



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

INTRODUCTION

CODESIGN METHODS AND PROCESS

PROJECT PROCESS MAP

PROJECT PHASES

VALUES

VISION AND AIMS

APPENDIX

	4–5
	6–7
	8–9
Phase 1. Scoping	10–11
Phase 2. Scenario development	12
Phase 3. Testing, Phase 4. Finalising	13
Experience over Assessment	14–15
Diversity and Justice	
Relationships First	
Participation and Flexibility	
Introduction	16–17
Community focused	18–19
Post digital	20–21
Data fluent	22–23
Playful and experimental	24–25
Assessment orientated	26–27
Boundary challenging	28–29
Core Team	30
Steering Group	31

INTRODUCTION

The Near Future Teaching project ran between 2017 and 2019, with the goal to develop a values-based vision for the future of digital education at the University of Edinburgh. It used futures-thinking and design-based methodologies to work with more than 400 students, staff and other stakeholders in the production of this vision.

The project advocated for the idea that the University community should take stock and actively shape a preferred future for teaching based on shared values, at a time when technological change is accelerating and often assumed to be driving the future of learning. It aimed to open space for reflection and the application of collective agency to the question of the future of teaching and learning.

This final report from the project explains its rationale and design, detailing the approach it took to mapping and understanding the future of digital education within the University. It shows how the project engaged widely with the University community in developing core values to guide us, and then sets out a vision and aims for a near future teaching which is:

Community focused

Post digital

Data fluent

Assessment oriented

Playful and experimental

Boundary challenging

DESIGNING THE FUTURE

“The project was made possible through the committed work of many colleagues, including outstanding support from the University of Edinburgh Institute for Academic Development, and an extended task group of staff and students from across the University (detailed in the appendix). Particular thanks to the design and futures agency Andthen for the verve and expertise they brought to the project.

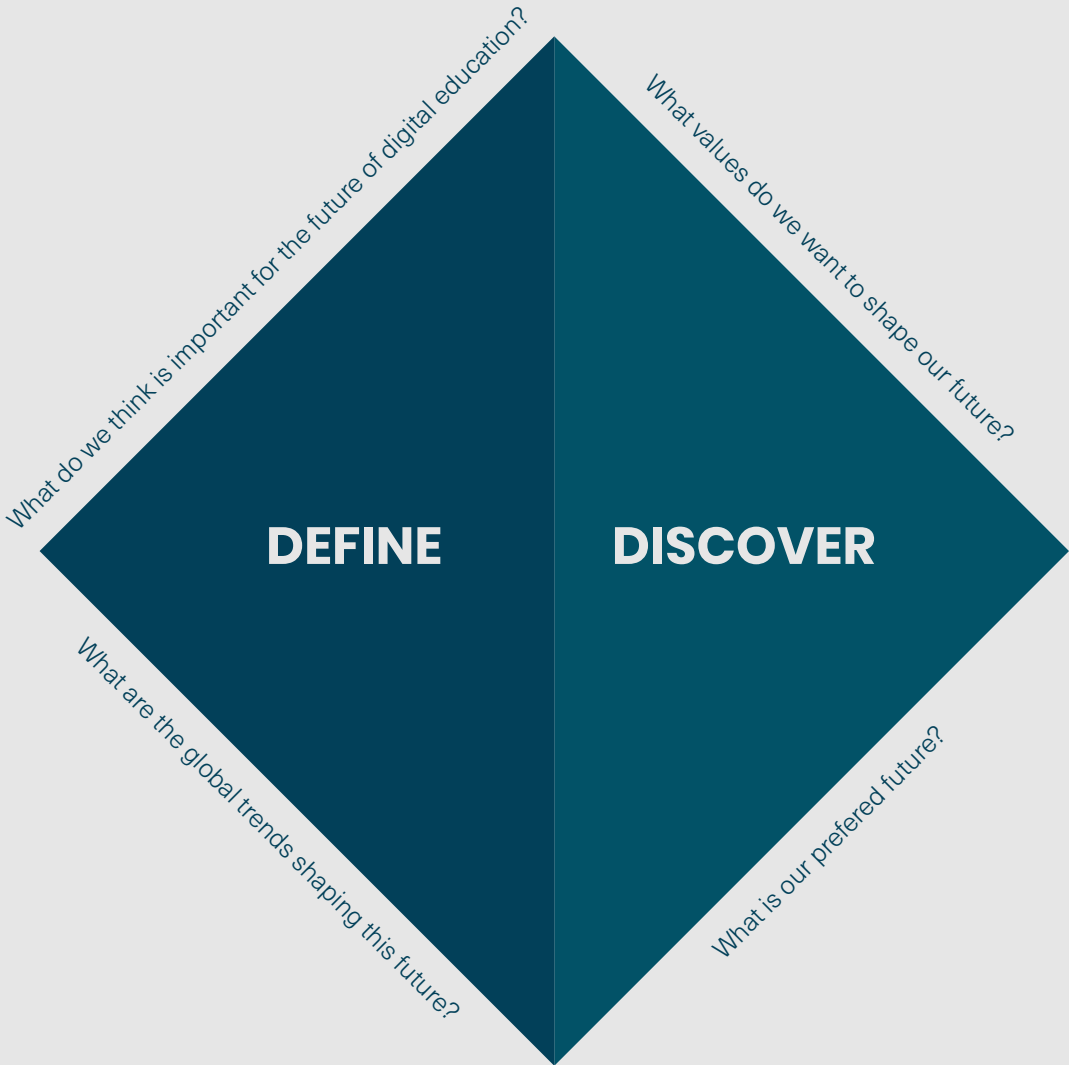
We have tried to make the project process as open as possible, in the hope that the methods and materials we developed will be useful to others wishing to conduct similar exercises. All the project outputs, including blogged accounts of events, trends reviews, future world scenarios and thematic edits of our video interviews are available for viewing and reusing on our web site at: www.nearfutureteaching.ed.ac.uk.

