Changing Times:

From Individual Scholarship to Cross Institutional Approaches to Educational Change
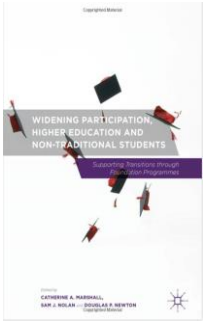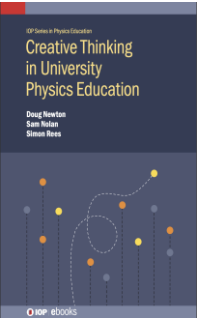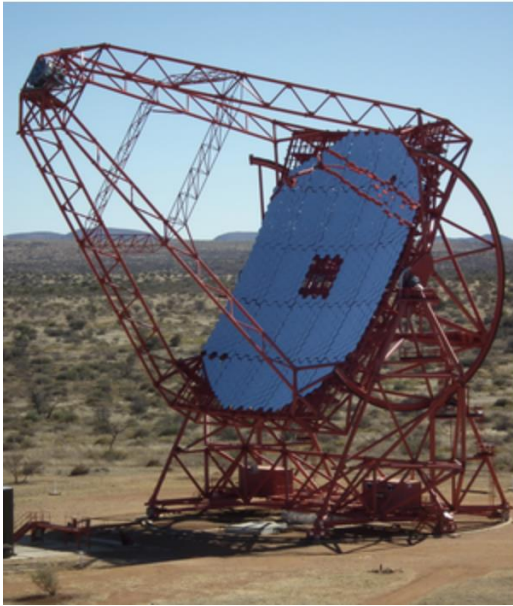
Prof. Sam Nolan, NTF, PFHEA
Durham University
@samjnolan

To Cover

- My Context
- The Joy of SOTL
- Career Evolution
- Network, Network, Network
- Developing an Education Lab
- Finding Time

My Background:

Durham University

- PhD Student
- Researcher
- Education Focussed Staff
- Academic Developer
- Senior Manager
- Prof (Education) & DCAD Director

Durham University

Getting Started with SOTL

Listen

- Ran several focus groups with students to understand the issues they were having on the course

- Co-developed research solutions to each of these

- Sought Funding From a Variety of Sources to Support Each Project. Many supported through DU funding.

- Projects got bigger in scope Class->Program->Institution

- Ended up with around 8-10 student workers working with me and collaborators on projects each year.

- *My summer jobs were one of the most rewarding parts of my time at Durham University, and certainly gave me the most material for impressing job interviewers of any aspect of my time there. I walked straight into full time employment the Monday after finishing university and my time as a summer student was largely to thank.*

  Katherine Hurst, Former Summer Student

- *Started to do similar activities 1 to 1 with colleagues and built a community of practice in SoTL, lead to publication of an edited volume on the work of Foundation staff.*
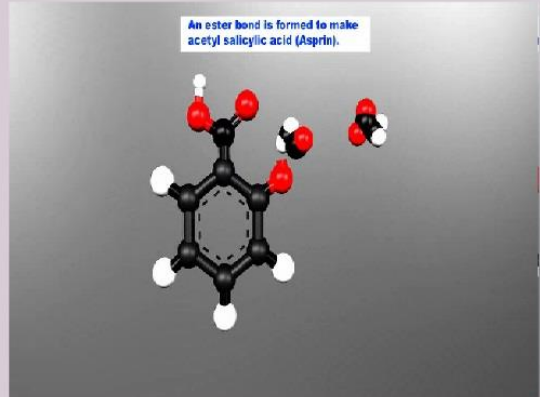

Listen

Classroom Changes

- Issue: Many students felt overwhelmed entering the laboratory for the first time and obsessed over the equipment without thinking about the underlying science at work.

- We developed virtualizations that allow you to interact, make mistakes and learn as if testing on the real equipment before you go into the lab.

