

# New directions for higher education: Towards a Connected Curriculum

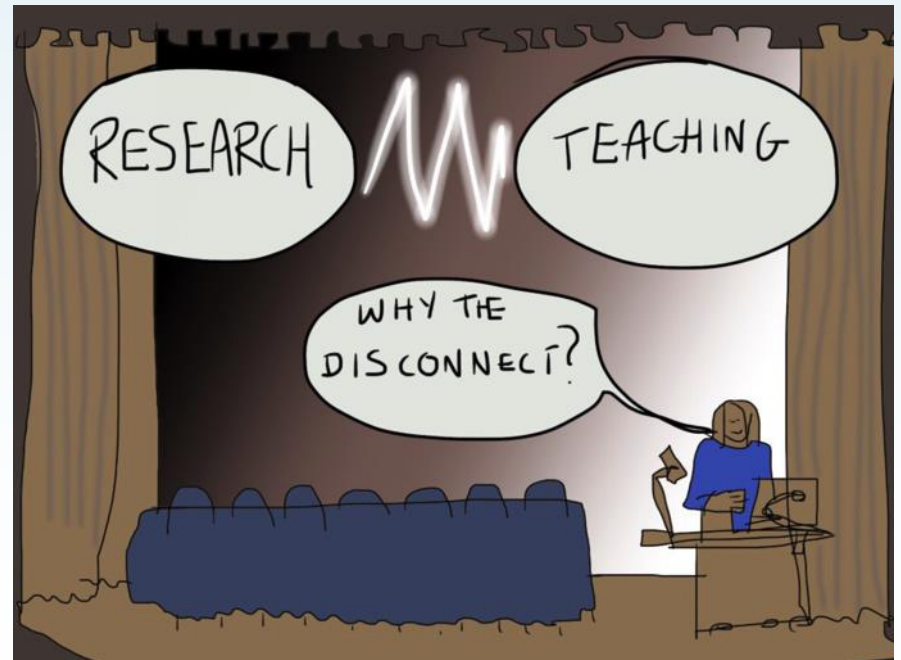
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EUA Paris 2017



1. Higher education for a changing world

2. Research-based education

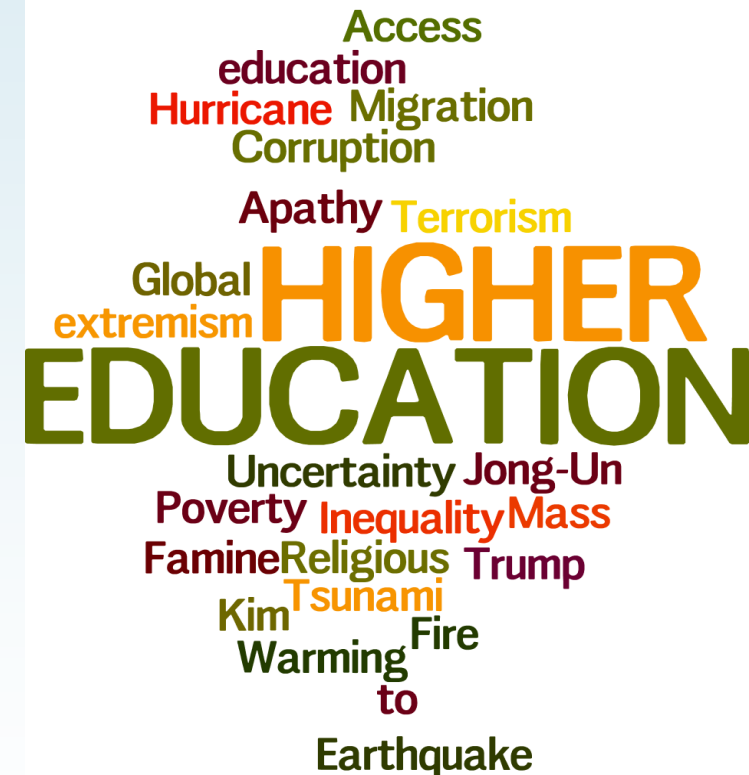
3. The Connected Curriculum initiative

4. Enablers of change

5. Q&A

## 21<sup>st</sup> Century explosion

- Political, social, economic and environmental upheavals
- New possibilities, including technological advances
- Impact of the digital: open education; citizen science...
- Learning: no longer receiving knowledge from established authorities and reproducing it, but curating and creating meanings while producing new outputs



# **‘Good’ education: a philosophical framing**

Drawing on philosophy, education may be defined as:

- ‘self-formation’ and collective advancement through critical dialog
- the widening of horizons

(Gadamer, 2004)

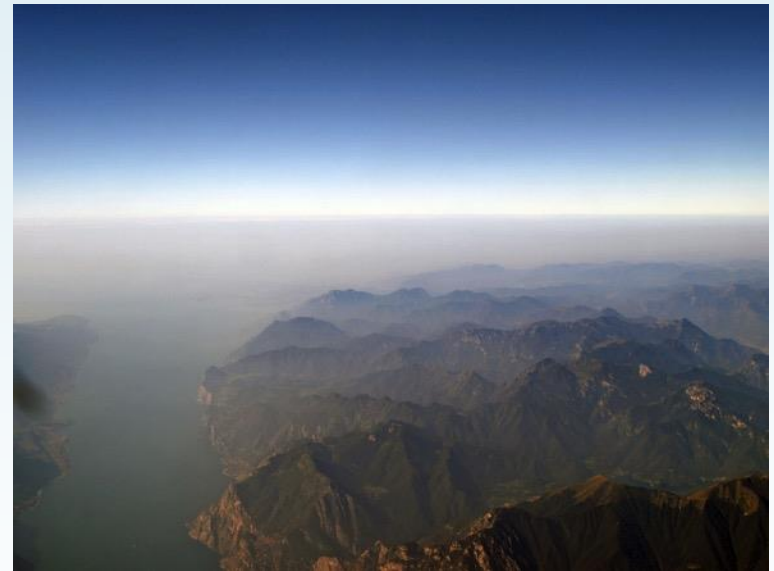
Education is underpinned by the need for the human mind to remain ‘unsatisfied with what it imagines it knows’ (Fairfield 2010, 3).