We look forward to continuing to work across our community to build the preferred future we have defined over the course of the project.”



Professor Siân Bayne
Assistant Principal Digital Education

CODESIGN METHODS AND PROCESS

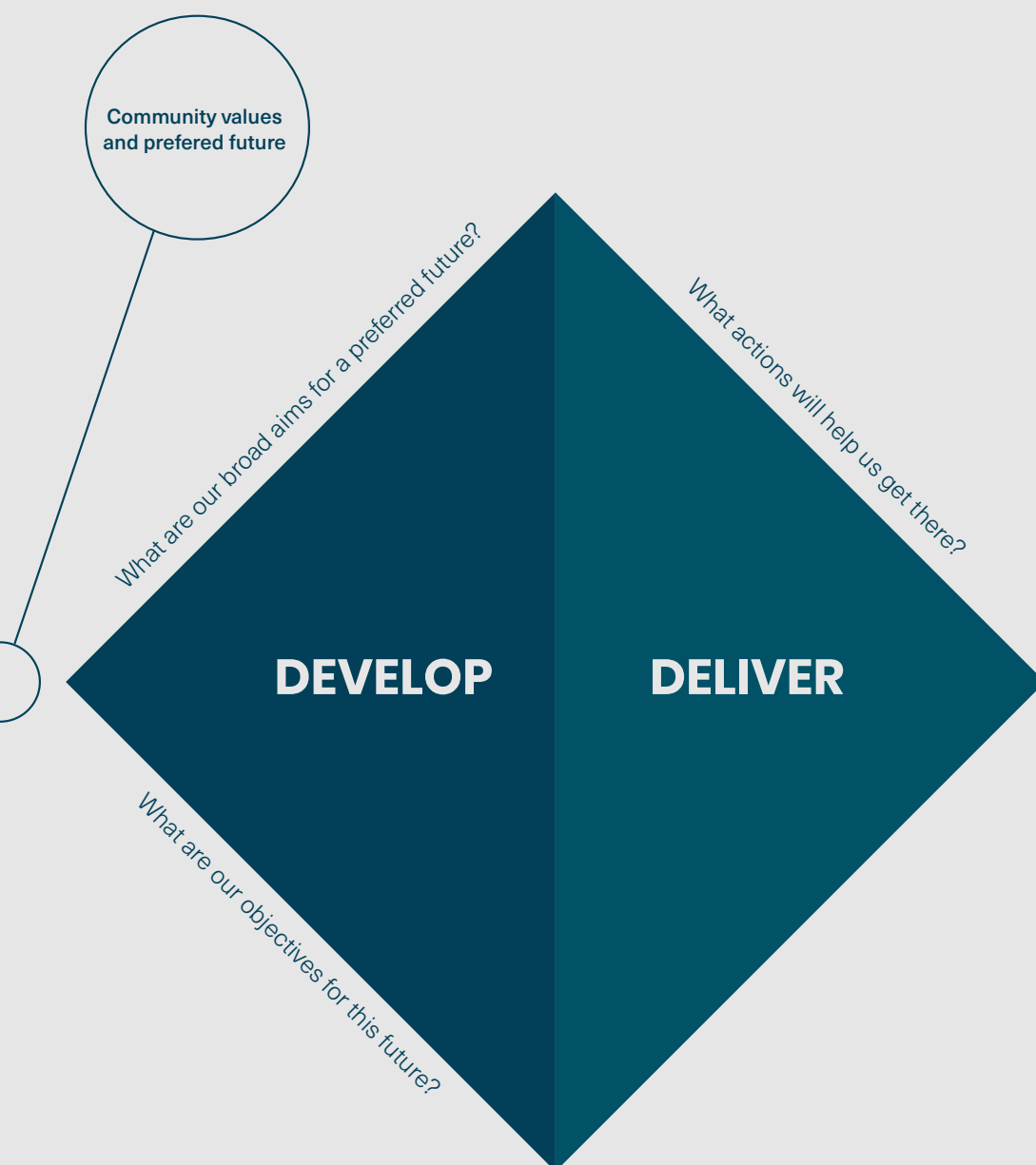


Phase 1 Scoping

Approximately 300 students and staff from across the University helped raise the key issues and priorities for the future of digital education through 15 events and workshops and 50 short interviews. Four core values were distilled from this process. We also researched and published two short reviews and mappings of current technological and social trends informing the near future of teaching.

Phase 2 Scenario Development

Using the values developed in the scoping phase, and drawing on the trend projections, four plausible future worlds and institutional responses to these were debated and developed in two intensive half-day workshops attended by an extended project task group. These established what a *preferable* future for digital education would look like at the University of Edinburgh.



Phase 3

Testing

We developed a set of aims, objectives and actions for building this preferable future, and took them out for testing with University staff and students. We also tested with our future students by running sessions with primary and secondary schools, and followed this by testing with employers. More than 100 people were involved in this testing phase.

Phase 4

Finalising

The vision, aims and actions were finalised and formally approved by the relevant University of Edinburgh committees. The final project report was launched in March 2019.

PROJECT PROCESS MAP