- Projects quickly expanded to include virtual field trips and augmented reality with departments including Physics, Foundation, Chemistry

- 'I used the experiment as soon as you sent it out, before the class, after the class and when I was writing the report. I haven't done practicals in Brazil and really appreciated this.'
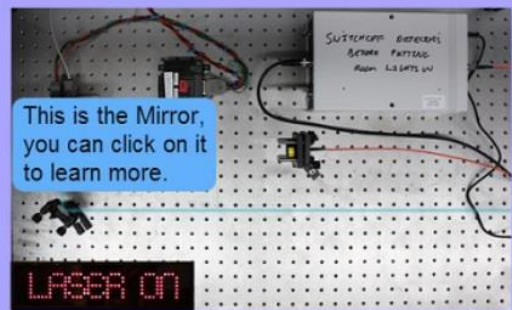
(Nolan, S., et al., 2013)

Program Changes

- The Study Skills Module That Everybody Hates

- Rethinking and Embedding Project Based Learning

- Placing Project at Core of All Student Pathways

- Designing Projects that would stretch and inspire students

- Giving students the opportunities to share with their departments

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Larger Projects
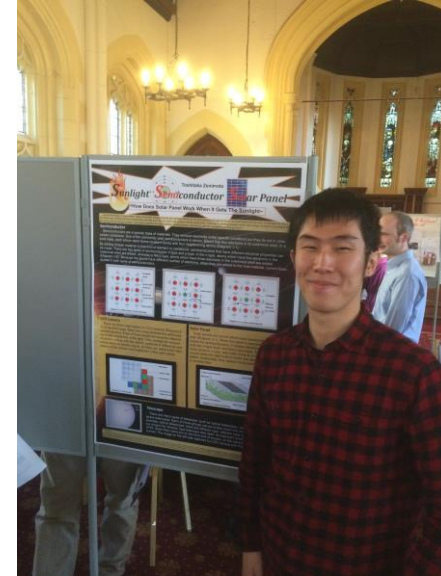
Transitions into HE

1 Preparing for Academic Study

2 Independent Learning

3 Digital Literacy and Managing Information

4 Preparing for Arrival

Typically used by over 85% of Students
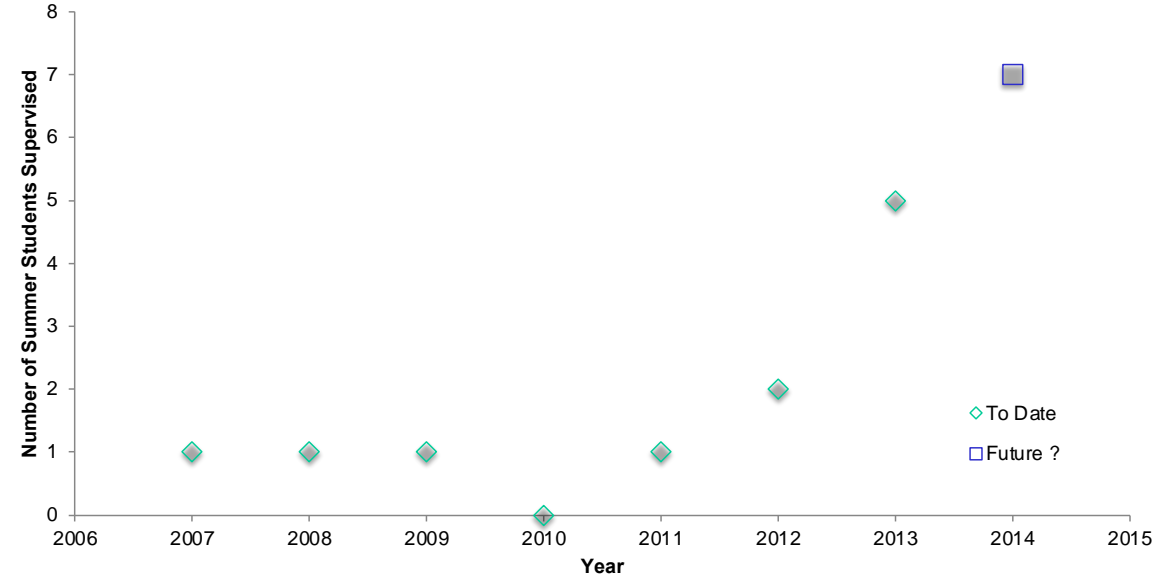
What Next ?

