UNIVERSITY OF BATH

Supporting Undergraduate Success through Curriculum Transformation

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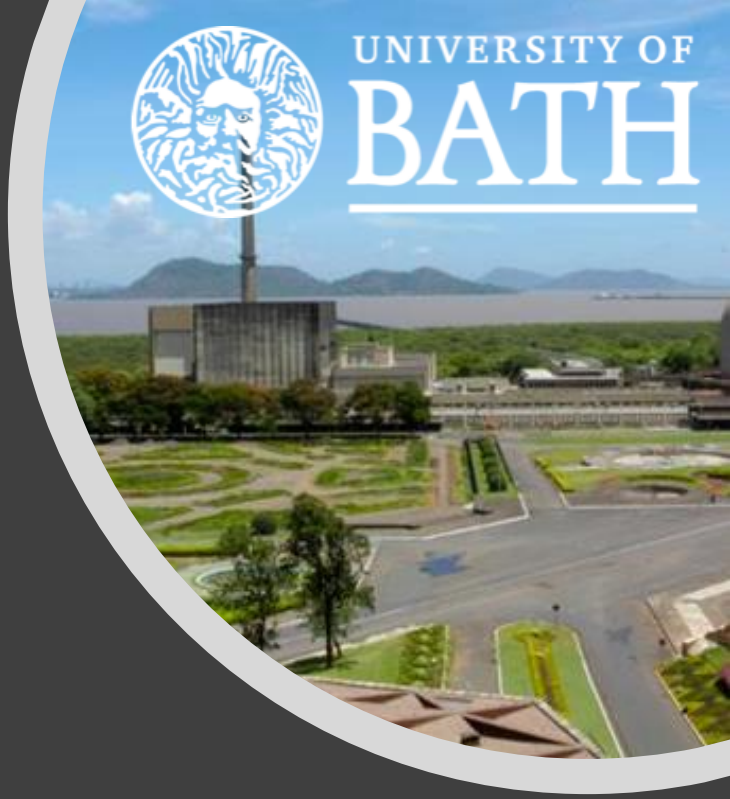
University of Bath

NERUPI event, Nov 14, 2020

BROOKHAVEN,
NEW YORK

BELFAST



BOMBAY (PhD)
Bhabha Atomic
Research Centre

Biomedical scientist...Life of B's

BATH
Faculty

Getting into education research, widening participation & outreach

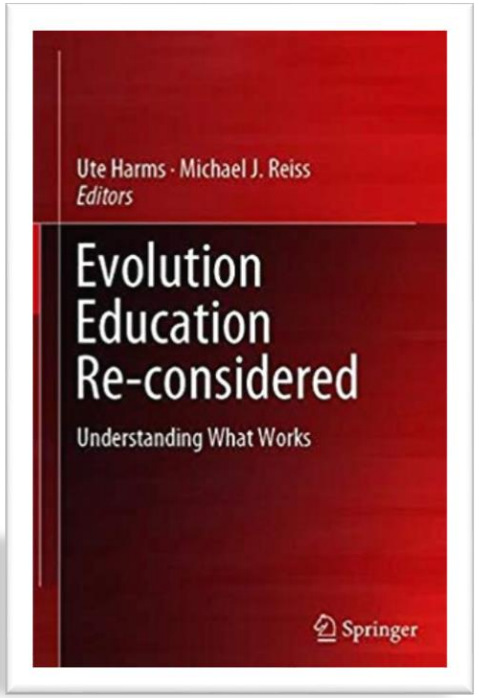
'Blended learning' approaches

Inter-disciplinary research into why students choose placements

Open Education (JISC-funded OER Phase 1 & 2)

Introduced the first MOOC from Bath - 'Inside Cancer'

Evolution education



Key challenges for academics involved in widening participation and outreach activities

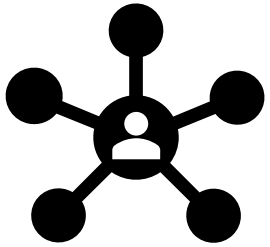
- Shifting ‘Civic’ conceptualisations
- Funding requirements
- Academic workloads
- Nurturing relationships
- Style and content
- Capacity building
- Evaluation of activities

HIGHER EDUCATION OUTREACH: EXAMINING KEY CHALLENGES FOR ACADEMICS.
Matthew Johnson et al (2019) British Journal of Educational Studies, 67:4, 469-491.