# What is education *for*?

Education is  
'for the global common  
good', embodying a  
'shared responsibility  
for a sustainable future'

(UNESCO 2011, 9)



# **‘Good’ education: a scientific framing**

Increasing evidence through empirical studies that students learn more effectively through active, enquiry-based learning as long as it is structured with peer collaboration and dialogic feedback.

See, for example, Blessinger and Carfora eds. 2014; Wood 2010; Spronken-Smith and Walker 2010; Levy and Petrulis 2012.



## **Comparing traditional teaching with enquiry-based learning** (Wieman and Gilbert 2015)

Comparative experiment: students who had to engage in interactive, research-based methods and received feedback from fellow students and their instructor were later tested in a quiz designed to ‘probe the mastery of the learning objectives’ (155).

Students engaging in active enquiry outperformed the other, traditionally taught student cohort significantly, across the entire distribution.

# Excellent education in research-rich universities

(Fung, Besters-Dilger and van der Vaart, 2017)

‘[B]eing part of a research-rich culture benefits students by providing them with a range of approaches to knowledge and knowledge production. These relate to ... the specific academic, cultural and professional practices of particular disciplines and/or of thematic interdisciplinary investigations.

Benefits for students also arise from the intellectual depth associated with engaging in any cutting edge investigations, and from the range of skills associated with independent and collaborative enquiry.’ (5)





The traditional model of the relationship between teaching and research needs to be replaced with a more inclusive notion of **‘scholarly knowledge-building communities’**.

(Brew 2006, 18)



## ***A Connected Curriculum for Higher Education***

**Dilly Fung**

**UCL Press**

***Open access at***

**<https://www.ucl.ac.uk/ucl-press/browse-books/a-connected-curriculum-for-higher-education>**



Dilly Fung

**A Connected Curriculum  
for Higher Education**

**UCLPRESS**

## Applied to institutional strategy at UCL

At University College London, our top strategic priority for the next 20 years is to close the divide between teaching and research.”

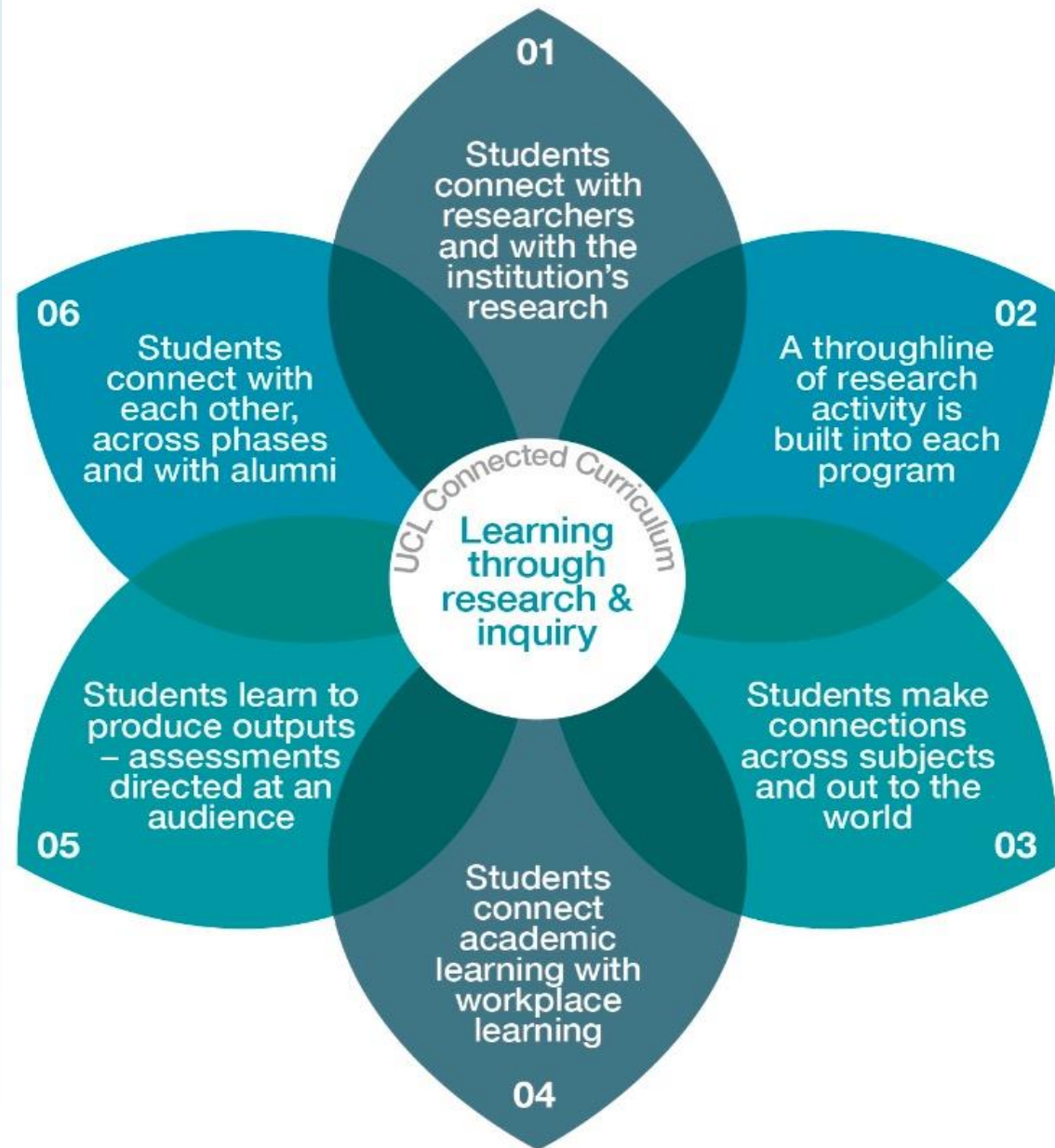
(Michael Arthur, President and Provost,  
UCL, 30 April 2014)