Reinvention No. 2
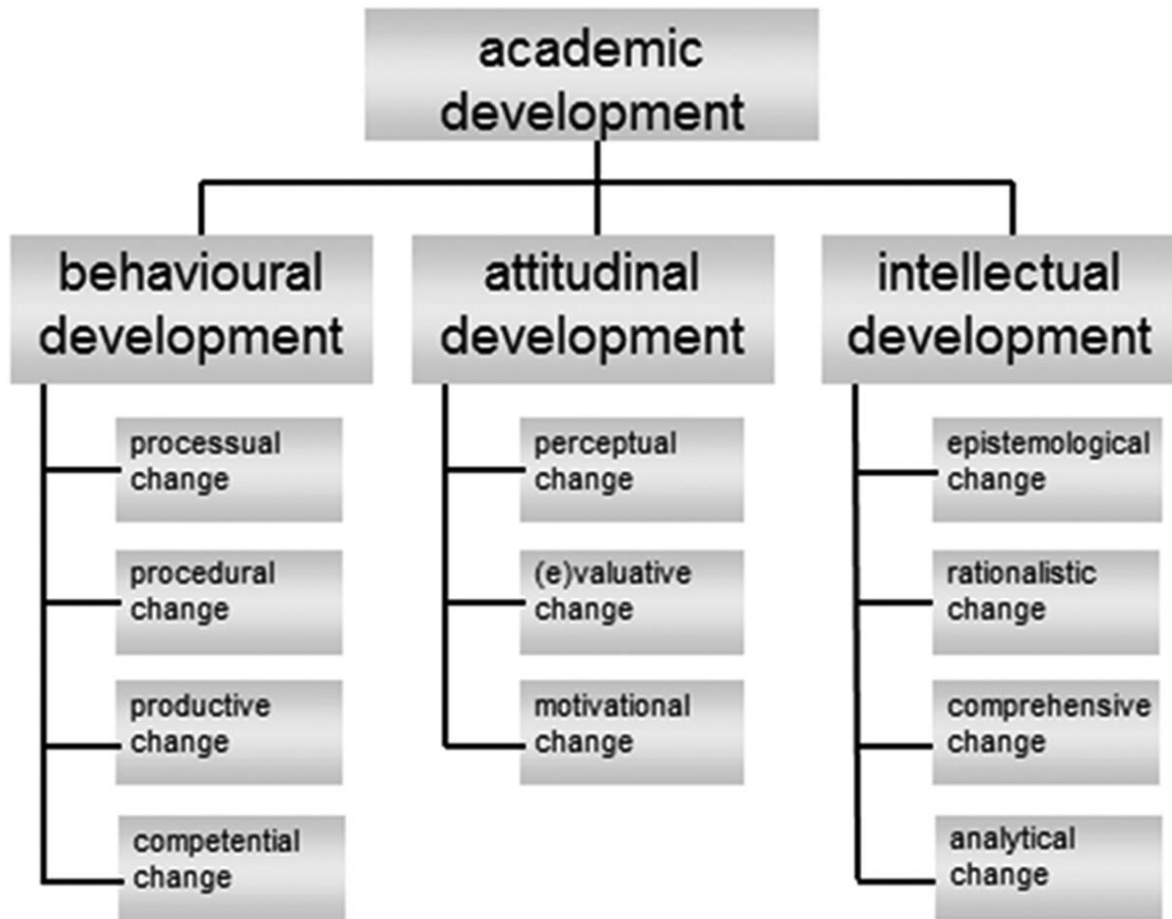
What is An Academic Developer ?

"An individual who works in partnership with academic staff to help them develop and enhance their professional identity."