Phase 1

Phase 2



COMMUNITY SCOPING

Looking inward, engaging students and staff across the University in conversation on the future of digital education through workshops and vox pop interviews.

250 staff and students attended workshops and other events

50 students and staff did vox pop interviews



VALUES

Four core values were distilled from the vox pop interviews and workshops with students and staff. These shaped the rest of the project and its outputs.



FUTURE UNIVERSITIES

Four plausible future worlds and institutional responses to these were debated and developed in two intensive half-day workshops attended by an extended project task group of 20 students and staff.



16 students engaged

4 staff engaged

16 staff engaged

4 students engaged

TREND REVIEWS

Looking outward, researching global trends affecting higher education and publishing these as two short trend reviews.

WORLD PROVOCATIONS

Four short provocations were written, which indicated possible trajectories for changes impacting universities.

FUTURE EDUCATION SCENARIOS

Working from the four provocations, the project's steering group built out a series of future education scenarios, outlining how global technological, social, political and environmental shifts might affect education.



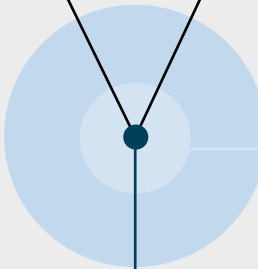
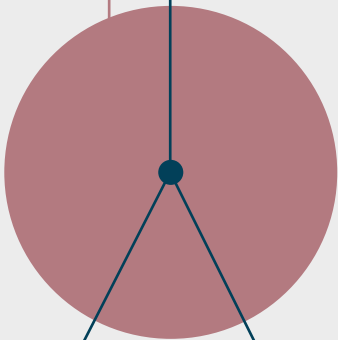
Phase 3



TESTING IN SCHOOLS

Sessions were run with school pupils in order to ensure that the four values were aligned with those of the next generation of higher education students. Pupils were asked to build 'dream schools' while answering questions around themes the project had been exploring.