A key part of the *UCL 2034* Strategy

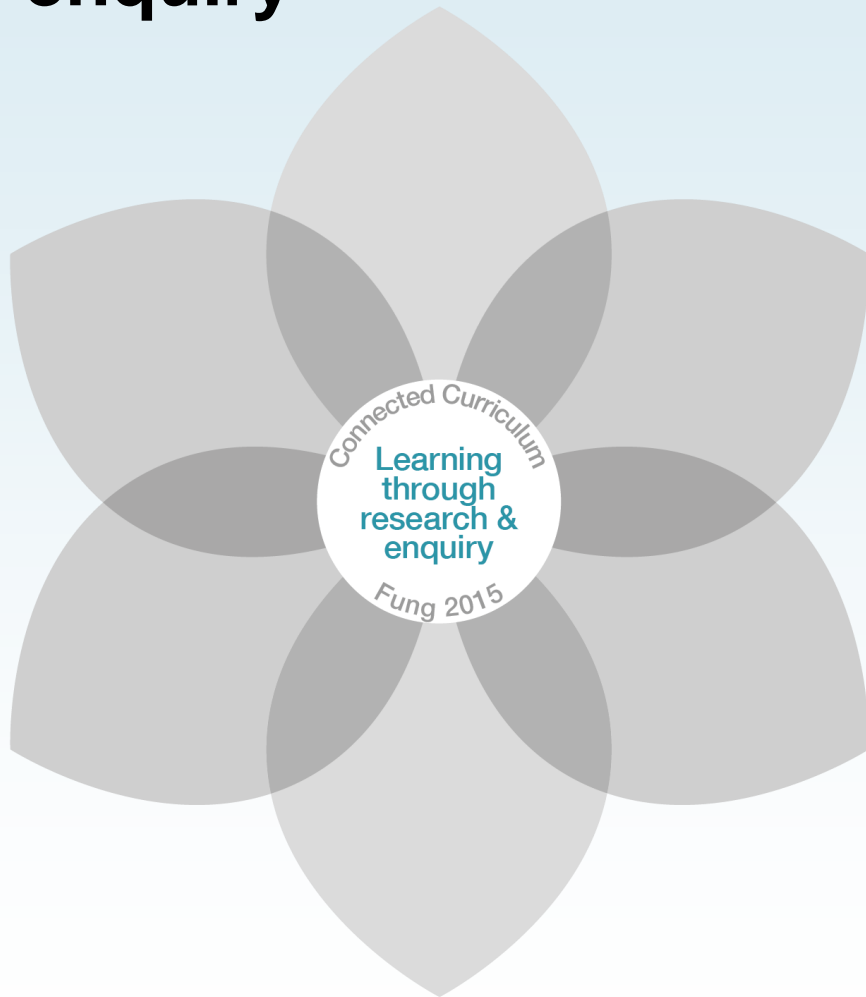


# The Connected Curriculum framework

(Fung 2017, 5)