Re-thinking Higher Education

Moving away from solely human capital or intrinsic notions

Technology has reshaped traditional models



Automation, climate & socio-cultural changes

Kromydas, T. Rethinking higher education and its relationship with social inequalities: past knowledge, present state and future potential. *Palgrave Commun* **3,** 1 (2017)

Changes in the HE landscape

"Educators are in the position where they are having to prepare learners for jobs that don't yet exist, using technologies that have not yet been invented, and spotting and solving problems that we have yet to define clearly."

Quality Assurance Agency, 2018

Skills for the 21st century

WORLD ECONOMIC FORUM

Global Agenda | Education and Skills | Digital Economy and Society

Higher education needs dusting off for the 21st century

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Growing

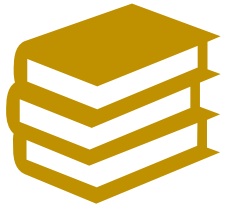
1. Analytical thinking and innovation
2. Active learning and learning strategies
3. Creativity, originality and initiative
4. Technology design and programming
5. Critical thinking and analysis
6. Complex problem-solving
7. Leadership and social influence
8. Emotional intelligence
9. Reasoning, problem-solving and ideation
10. Systems analysis and evaluation

Declining

1. Manual dexterity, endurance and precision
2. Memory, verbal, auditory and spatial abilities
3. Management of financial, material resources
4. Technology installation and maintenance
5. Reading, writing, math and active listening
6. Management of personnel
7. Quality control and safety awareness
8. Coordination and time management
9. Visual, auditory and speech abilities
10. Technology use, monitoring and control

Curriculum Transformation Initiative at Bath (2022)

