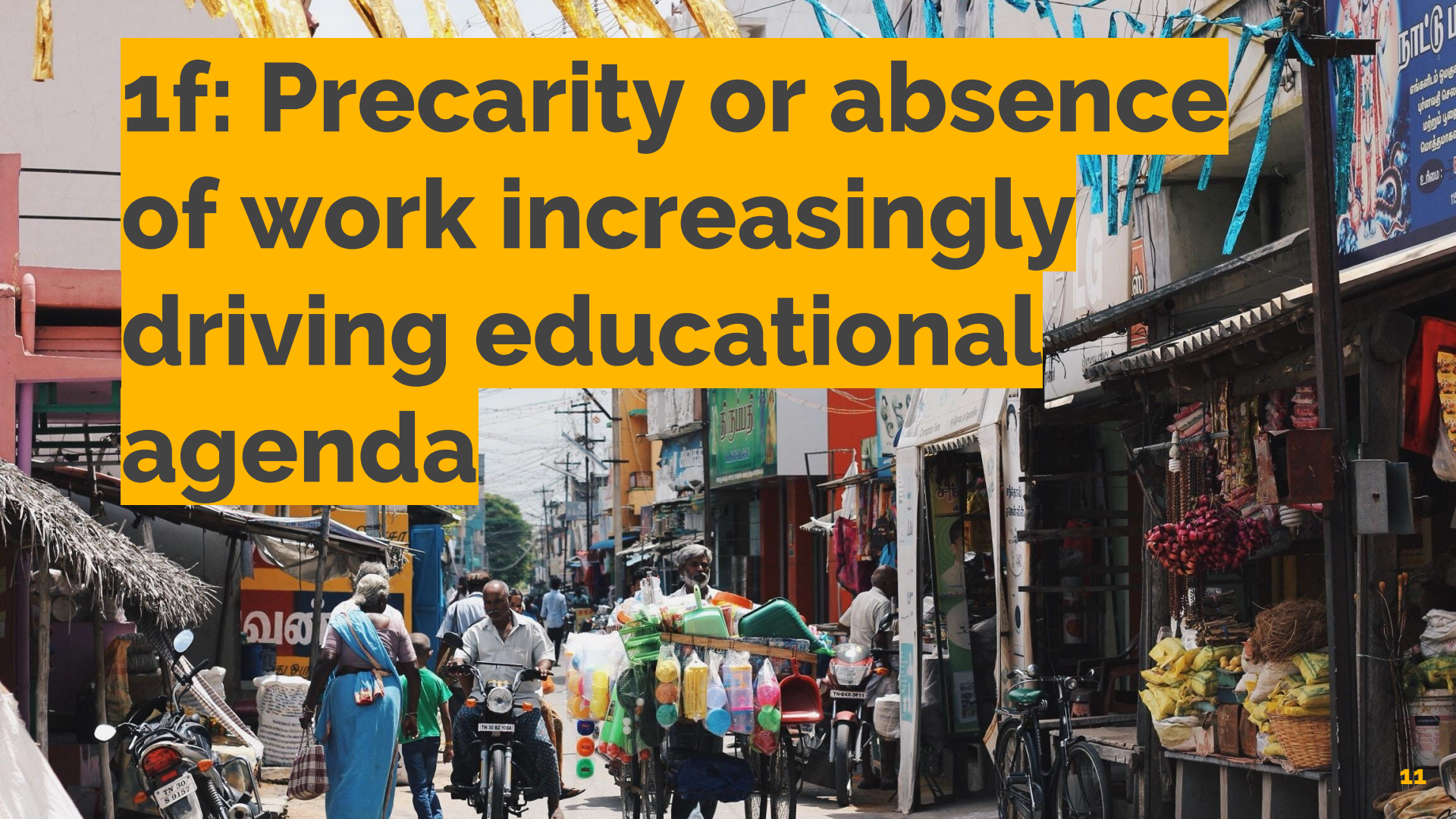
**1d: increasingly
weaponised**



**1e: Digital increasingly
seen as means of
addressing youth and
capacity gaps**



1f: Precarity or absence of work increasingly driving educational agenda





1g: Massification and scale and links to SDGs



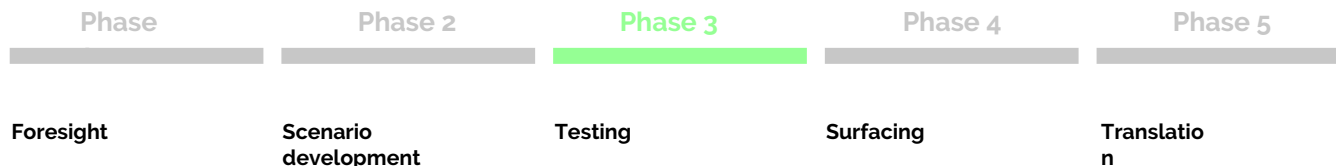
**1h: Carbon footprints are
unsustainable**

What do we want the future of digital education to be?

