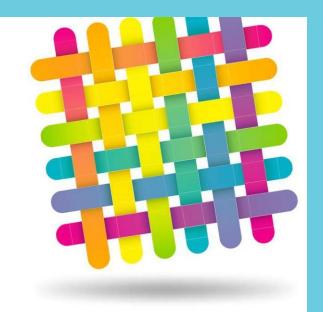




Supporting undergraduate interdisciplinary engagement and meta-Cognition:

UCIL's Introduction to Interdisciplinary Learning

Dr Maria Kopsacheili Learning and Assessment Developer Introduction to Interdisciplinary Learning



Welcome to Interdisciplinary Learning with UCIL!

You are about to embark on a learning journey that might feel a little different to your experience at university so far.

<u>Introduction to Interdisciplinary Learning - Overview | Rise 360</u>

- ☐ 2-hour online course attached to all UCIL units
- Not assessed
- ☐ Trial in Semester 1 25/6, full launch in Sem 2
 - ✓ Goals, development process, content examples
 - ✓ Lessons learnt from working with students and academic partners

UCIL'S PORTFOLIO

















- ☐ 34 credit-bearing units, electives, 2nd and 3rd year UGs
- One PG unit
- Online, blended, face to face
- ☐ Rising enrolments (3000+ annually) & expanding portfolio
- Broad range of units: complex problems & skillsfocused
- Teaching staff from all faculties
- → Variety in ID T&L methods and student support
- → Variety in the student experience of IDL

How can we make the student experience of IDL more consistent across the board? How can we empower our students and enhance their sense of belonging?

DEFINING AIMS AND ILOS



Members of the UCIL Team at the Interdisciplinary Learning & Teaching Conference, London School of Economics, 10.04.25

The Student Voice

- ☐ Unit Surveys
 - ✓ 3 online, 3 blended, 3 ftf units
 - ✓ Over 4 semesters, 2023-25
 - ✓ Mean response rate: 17.19%
- ☐ End of online module questionnaires (Visualising Information, Why China Matters, Leadership in Action)
- □ 2 x Student Focus Groups (on campus)

Academic Advisory Group

→ Focus on Student Engagement & the development of Meta-cognitive Skills

STUDENT ENGAGEMENT & METACOGNITION

SE in a broad Higher Education context:

'Student engagement has been defined **as "participation in educationally effective practices**, both inside and outside the classroom, which leads to a range of measurable outcomes" (Kuh et al., 2007)'.

(as quoted in Trowler, V. 2010, 7)

Considering SE in the context of ID study:

"Interdisciplinary learners integrate information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines to craft products, explain phenomena, or solve problems, in ways that would have been unlikely through single-disciplinary means."

Mansilla, V.B. 2010, 289.

- → a process that requires sustained cognitive effort, openness, reflection
- → But: Students' lack of experience

STUDENT ENGAGEMENT & METACOGNITION

'Gourgey (1998) offered this perspective on the nature of metacognition: "Whereas cognitive strategies enable one to *make* progress—to build knowledge—**metacognitive strategies enable** one to *monitor and improve* one's progress—to evaluate understanding and apply knowledge to new situations."

What skills does the ID study learner develop?

Our students tell us about:	Scholarship identifies:
 Collaboration with students from other programmes Thinking about a problem in ways they hadn't considered before Critical thinking 	 Collaboration within teams Analysing complex problems, combining multiple perspectives, Critical thinking Perspective change Tolerance to ambiguity Sensitivity to bias and ethics Enhanced creativity etc. (e.g. Oudenampsen et al. 2024; Ivanitskaya et al. 2022

INTENDED LEARNING OUTCOMES (SELECTION)

Catagamy of autooms	Studente obeuld/will be oble to.
Category of outcome	Students should/will be able to:
Knowledge and understanding	- recall and relate key concepts of interdisciplinary pedagogy
	- articulate the value of interdisciplinary study and collaboration []
Intellectual skills	- start comparing and contrasting methods of own discipline with other disciplines and identifying synergies []
Practical skills	- experiment with self-reflection tools to evaluate their IDL experience []
Transferable skills and personal qualities	- articulate the way in which they learn by being exposed to knowledge and methods outside their own field (self-awareness)
	[]

COMPONENTS

- ☐ 4 self-contained components
- ☐ Variety of text-based and AV content
- ☐ Features academic experts, TAs, and students





Prof. K. Flanagan and Dr Ian Burney giving top tips to UCIL students about their learning journey

MODULE 1 - INTERDISCIPLINARITY AND YOUR LEARNING JOURNEY

- 1.1 So, what is interdisciplinary learning?
- 1.2 The benefits of interdisciplinary study
- = 1.3 Your subject area and how it speaks to other disciplines
- 1.4 How can you make most of your interdisciplinary learning journey?