Support the needs of all learners



Embed independent learning and critical evaluation skills

Foster confidence in students to thrive in a global workplace

Deliver an inclusive curriculum

Support Transitions

Deliver an inclusive curriculum

Support Transitions

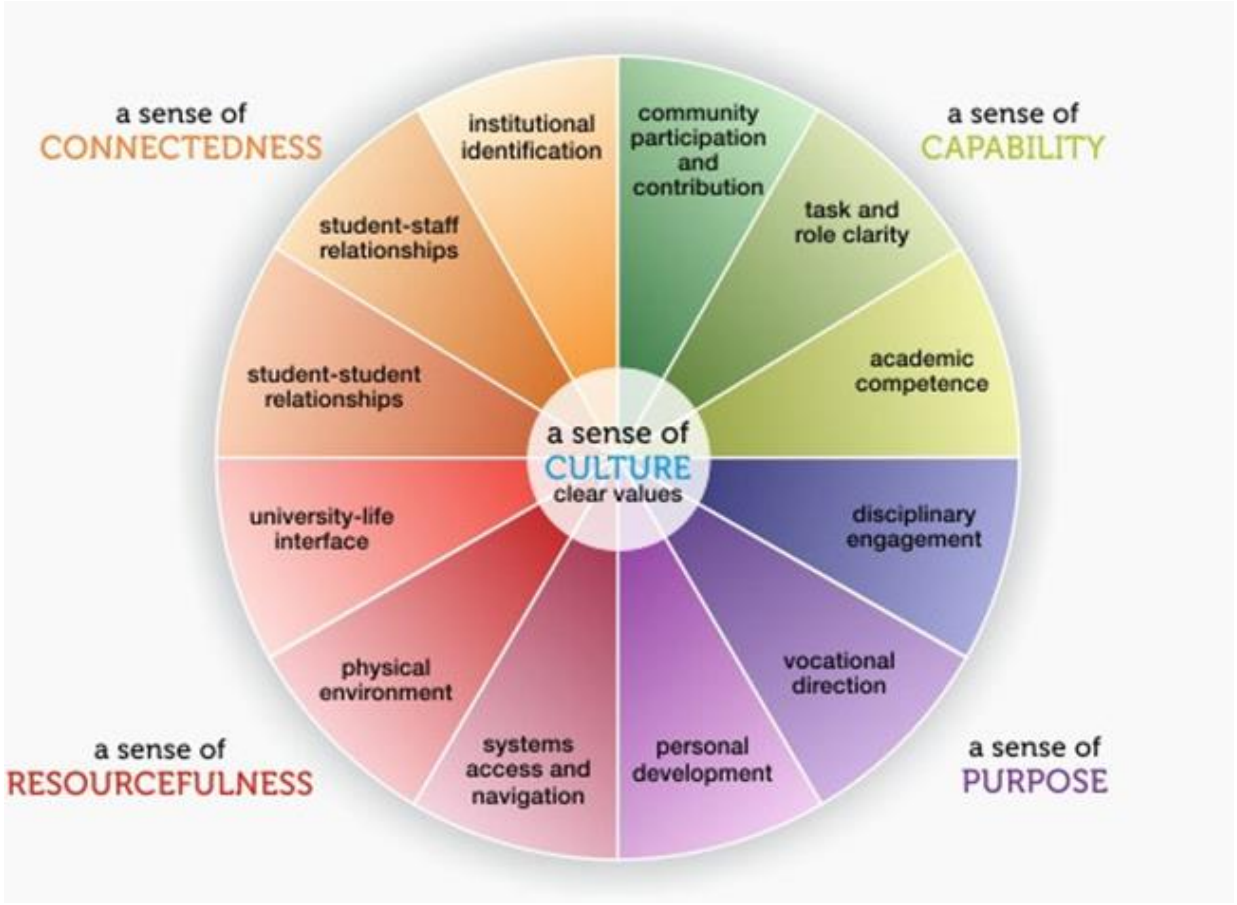
What Works, Student Retention and Success

Supportive peer relations

Meaningful interaction between staff and students

Developing knowledge, confidence and identity as successful HE learners

An HE experience relevant to students' interests and future goals



Five Senses of Success' Lizzio and Wilson (2006, 2010).

Adapted from Thomas (2012; 2017)

How does CTI link to the NERUPI Framework?

NERUPI Framework level 5

HABITUS	EDUCATION CAPITAL	INTELLECTUAL CAPITAL
Develop students' confidence and resilience to negotiate the challenge of university life and graduate progression	**Develop students' study skills and capacity for academic attainment and successful graduate progression**	**Develop students' understanding by contextualising subject knowledge**
Engage with students from a variety of social, cultural and ethnic backgrounds to establish positive relationships and form mutual support networks	Consolidate their academic skills and develop a personalised strategy for skills acquisition	Extend their capacity for critical thinking, perspective taking and creative engagement with their subject area
Engage pro-actively with the changing demands of their studies and develop pro-active support-seeking behaviours to ensure their success	Consolidate a varied skills set to enhance future employability and develop the capacity to demonstrate skills to potential employers	
	Consolidate their interpersonal and group work skills and capacity to work collaboratively with others	

CASE STUDY - 'The Grand Challenge project'

Aims: To advance science as integral to address the challenges of global environmental sustainability, and enable students to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future





Year 1- 3 ***Vertically Integrated Project***	**Students grouped into teams**	**Identify a shared project goal**	**Online courses and campus-based workshops on**	**Phased approach to targets and milestones**
	Based on personal attributes and skills	*LOCAL Community project (Council / Corporate)* *UN Sustainable Development Goals (e.g. sanitation)* *International Community Project*	• *Analytical thinking & creativity,* • *Innovation & entrepreneurship,* • *Team-working,* • *communication,* • *project-management & leadership,* • *Critical thinking and problem-solving*	


Questions?

ACTIVITY

How will we measure success on the ‘Grand Challenge Project?

- Group work on tables

- Discuss methods we can use to measure success on the 'Grand Challenge Project' using the criteria provided in NERUPI level 5