(Evans, 2023)

Network
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- Helping
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- Running
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scholarship

- Advocati
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- Developi

Enhancing Student Learning Through Innovative Scholarship Conference

A Conference for all UK Teaching Focussed Staff in Higher Education

About   Keynotes   Registration

Programme for ESLTIS24   Organisers

8th July – 9th July 2024, University of St Andrews

Finding Advocates

- Find others who recognize that being an education focused academic is important.

- If they can help you influence those in power – even better

- Form a group and develop a shared vision

- Where possible align yourself to strategy or help redefine strategy

Is This Approach Entirely Successful ?

Teaching Focused Academic Staff Promotion Criteria at Durham

Durham criteria derived in consultation with staff, based on spheres of influence and stick broadly to the concept of educational "impact", examples include:

Professor
- Leadership of a professional network; editor of a scholarly or professional journal.
- Winning a national excellence in teaching award;

Associate Professor
- Produce scholarly pedagogic outputs and disseminate findings across the University and externally.
- Success in external grant capture to support educational innovation and scholarly impact.

Assistant Professor
- Holding an internal award (e.g. CIG) to support educational innovation and scholarly activity.
- Publication in a scholarly journal or relevant professional publication.

Everybody submits a CV at least once every 2 years as part of our progression and promotion process

From 2021 defined as SOTL in Promotion Criteria

Depts increasingly calling out SOTL through work-loading

A number of promotions at each level.

Challenges

- People can struggle to engage with SoTL due to:
    - Workloading, e.g. lack of time
    - Lack of community within their discipline or within the institution, e.g. lack of CoP locally
    - Holding an identity as a "teacher" or a "disciplinary researcher" not as a "SOTL researcher"
    - Taking on substantive leadership roles
    - Money, e.g. for projects, conferences etc
        (Nolan, S. and Newton, D., 2022)

Developing a Platform for SOTL

Durham Centre for Academic Development (DCAD)

- Established in 2018 - Combination of 7 Existing Elements - home in purpose built Teaching and Learning Centre
  - Education Development
  - Researcher Development
  - Digital Learning
  - MA Programmes in Teacher Education
  - Pre-Sessional Language Programmes
  - English for Academic Purposes and Student Skills
  - Foundation Programme for Widening Access to University
- Development of 1 new Unit
  - Education Lab for Education Innovation

The Education Lab

- A new approach to offer consultancy and support to the University in Teaching, Learning and Assessment through:

- Research Groups
    - Creative Pedagogies, Digital Learning, Leadership in HE

- Training and Development in Research Methods – developing new PGCERT/MA

- (Inter)national Collaboration

- Conferences – e.g. VR in 2021, AI in 2023

- Internal Grants and Awards

# The Durham Scholarship Support Roadmap
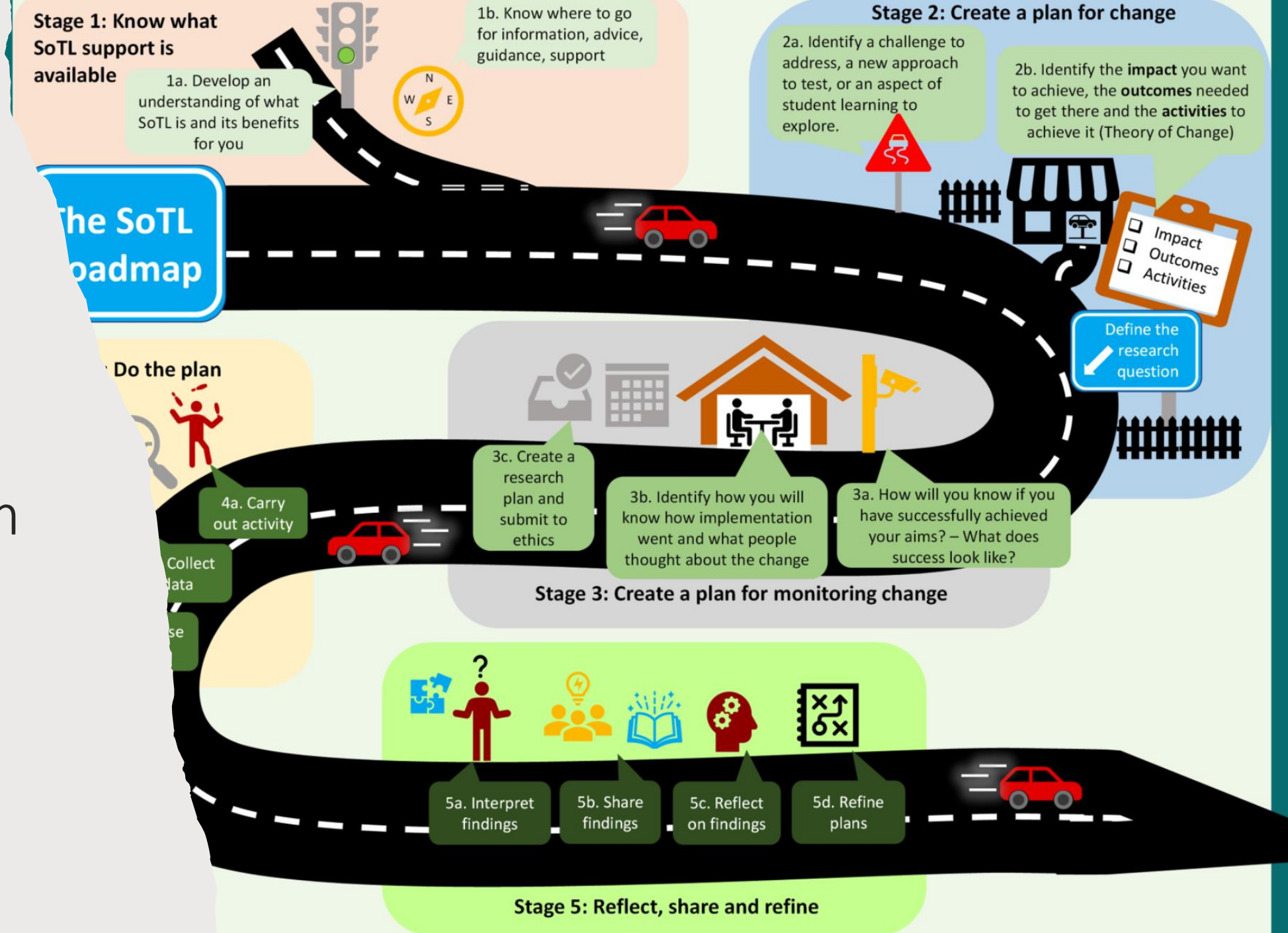
Grants and Funding

- Project Funding from £5K-£40K

- Collaborative Innovation Grants

- All co-led by a Durham Academic, a member of the DCAD Team and a student.

- Assessed against research criteria: Innovation, Feabsility, Cost Effectiveness, Evaluation, Impact

E.g. 1 – Virtual Field Trips (Dept of Geography)

- Geography students undertake field trips as part of their teaching to remote mountainous regions

- Project to explore how a simulation could facilitate the same learning – to enhance accessibility