57 school children engaged



40 students engaged
15 staff engaged

TESTING AT THE UNIVERSITY

Building on the preferable future defined at the end of Phase 2, a set of aims, objectives and short-to medium-term actions was drafted. These were then tested with staff and students, through the use of provocative prototypes which aimed to spark discussion around some of the key issues covered in the vision and strategy.



Phase 4

KEY PROJECT STATS

Project duration	2017–2019
No. of people engaged	400+

All materials are available at:
www.nearfutureteaching.ed.ac.uk

FINAL VISION AND STRATEGY

Input from the testing phase was used to finalise the vision set out in this document, published in March 2019.

PROJECT PHASES

Phase 1 Scoping

Approximately 300 students and staff from across the University raised key issues, concerns and priorities for the future of digital education through 15 events and workshops and 50 short interviews.

Insights from the events were captured in blog posts on the project website. The short interviews were recorded on video, analysed, clustered and edited into common themes. The resulting 13 short, thematic videos are all available on the project web site and give an engaging sense of the perspectives and values of staff and students (online and on-campus).




In addition to this internal scoping, the Centre for Research in Digital Education also produced two short reviews and mappings of current global trends likely to inform the near future of teaching. These are available for download from the project website.



On the basis of this scoping work, four core values were distilled from the work with staff and students using an ‘affinity mapping’ approach. This involved looking across the interviews and events and defining common opinions and perspectives that were raised by individuals. These key issues were captured in the form of a series of ‘opinion cards’. Some examples are shown here, and all the opinion cards are viewable on the project website.

The values expressed and captured in the ‘opinion cards’ were then synthesised into four core values which shaped the rest of the project. These are shown in the ‘Values’ section that follows.



Education should not be treated like a commodity

VALUE 01. OPINION 01

"We resist being treated as consumers, and seeing our education treated as a commodity."
(Student Occupation)

"It puts everyone into a box and if you don't fit in you won't do well."
(NFT Video, Lectures)

"The risk of reducing every aspect of learning to a form of economic capital."
(NFT Blog, Blockchain)

VALUE 01. OPINION 01



Education should encourage creative thought


VALUE 01. OPINION 04

"The university should be a space for learning and un-learning."
(NFT Blog, BME Liberation Group)

"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)

"... avoid being too driven by training in some sense it should be on education that we are focusing on. It should be trying to encourage curiosity."
(NFT Video, Values 2)

VALUE 01. OPINION 04




One-to-one experiences between students and staff should be supported

VALUE 04. OPINION 05

"I really do value that personal one-on-one experience with a lecturer."
(NFT Video, Humans)

"The thing you get from university is the community and the sort of in-person help which is tailored to you."
(NFT Video, Community)

VALUE 04. OPINION 05



Too much technology can threaten wellbeing

OUTLYING OPINION 02

"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

Phase 2

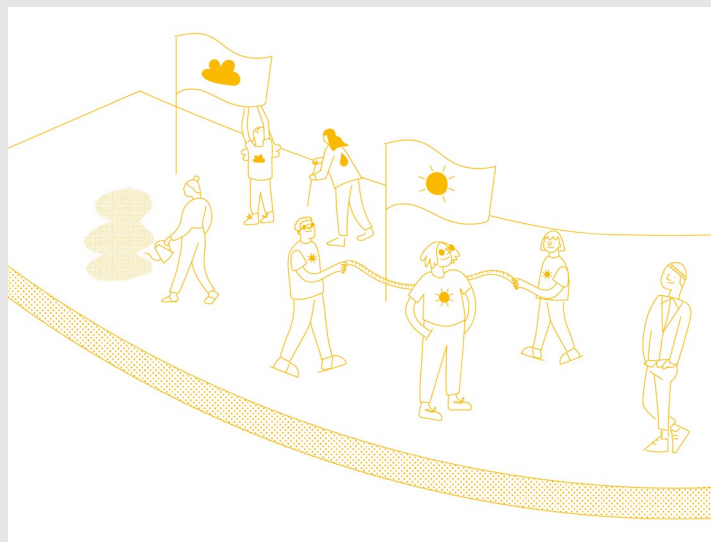
Scenario Development

Using the values and trends projections, four plausible future worlds and institutional responses to these were debated and developed in two intensive half-day workshops attended by an extended project task group of 20 students and staff (detailed in the appendix), and led by Andthen. These set out to understand what a preferable future for digital education would look like at the University of Edinburgh. The future world scenarios and blogged records of the workshops and their design are available on the project website.