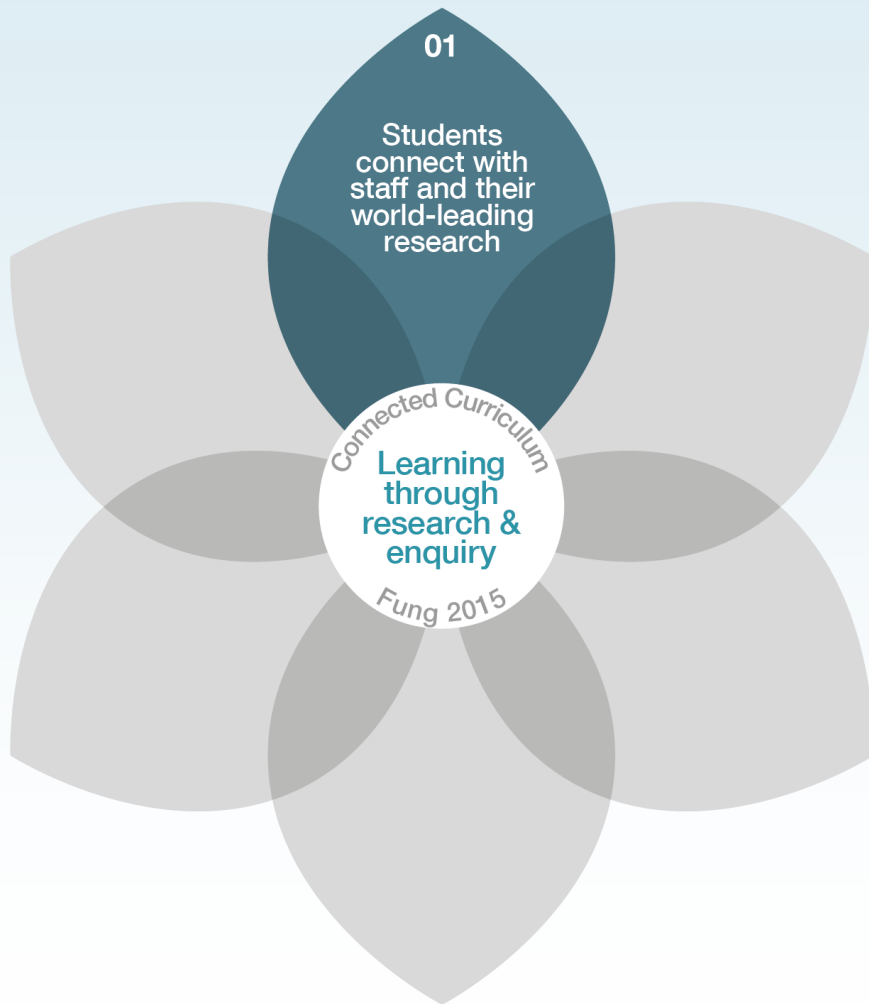


# The core principle: learning through research and enquiry



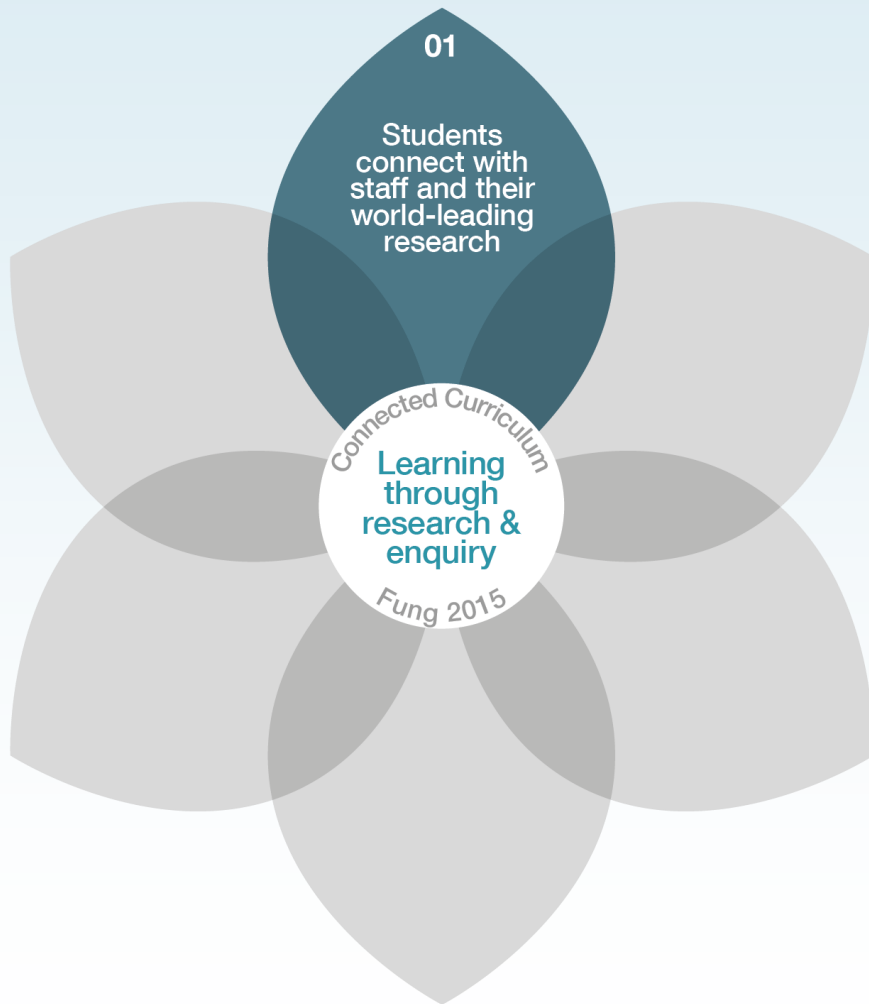
- What *is* research in our subject(s)? What principles, practices and values underpin *our* research?
- In what ways, and when, are our students already engaging in forms of enquiry and/or their own investigative research?
- Do our approaches to student assessment promote authentic enquiry?

# Connecting with research and researchers



- Are students introduced to and inspired by the latest research in the field, including that undertaken by the department?
- Do their courses and the wider activities and events in their department enable them to meet, learn from and even challenge researchers and scholars?

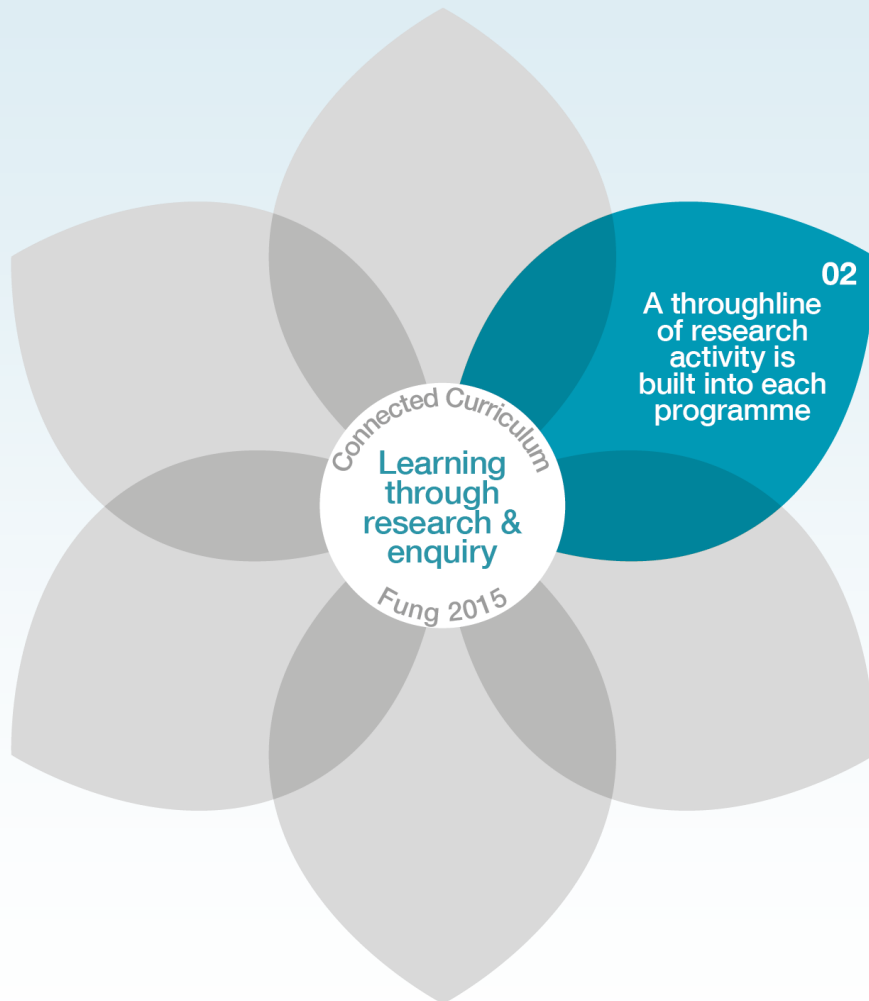
# Connecting with research and researchers



During induction week 145 first-year UG students in Brain Sciences view a selection of videos with academics discussing their research, identify someone to interview, & present findings in seminar group.

**Meet Your Researcher**  
 template available at  
[https://www.ucl.ac.uk/teaching-learning/connected-curriculum/Meet\\_your\\_researcher](https://www.ucl.ac.uk/teaching-learning/connected-curriculum/Meet_your_researcher)

# A 'throughline' as part of programme design



- Is there a connective storyline of enquiry, e.g. in the pattern of learning/research activities and assessments, which helps students to build their own coherent learning narrative?
- Is there a clearly constructed sequence of enquiry-based activities across the years of study that enables students to go beyond accumulating knowledge and develop themselves reflectively as critical, creative people?