- Green Gown award for sustainable education
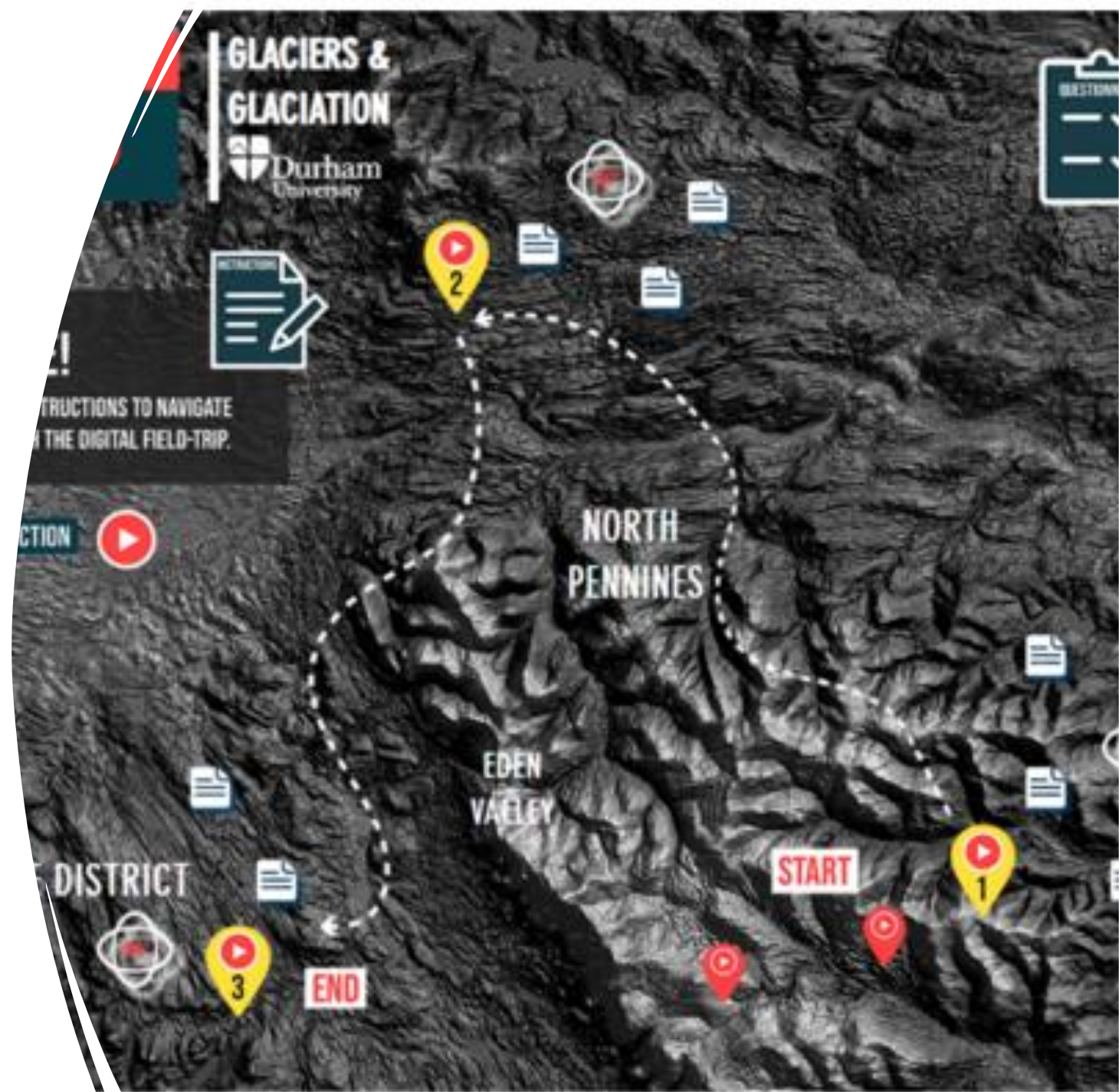
E.g. 2 – Using AR to Learn Science (Physics)