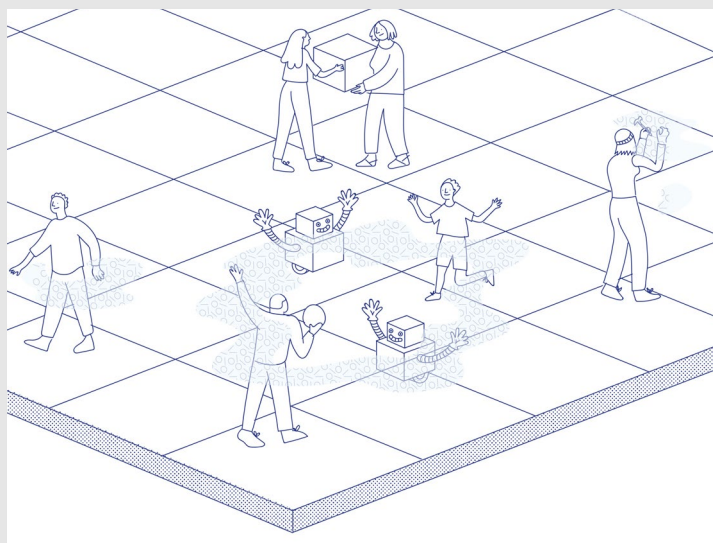
Data, data, everywhere

Datafication
Marketisation
Tight borders
Increased competition



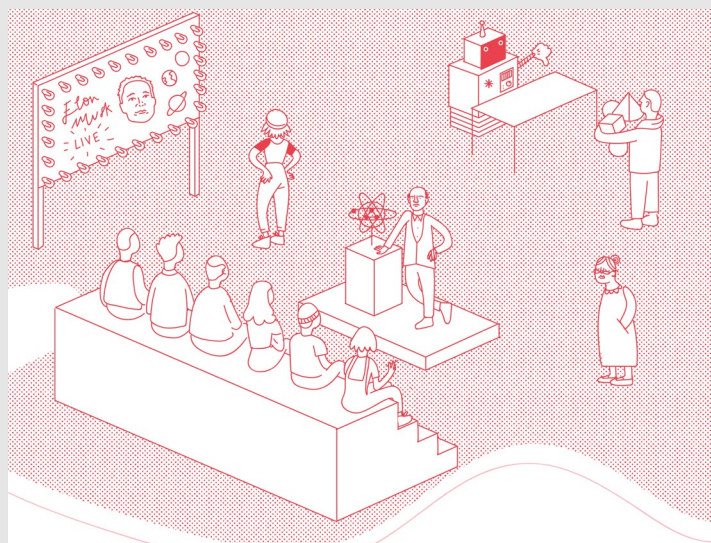
A new ecology

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



Human-machine interdependence

Automation
Human-machine hybridity
Personal missions
Leisure



Uberfication from cradle to grave

Ageing population
Sharing economy
Consumer power
Unbundling

Phase 3

Testing

From these sessions a draft set of aims and indicative actions for a preferred future for digital education were developed by the project team, and taken out for testing in intensive workshops with 15 staff and 40 students. They were also compared with next-generation students' future visions of higher education through two sessions with 57 children in primary and high school, and also tested with employers.