MODULE 2 - BEING AN INTER-DISCIPLINARIAN IN THE 21ST CENTURY

- 2.1 Interdisciplinary learning and the modern world
- 2.2 The interdisciplinary mind, skills and employability

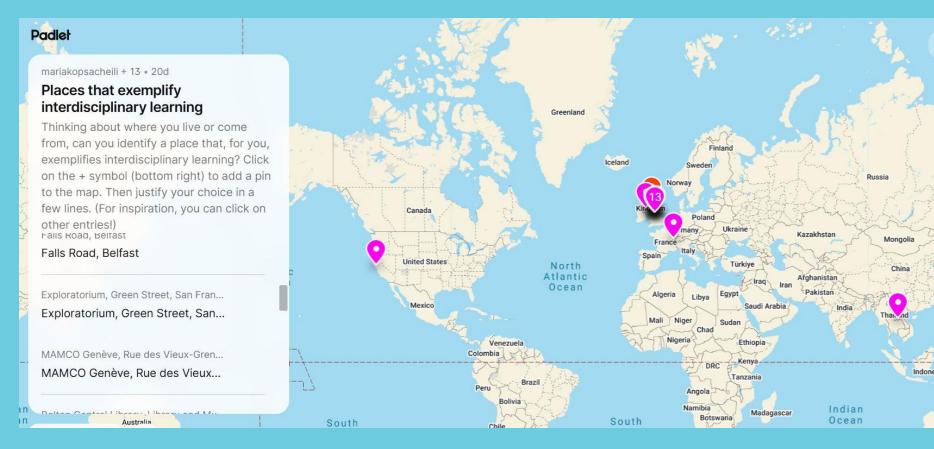
AN INTERDISCIPLINARY MAP OF MANCHESTER

Inspired by:

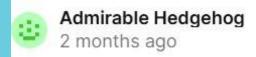
- Assignments in UCIL's portfolio
- ☐ UCIL Away Day 2024

To encourage:

- ☐ Student thinking about the value of IDL beyond the classroom
- Exploring more about IDL according to own interests
- ☐ Sense of community of learners



https://padlet.com/mariakopsacheili/places-that-exemplify-interdisciplinary-learning-1xm2ab7bf80r1ye5



The Whitworth, Oxford Road, Manchester

This place blends education, research, achievements and arts in an innovative way. By hosting graduation ceremonies and exhibitions it promotes intellectual growth, collaboration and inclusion beyond what happens in class.

Location

The Whitworth, Oxford Road, Manchester



Location			
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Serious Peacock

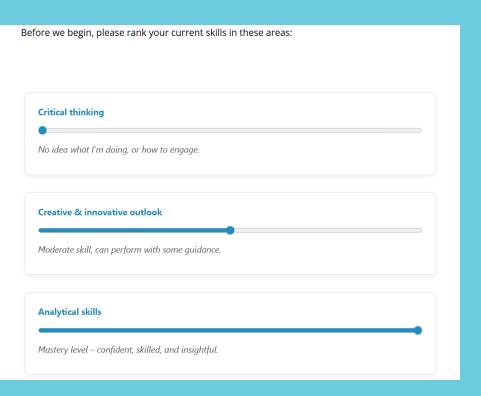
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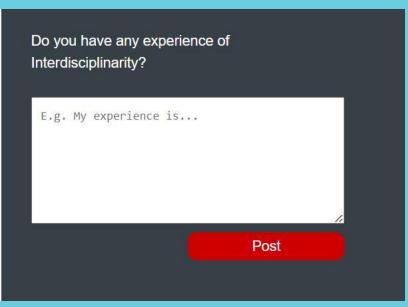
Exploratorium, Green Street, San Francisco, CA, USA