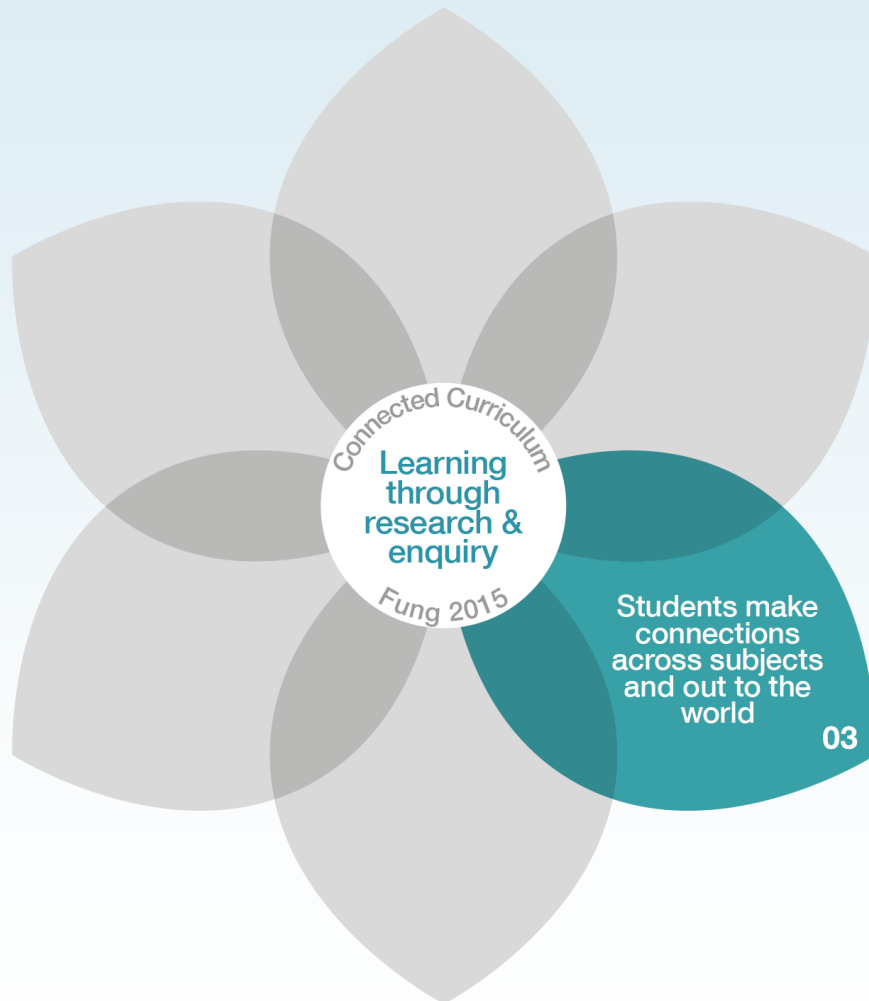


## Showcase portfolio

Just one way of creating a more connected throughline

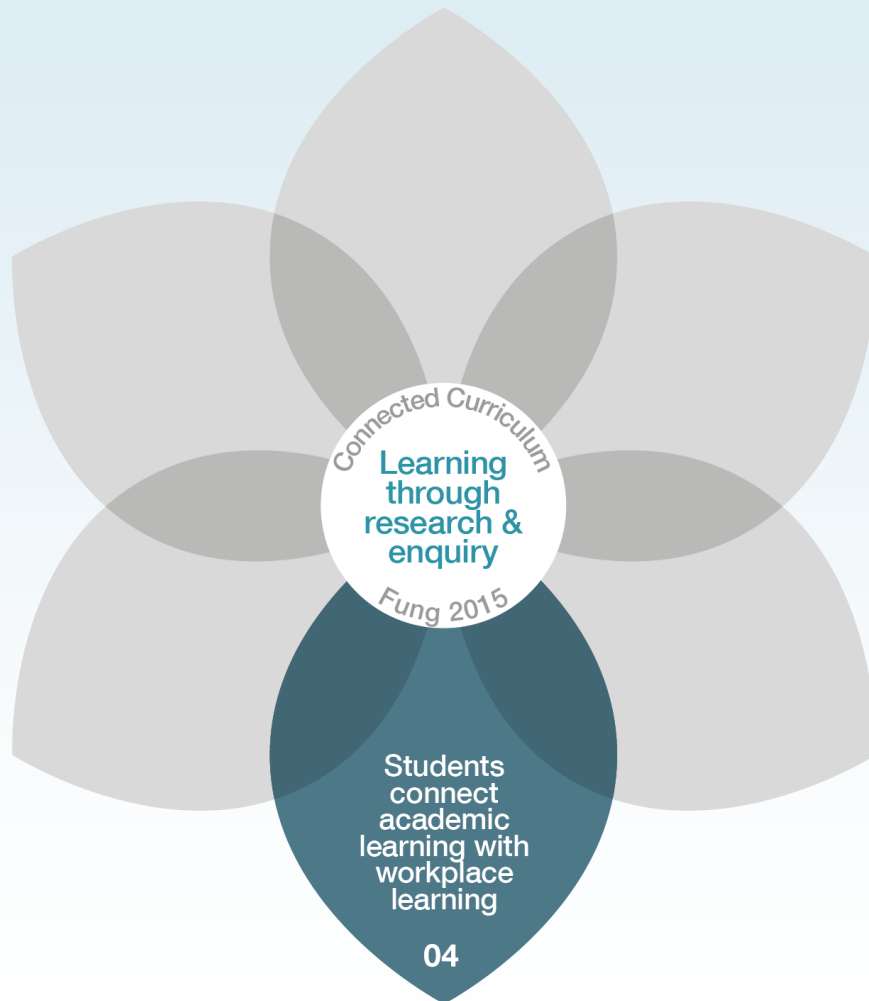
- Programme-wide assessment
- Curated* portfolio: empowers students
- Can include a narrative 'wrapper' (e.g. blog or video introducing learning and its 'outputs' to an external audience, such as a future employer)