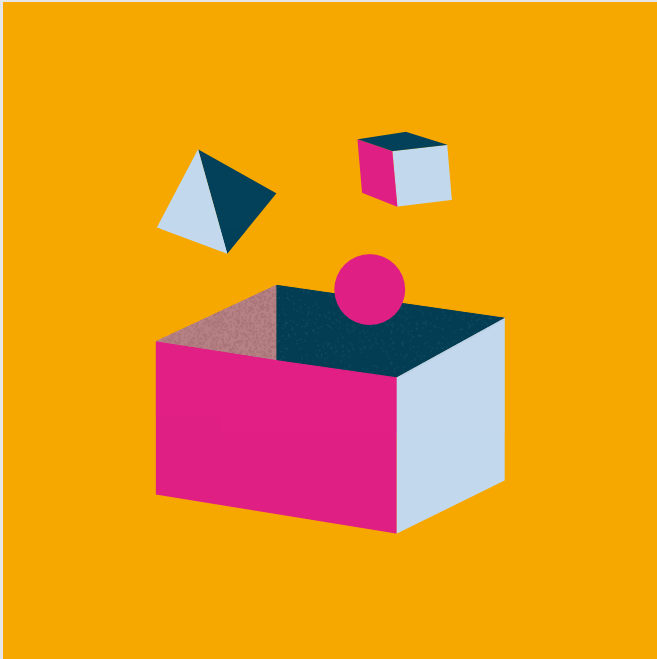
Phase 4

Finalising

The vision, aims and actions were finalised in response to testing, and approved by the Learning and Teaching Committee and by the University Executive. A launch event took place in March 2019.

VALUES

We distilled four core values for near future teaching as defined by Edinburgh students and staff.



Experience over assessment

Learning should not be over-assessed and instrumentalised.

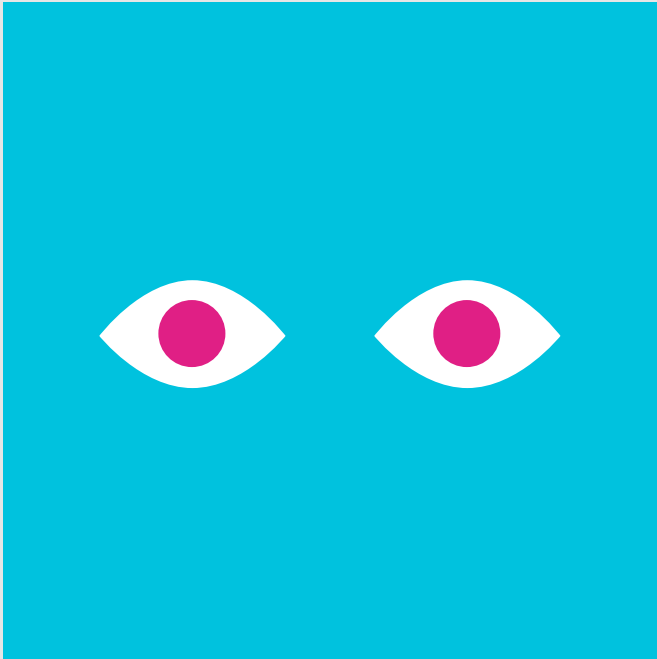
Teaching should share a focus on employability and success with an understanding of the value of rich experience, creativity, curiosity and – sometimes – failure.



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 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.



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.

VISION AND AIMS FOR THE FUTURE OF DIGITAL EDUCATION

The vision and aims for a preferred future based on these values are for a digital education which is:

1.
Community focused

2.
Post digital

3.
Data fluent

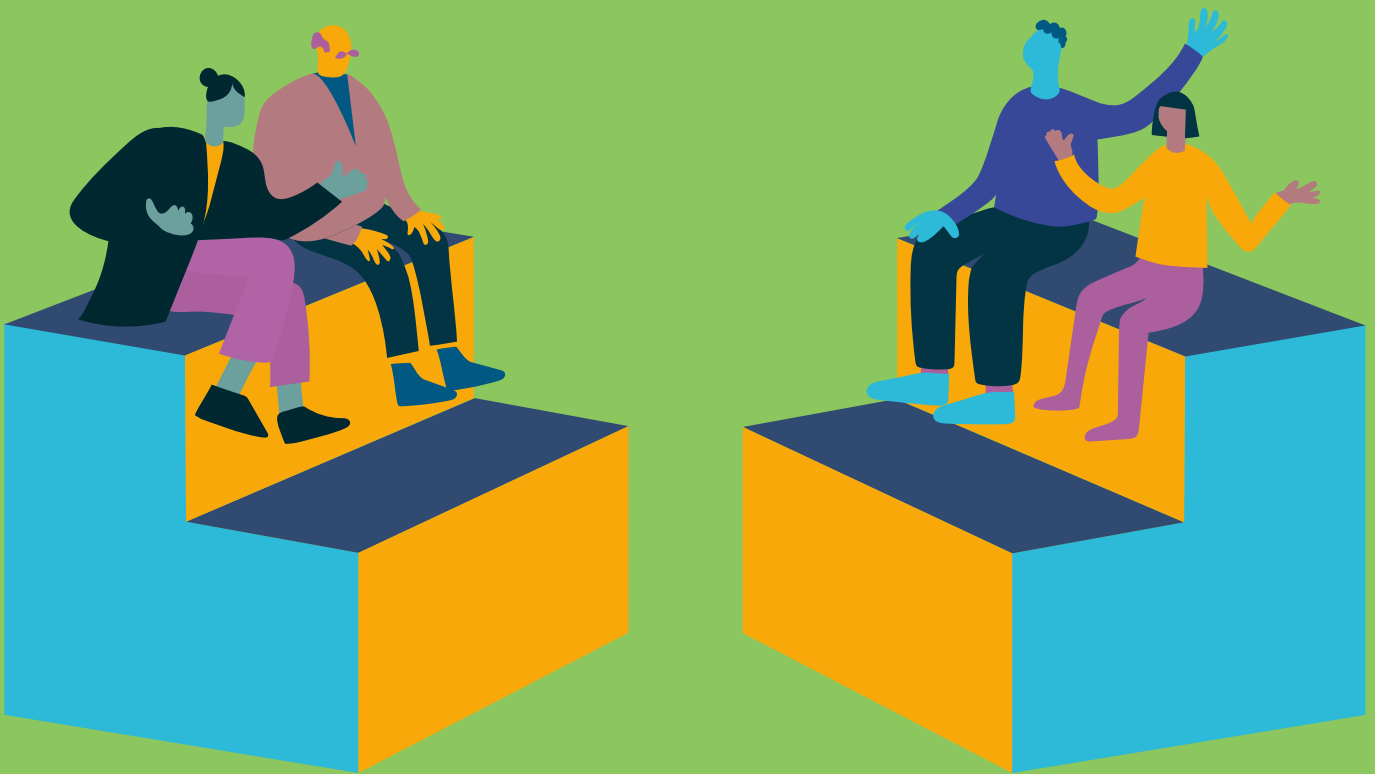
4.
Assessment oriented

5.
Playful and experimental

6.
Boundary challenging

Aligned to these are a set of objectives and short- to medium-term actions for building this preferred future.

Community focused



Aim: digital education with the University community at its heart.

Objectives

Prioritising human contact and relationships.

Connecting our community of scholarship in new and diverse ways.

Committing to technology which makes the University accessible and welcoming.

Short- to medium-term actions

Put the student and staff experience at the centre of educational technology development, decision-making and procurement.

Invest in technology futures which help us build and diversify communities of learners in new ways, with a particular focus on social technology horizon scanning, staff development and support.

Provide easily accessible training to staff and students focused on social media skills specifically for teaching, and develop support frameworks for those experiencing toxicity, trolling and victimisation online.

Use technology to build relationships between students and staff based on trust, resisting logics of surveillance and unnecessary monitoring.

Invest in technologies which offer new ways for remote and off-campus students to be part of the community.

Accompany these with innovative, cross-discipline community building approaches including peer pairing based on shared interests and geographies.

Continue to support and further build existing networks for digital education staff to share experience and practice.

Develop and support digital methods and pathways for building greater engagement with the alumni community.

Post digital



Aim: education which recognises that technology is fully embedded in daily life.

Objectives

Reworking the concept of 'contact time' to reflect contemporary practice.

Breaking down the boundaries between on and off campus.

Rethinking what it means to be 'here' at Edinburgh.

Offering more flexible ways to be part of the University community.

Short- to medium-term actions

Define and embed a re-worked understanding of 'contact time' into workload models and course descriptors, which takes account of student mobility, distance education and flexible patterns of study.

Continue to invest in programmes of work which open our teaching and community to new cohorts of students online and globally, including technologies for increased telepresence for students working off-campus.

Plan for the introduction of technological capacity to teach online and on-campus students together in joint cohorts.

Use our capacity and understanding of distance education to open our teaching in new ways to on-campus students, putting student-focused flexibility at the heart of our offer.