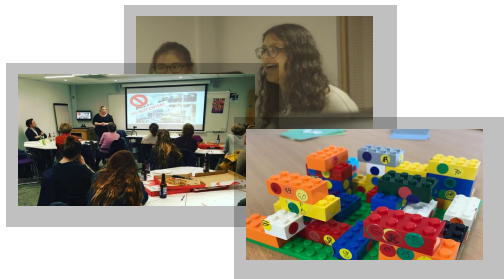


NFT Project Aims

Working to the **social and technological changes** likely to affect the future of digital education in universities, the project aims to build a realistic and **preferable future vision** for digital education at the University, based on the values of the University community. It will then build a **strategy for enabling this future** which can be translated into **policy and action**.

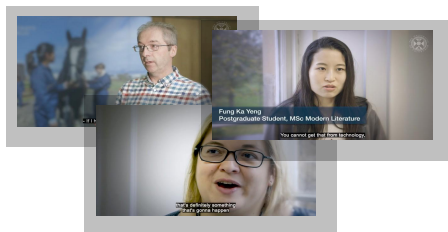


Previous Activities



1. Creative Workshops

Engaging student groups in discussion and critical thought around digital education and related themes



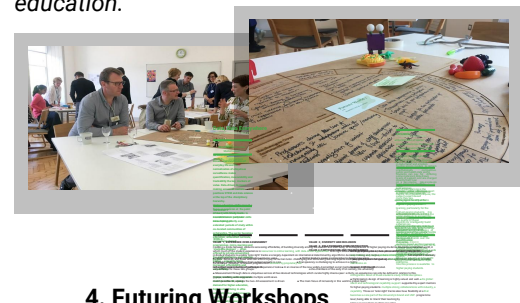
2. Vox Pop Interviews

Talking to students and staff about emerging issues, and their visions for the University's future



3. Written Reviews

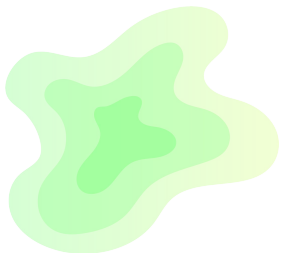
Identifying and exploring global societal shifts likely to impact digital higher education.



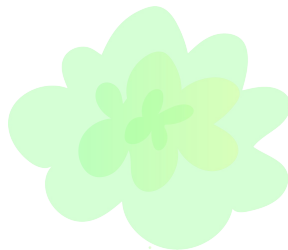
4. Futuring Workshops

Sessions with staff and students building a series of 'possible' future digital higher education scenarios.

Where are we now?



We have converted the learnings of the project into something **actionable**.



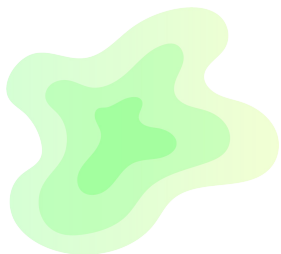
We have **distilled our learnings** from the project so far into a **draft vision and strategy**.



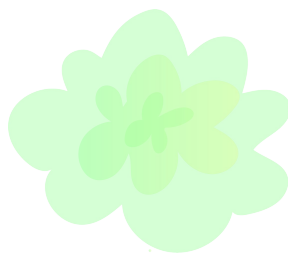
We tested this vision and actions with faculty, staff, and schoolchildren.

Testing Sessions

We are running several types over session to test this preferable future



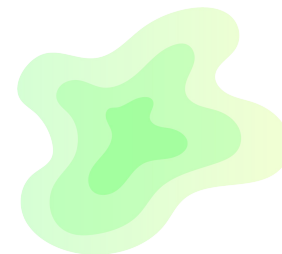
Sessions with **Staff**



Sessions with **Students**



Sessions with **Schools**



Session with **Employers**

Reviews of Future Trends

Future Teaching Trends: Education and Society



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 and Technology



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.