# Outward looking, interdisciplinary connections



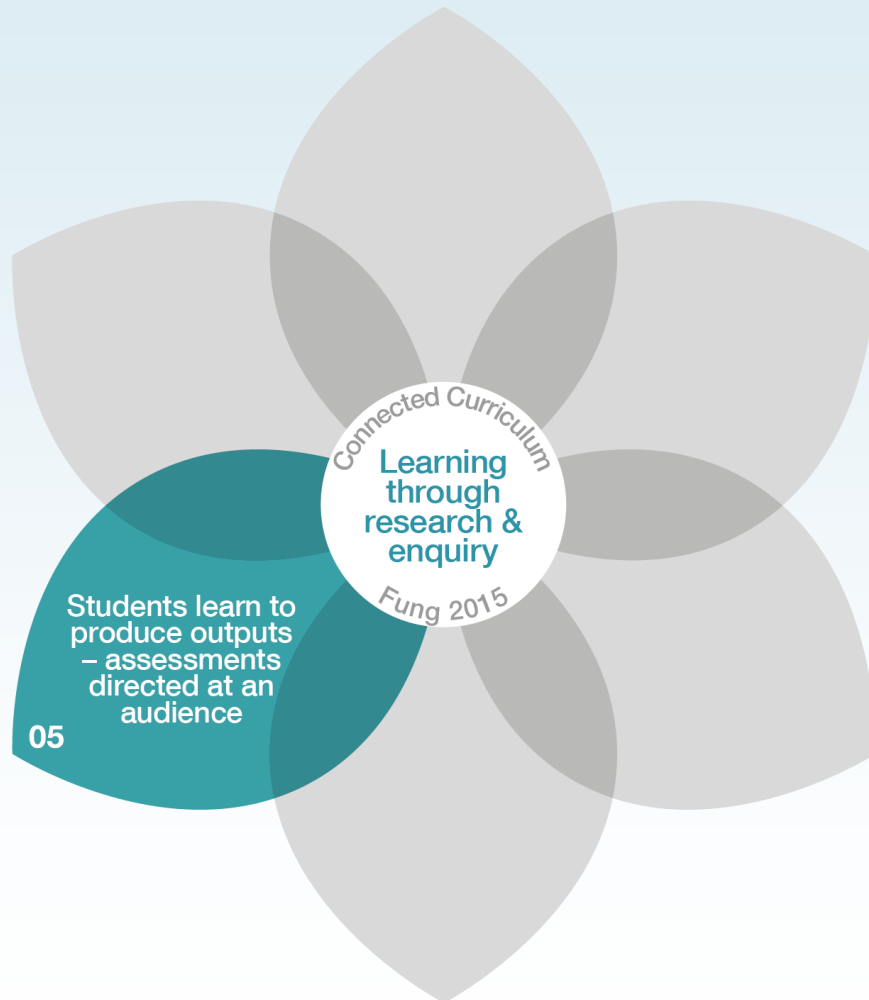
- Can students connect outwards from their immediate subject(s) of study and learn to tackle multi-layered challenges using different 'knowledge lenses'?
- In doing this, can they build understandings of and links with appropriate external communities and organisations?
- Are they encouraged to analyse their ethical bearings through developing research integrity, social responsibility and global citizenship?

# Workplace connections



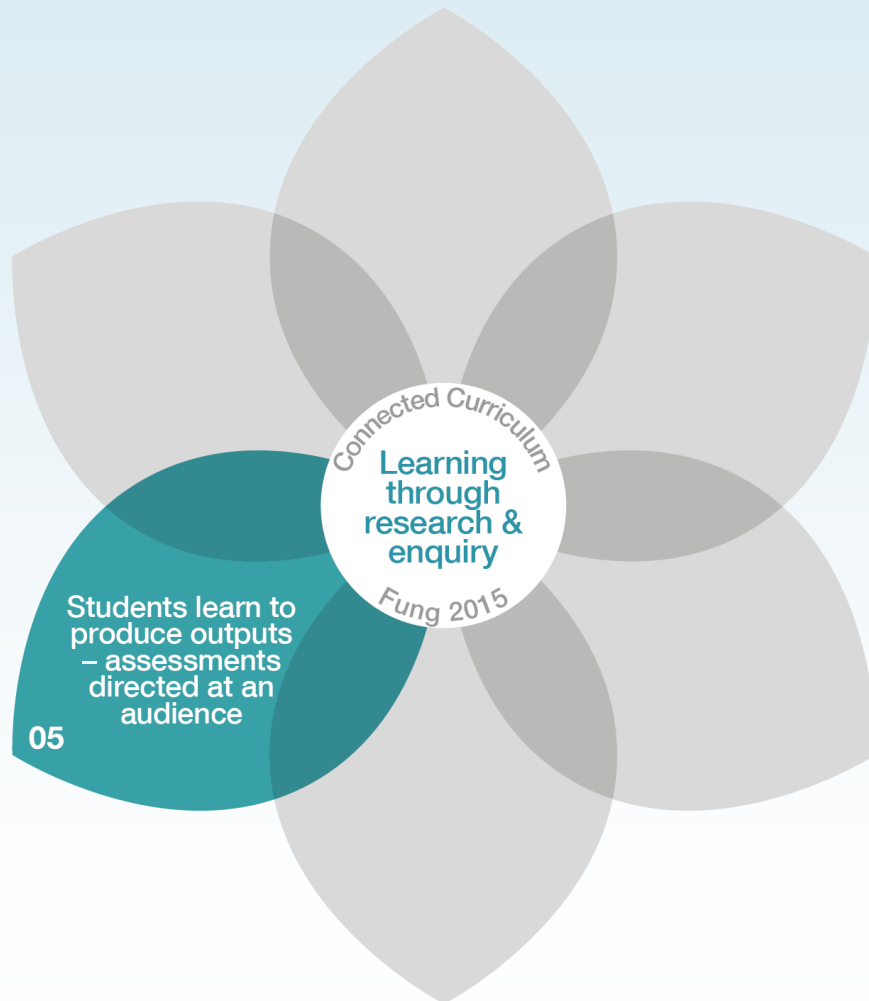
- Are students developing a range of professional attributes, such as leadership, project management, creativity, communication and problem-solving skills?
- Can students make and articulate conceptual and practical connections between their academic learning and the lifelong learning needed for employment and for their future lives?