- Collaboration between Physics department, Computer Science Facilitated by DCAD

- Explaining complex invisible phenomena through AR

- Training Partnership with local NHS (Health Care) Education Centre

E.g. 3 – AI in Teaching, Learning & Assessment
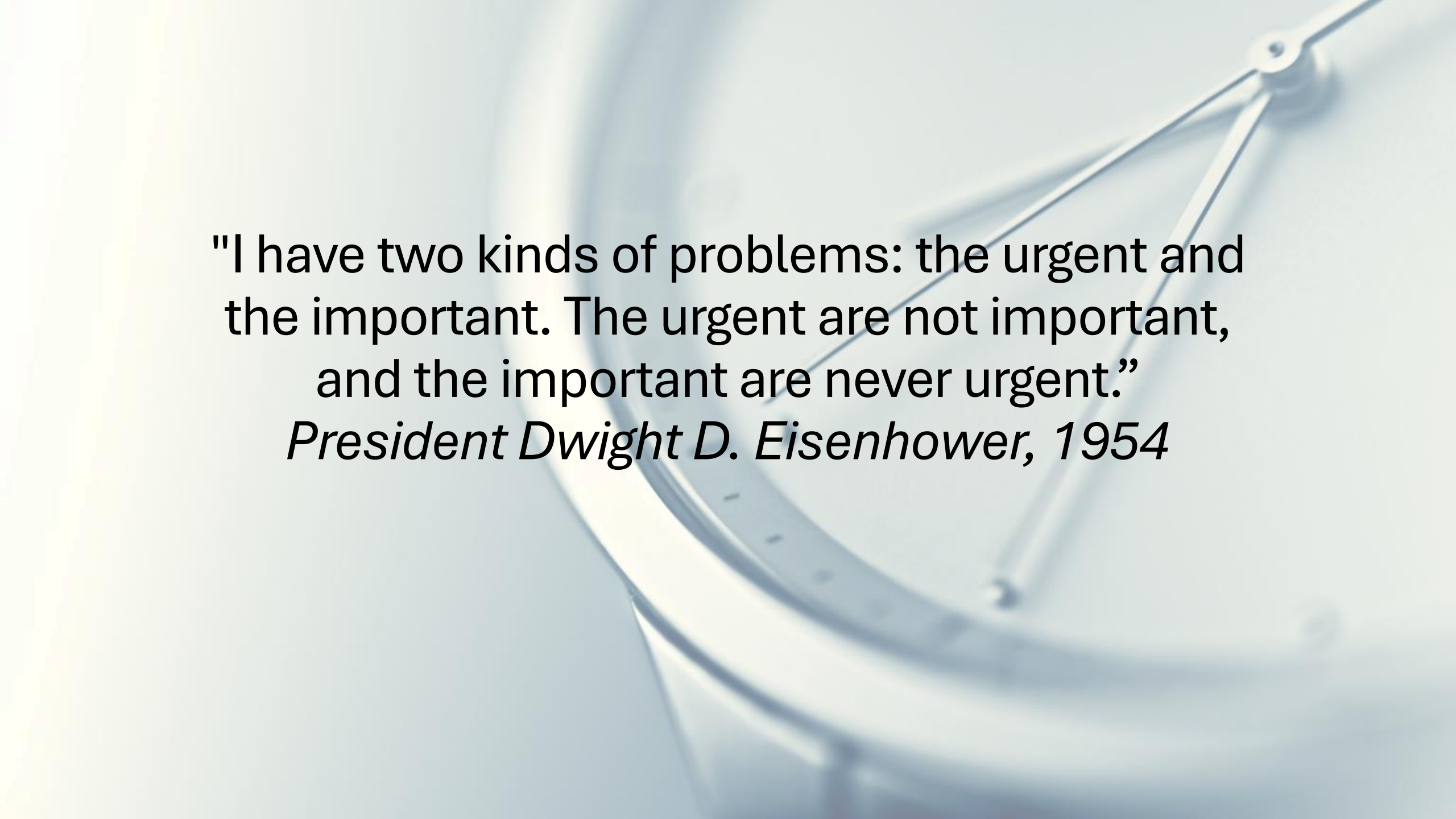

- Suite of projects exploring initial uses, including:
  - Using AI Chatbots to support students laboratory learning
  - Exploring students use of AI in Language Learning
  - Exploring how AI can support neurodivergent students
  - Exploring AI as an academic tutor to facilitate critical thinking in the Biosciences

Dr Malcolm Murray

A student guide to generative AI

START COURSE

Getting From Here to There

What is the Biggest Road Block ?