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

AUTOMATION

LIFELONG LEARNING

ACCREDITATION

CITIES

**NEUROSCIENCE AND COGNITIVE
ENHANCEMENT**

DATAFICATION

Diversification of provision

WEALTH AND INCLUSION

TRUST AND PRECARITY

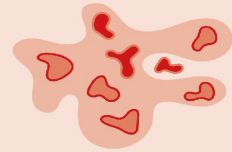
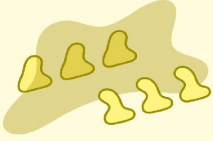
**ARTIFICIAL INTELLIGENCE (AI)
AND EDUCATION**

UNBUNDLING AND NEW DEGREE MODELS

**VIRTUAL AND AUGMENTED
REALITIES**

Values

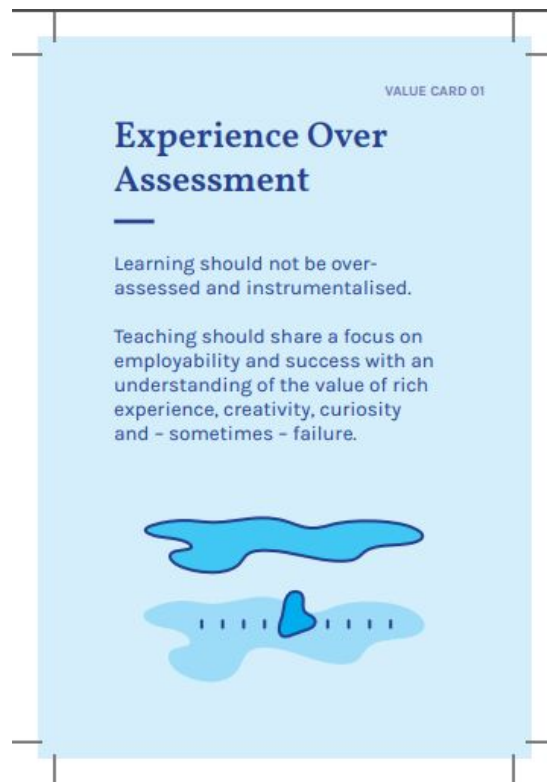
These represent four dominant values which have been surfaced by the project.

VALUE CARD 01	VALUE CARD 02	VALUE CARD 03	VALUE CARD 04
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. 	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. 	Relationships First Relationships, dialogues and personal exchanges between students and staff build understanding in a way that transmissive forms of teaching can't. Teaching should be designed to provide the time and space for proper relationships and meaningful human exchange. 	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. 

Values: alignment?

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.

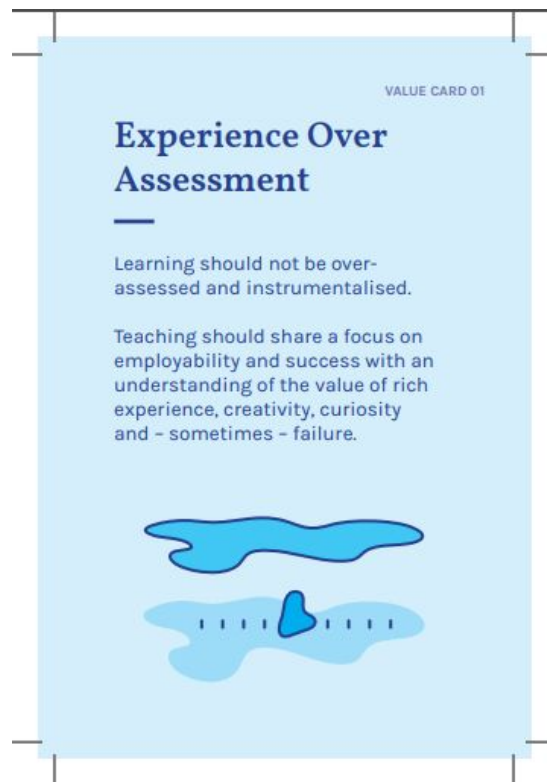
- "The university should be a space for learning and un-learning." (NFT Blog, BME Liberation Group)
- "The risk of reducing every aspect of learning to a form of economic capital." (NFT Blog, Blockchain)
- "Is a future without failure a good future? What is the educational value of mistakes?" (NFT Blog, 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 learned experiences of teachers, students and non-academics on the ground." (Student Occupation)