Ensure all staff have the baseline skills needed for a good student experience of digital education (for example the ability to upload slides, to record lectures, to design effective visuals, to tackle accessibility issues, to provide electronic reading lists).

Data fluent



Aim: 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.

Short- to medium-term actions

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.

Establish Edinburgh as a world-leading centre for research in interdisciplinary, data-informed education in key areas such as educational data ethics and data-driven policymaking in education.

Use our research expertise in data to build an ethical, responsible near future for our teaching and to improve student experience.

Create specialist academic development opportunities for staff to fully understand how to analyse and interpret learning and engagement analytics, with an understanding that the datafication of teaching is likely to accelerate and intensify in the coming decades.

Embed critical understanding of data ethics and algorithmic accountability within academic development and staff training.

Support cross-university programmes of work to provide data skills training for staff and students.

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

Develop new, engaging ways for students to work creatively with their own learning data to understand issues around its use and ownership.

Instigate an academic-led programme to scope ways in which transparent, fair, context-sensitive artificial intelligence applications and services could assist and support human-driven teaching.

Establish a cross-institutional, student-led programme of work to develop creative, responsible designs for a 'smart' campus.

Playful and experimental



Aim: enabling creative, academic and student-led R&D for digital education.

Objectives

Confidently opening our teaching practice to technological change.

Being energetic in designing new, creative ways of teaching digitally.

Using our academic expertise to develop and scale up new forms of digital education.

Making access to technical development expertise easier for staff and students.

Short- to medium-term actions

Invest to give academics more time to be creative and risk-taking in their use of digital education.

Provide teaching staff and students with central access to programmers and developers for joint prototyping and trialling of new ways of doing digital education. Support associated pedagogic research through the Principal's Teaching Award Scheme and other channels.

Support staff and students to scale up and spin out digital education ideas and applications.

Extend existing media production facilities and makerspaces into new areas such as biohacking.

Fund a cross-institutional programme of work to scope and develop new virtual and augmented realities for teaching.

Assessment orientated



Aim: digital education with
a focus on assessment and
feedback.

Objectives

Diversifying assessment practice.

Making assessment more engaging for students and academics.

Supporting new kinds of feedback.

Short- to medium-term actions

Launch a cross-university, discipline-sensitive programme of work to increase diversity in forms of assessment, including multimodal (video, audio, image, making) and experiential forms (projects, blogs, reflections, reports).

Build a culture – supported by technology as appropriate – in which students have greater choice over the form of their assessments. Enable risk-taking by, for example, giving students greater choice over which assignments count toward final marks.

Focus academic development and course design around building exceptional learning experiences, rather than on assessment and performance.

Promote a culture shift away from exams where possible. Use appropriate technology, including AI-supported methods, to enable peer assessment, self assessment and timely formative feedback.

Critically evaluate and build capacity for high quality automated assessment and feedback appropriate to disciplines, as a way of augmenting and supporting human assessment.

Create a platform to open up students' access to each other's assessed work after submission for peer learning and feedback.

Boundary challenging



Aim: digital education
that is lifelong, open and
transdisciplinary.

Objectives

Building a culture of lifelong learning.

Supporting teaching which transcends disciplines.

Committing to openness.

Connecting to the city and region.

Short- to medium-term actions

Promote and support initiatives which open up our education to broad, diverse groups of learners, in the form of high quality, affordable online accredited programmes, open courses, micro-credentialing and continuing professional learning.

Build capacity for individuals to develop a lifelong relationship with the University regardless of their geographical location or career stage, via open and digital education.

Make it easy for local people to be part of the university community through informal as well as formal learning.

Invest to develop transdisciplinary, university-wide courses in key areas, bringing together the best of our online and on-campus teaching.

Continue to develop codesign methodologies to build student and partner agency in curriculum and learning space design.

Open all course content to all enrolled students and continue to develop and support existing work in open education.

APPENDIX

Project team

The project was sponsored by the University of Edinburgh Senate Learning and Teaching Committee, and led by the Assistant Principal for Digital Education. It was supported and resourced by the Institute for Academic Development, the Information Services Group and the Senior Vice Principal. It contracted facilitation, planning and design expertise from the Glasgow-based agency Andthen, who designed and led production workshops and events with students, staff and schools, and undertook aspects of the analysis, scenario development and project synthesis.

Core Team

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