"I have two kinds of problems: the urgent and the important. The urgent are not important, and the important are never urgent."
President Dwight D. Eisenhower, 1954

Leading Change – Biggest Blocker

"I think the thing is we need to recognise as a university that we're going to be in continual change. It's not something that you just do for a while, you get the answer right, and then you carry on with what you did before. So, I think we need to encourage a culture where there's an acceptance of change, but there is also time built into people's workflows for it."
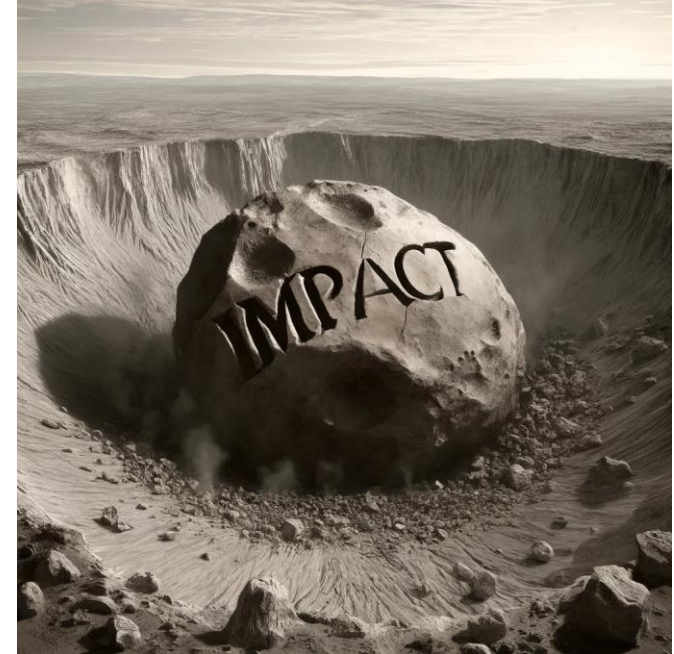
(Nolan, 2023)
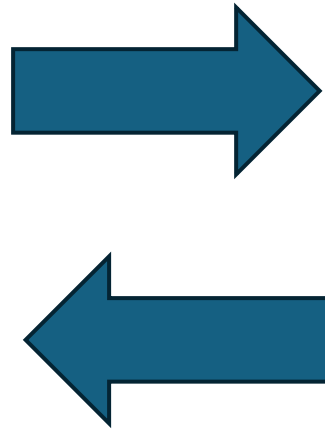
Finding Ways to Find Time

CONTEXT

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Conclusions

- Start Small with Your Own SOTL
- Never be limited by your own personal horizon
- Mentoring is Key
- Partner:
  - With Advocates
  - With Colleagues
  - With Students

References

- Bridges, W. (2009). Managing Transitions: Making the Most of Change (3rd ed.). Da Capo Lifelong Books.

- Evans, L., 2023. What is academic development? Contributing a frontier-extending conceptual analysis to the field's epistemic development. Oxford Review of Education, pp.1-17.

- Marshall, C.A., Nolan, S.J. and Newton, D.P., 2016. Widening participation, higher education and non-traditional students. London: Palgrave Macmillan.

- Newton, D.P., Nolan, S. and Rees, S., 2022. Creative thinking in university physics education. IOP Publishing

- Nolan, S. and Hutchinson, S. eds., 2022. Leading Innovation and Creativity in University Teaching: Implementing Change at the Programme Level. Taylor & Francis.

- Nolan, S.J., Szablewski, M., McComb, T.L.J. and Hughes, I.G., 2013. Using interactive screen experiments as pre-laboratory tasks to enhance student learning. New Directions in the Teaching of Natural Sciences, (9), pp.24-27.

- Rees, S., Bruce, M. and Nolan, S., 2013. Can I have a word please: Strategies to enhance understanding of subject specific language in chemistry by international and non-traditional students. New Directions in the Teaching of Natural Sciences, (9), pp.8-13.

- Whitchurch, C., 2008. Shifting identities and blurring boundaries: The emergence of third space professionals in UK higher education. Higher education quarterly, 62(4), pp.377-396.

Learn More Here:
https://www.dur.ac.uk/dcad