# Outward-facing student assessments



- Are some assessments of student learning outward facing, directed at an identified audience, giving students a voice beyond the class?
- Can students demonstrate an ability to use a range of digital media effectively, as well as different modes of writing, visual and oral communication, as they express their insights and arguments to others, both within and beyond the institution?

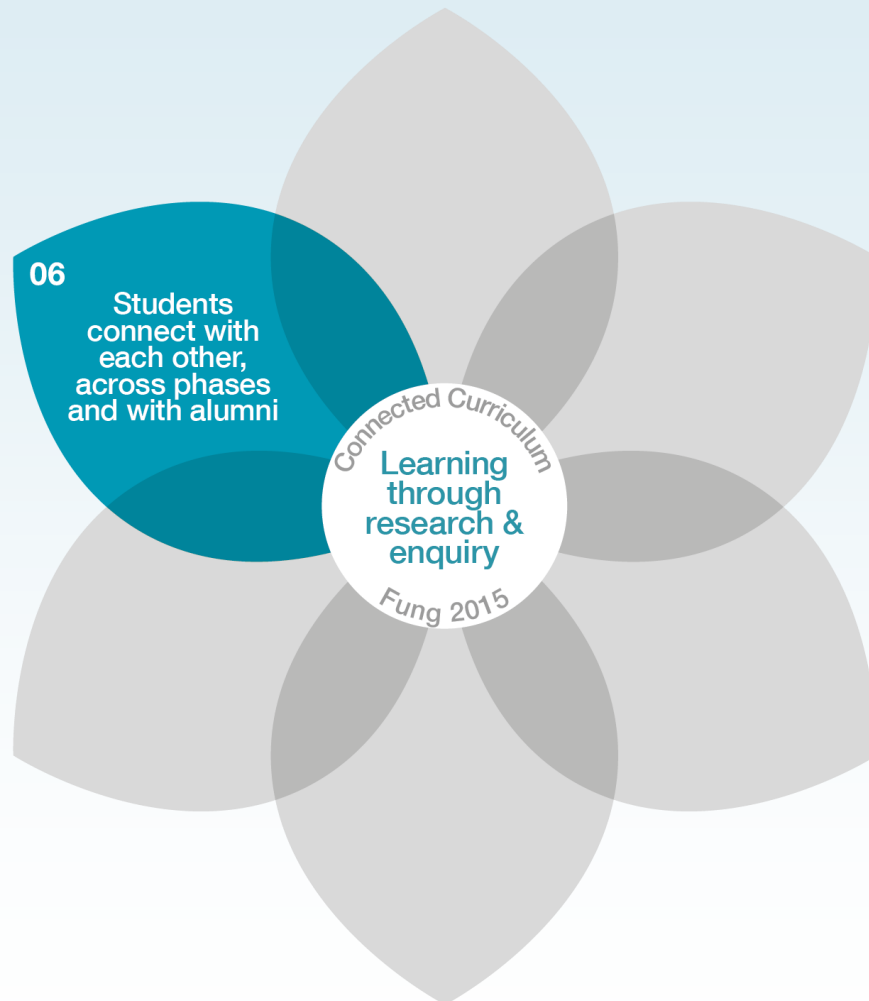
# Outward-facing student assessments



At UCL, students in Museum Studies develop a public engagement series and digital resources.

Other assessment modes include grant bids, articles for specific journals, film documentaries, blogs, posters for conferences...