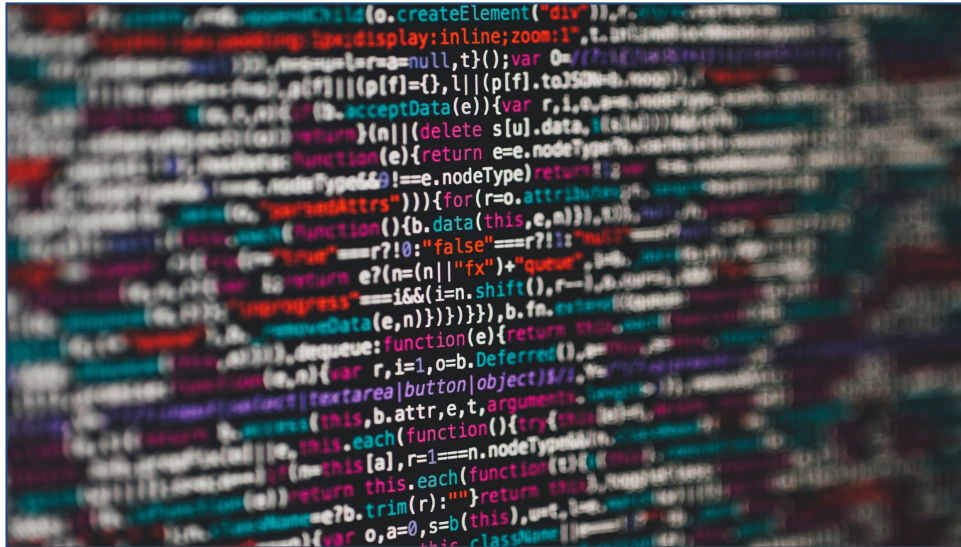
Values: alignment?

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.

- How do we pragmatically realise this value?
- What pedagogies support it?
- What assessment strategies work here?
- How would this render differently in different disciplines?



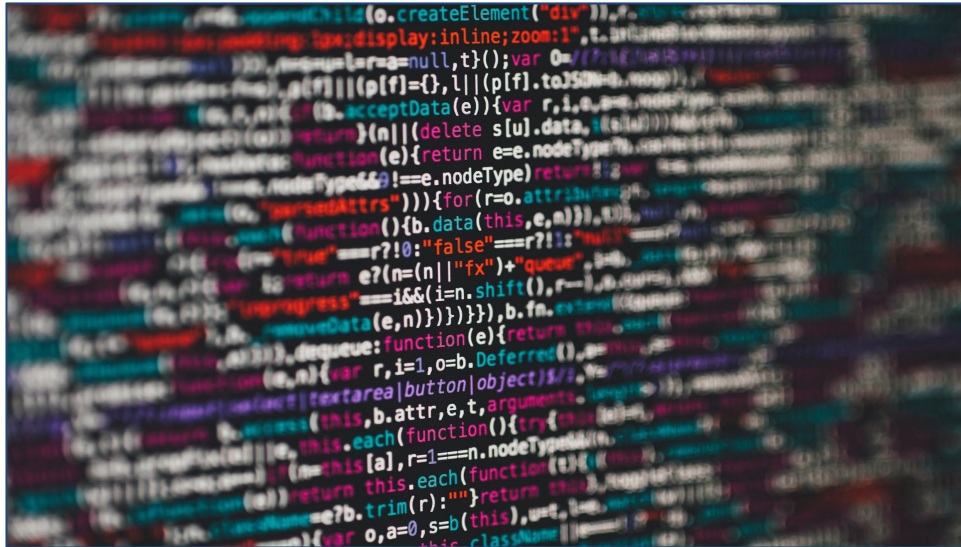
Aim #3: digital education that understands data, data skills and the data society



Objectives

- Taking a research-led approach to education and data
- Understanding the possibilities and problems surrounding the datafication of education
- Addressing automation with an emphasis on human skills
- Engaging creatively and responsibly with learning data

Aim #3: digital education that understands data, data skills and the data society



Short to medium-term actions

1. Balance development of data skills with other human capacities for wellbeing and employability in a future of automated work, by building cross-university courses to develop student creativity, criticality, problem-solving and collaboration.
2. Embed critical understanding of data ethics and algorithmic accountability within academic development and staff training.
3. Seek mechanisms for embedding students in 'data work' via digital apprenticeships, internships and employment experiences.
4. develop creative, responsible designs for a 'smart' campus.

Aim #3: digital education that understands data, data skills and the data society



Short to medium-term actions

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Aim #3: digital education that understands data, data skills and the data society



Short to medium-term actions

1. Seek mechanisms for embedding students in 'data work' via digital apprenticeships, internships and employment experiences.

Big questions?

Sustainability?

Ethics?

Pedagogy?

Future of employment?

Assessment?

Student experience?

Viability?

Practical considerations

Unbundling

Peer and Adaptive Learning

Redefining and redesigning contact time

Data positives and problems

Community and Edinburgh

Postdigital

Rethinking assessment

Tangential Projects

Continuing
Professional
Development
(CPD)

Distance Learning at
Scale

Edinburgh Futures
Institute (EFI)

MSc in
Digital Education

ICT4D

UKRI GCRF Urban
Disaster Risk Hub



Thank you!

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