- museum with displays about science in many fields
- e.g., weather, psychology, material science, biology, etc.
- hands-on learning environment that encourages children and adults to participate
- pair and group activities where the outcome can vary depending on the



EXAMPLES OF INTERACTIVE ELEMENTS, MODULE 1







Skills-slider

Freeform response tab

3 Dimensions of IDL

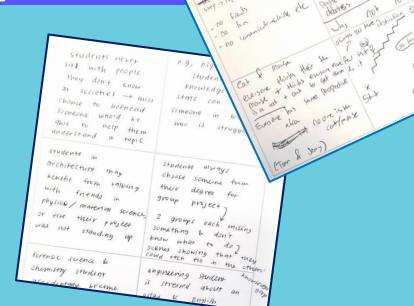
CO-CREATING WITH STUDENTS: GIVE PLENTY OF TIME!

The 'After the Credits' storyline

Scenario for interactive web-comic for Module 1

☐ To get students thinking about the benefits of IDL.

- -What happens when one engages in IDL opportunities?
- -What happens when one misses the opportunity?
- ☐ Branching scenario
- ☐ Used divergent design technique ('From 6up to 1up')
- ☐ Popular: Halls of residence, Societies, Idea of supporting each other
- ☐ The process took about 1 hour
- ☐ Invaluable student feedback for a **relevant and realistic** storyline





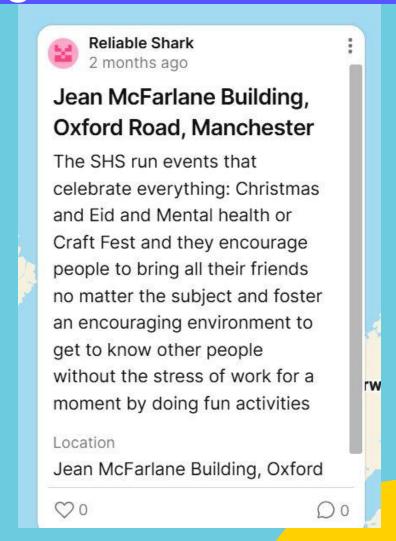
CO-CREATING WITH STUDENTS: BE PREPARED FOR THE UNEXPECTED! IDL and Student Wellbeing

Very popular in student feedback:

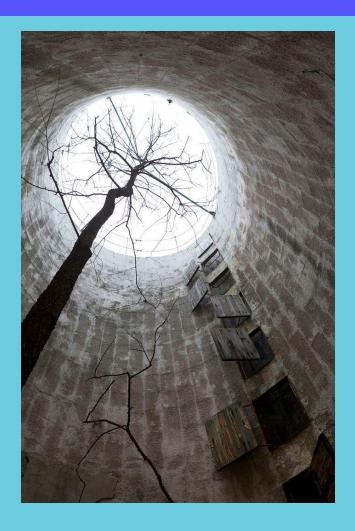
- "Making new friends"
- "Face to face time"
- "Refreshing", "Different"/ "Novel", "Enjoyable"

"[Studying an interdisciplinary unit has been] **incredibly important for my wellbeing:** I loved it that I had this module I could turn to when my other courses felt overwhelming."

Student in UCIL20301/20801 *In Frankenstein's Footsteps: Science Fiction in Literature and Film*



SOME REFELECTIONS FROM WORKING WITH ACADEMIC PARTNERS



Important to:

- Stay clear from turning "interdisciplinary studies" into yet another "disciplinary silo"
- Endorse variety of ID pedagogies
- Focus on integration skills

Sharing good practice in ID teaching:

 Can improve practices in disciplinary contexts (e.g. Assessment for diverse student cohorts)

Interdisciplinary learning is often described as 'breaking the boundaries of disciplinary silos.' A tree rises inside an empty silo near Lawrence, Kansas. Credit: Steve Hebert for The New York Times.

THE INTRO TO IDL BEYOND UCIL

- UCIL's remit: increasing demand for content repurposing
- Potential of repurposing the short course for Schools/Faculties



In what ways do you think the Intro to IDL can support students in your own programme?

With thanks to:

- A. Godliman, S. Miller (UCIL e-learning support)
- S. Midson, D. Hirst, J. Styles, F. Salehi, S. Kunamaneni, E. Clark, V. Jankovic, R. Martin, I. Eleftheriou, J. Sumner, S. Yeowell (Advisory Group members)