# Human connections

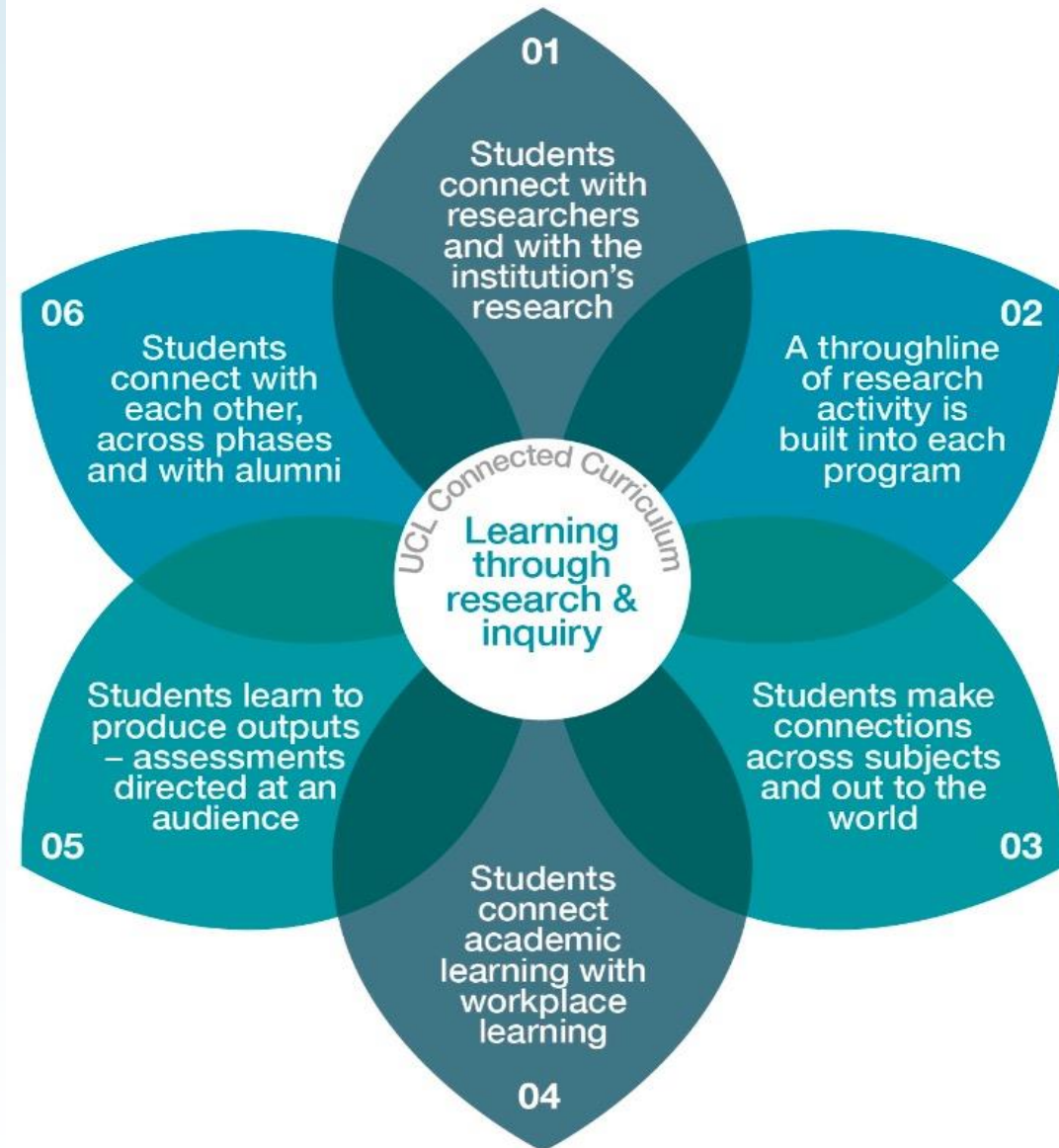


- Are students explicitly invited into an inclusive research and learning community?
- Are there opportunities for them to meet, mentor and work collaboratively with their fellow students across year groups?
- Are alumni actively engaged in the learning and research community, e.g. by enriching the curriculum with their expertise, contributing to mentoring schemes or working with departments to enhance their educational provision?

# The Connected Curriculum

**See Fung, D. (2017)**  
***A Connected Curriculum for  
 Higher Education***  
 UCL Press: London

***Open access at***  
<https://www.ucl.ac.uk/ucl-press/browse-books/a-connected-curriculum-for-higher-education>



## Students as leaders and agents of change



<http://www.ucl.ac.uk/changemakers>

Co-creation to enhance the student learning experience.

Students and staff work in partnership with each other on education enhancement projects.

Projects involve teams of students partnering up with faculty members to investigate an educational issue and make improvements or to pilot a change and evaluate it.



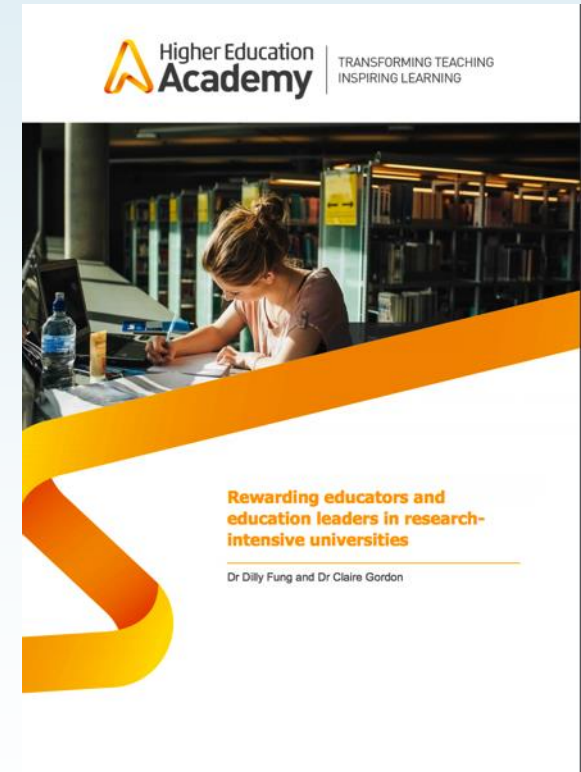
# Rewarding educators and education leaders

(Fung and Gordon 2016)

We must break down some of the structural and conceptual divides between research and education.

We can then *not only* develop distinctive new forms of research-based education *but also* move towards achieving 'parity of esteem' for educators and researchers.

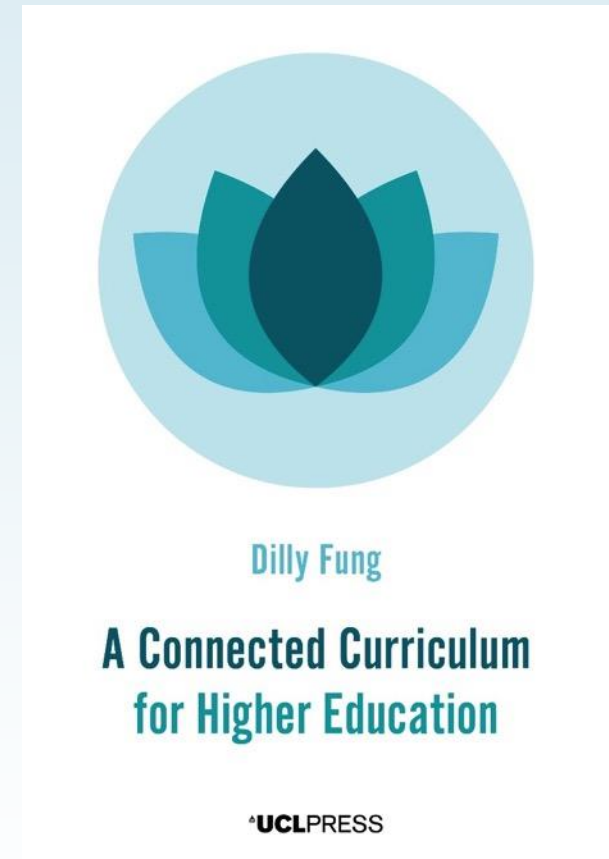
This means re-framing higher education as an ecosystem. The moment is now!



## New directions for higher education

‘Connecting education more readily with research can enable students to work in partnership with universities to develop even stronger societal and global missions. [It can] also build stronger bridges between research, education, professional practice and society. As these boundaries are crossed, so older hierarchical distinctions become less powerful, and new kind of conversations and collaborations become possible.’

Fung (2017, 156)



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