Interdisciplinary Research, Teaching & Learning Approaches & the SDGs

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Presentation to the ABIS Colloquium 15-16 Nov 2017

Leadership for a Sustainable Future:
Business-Academic Collaboration on the UN SDGs for Long-Term Success
Overview

• Institutional Scaffolds:
  • Deep Institutionalisation
  • External Environment/Internal Organisational Scaffolds
  • System overflows
  • Ambidextrous & Entrepreneurial Academics

• Pedagogy:
  • The science, research and practice of teaching and learning
  • Enquiry and Problem Based Learning & Inter-disciplinarity
    (Business, Management & Governance + Science & Engineering)

• Practice:
  • Illustrative Examples (I4S; CELT-E&BL@SusDev&RI; MSc STIM)

• Approaches & Relevance to the SDGs
Institutional Scaffold:
External Assessments,
Normative Values translated into evaluative criteria
New university tops green table as Oxbridge lags behind

Campuses have come a long way in the 10 years of the student-led People & Planet rankings - but there are surprising fails.
“It’s not just about recycling, it’s not just about switching off the lights. It’s about the sustainability of society moving forward and what we as a university can impart to our students about the environmental, ethical and economic issues the world is facing and the skills they will need to tackle them.”

Helen Tinkner, Head of Environmental Management, Manchester Metropolitan University, The Guardian, 14 Nov 2017
• Student-led

• Criteria:
  • Envt Sus. Strategy & Policy
  • Human Resources for Sust
  • Envt Auditing & Mant Systems
  • Ethical Investment
  • Carbon Mant
  • Workers Rights
  • Sus Food
  • Staff & Student Engt
  • Ed for SD
  • Energy Sources
  • Waste & Recycling
  • Carbon Mant
  • Water Reduction
The 2017 Winners have been announced!

Click here to view the Winners brochure
EAUC

Proud sponsors of the UK and Ireland Green Gown Awards

The EAUC is the sustainability champion for universities and colleges in the UK. Run by members, for its members, the EAUC seeks to drive sustainability to the heart of further and higher education. We have a membership of over 200 university, college and learning and skills providers in the UK. Being Member-led, we deliver Member services and resources that continually add value and offer exclusive access to information, ideas and news from many of the projects we're involved in.
2017 Winners!

• Learning & Skills
  • University of Manchester
  • 10,000 Actions

• Institutional Change
  • University of Salford

• Enterprise
  • Manchester Metropolitan
  • MetMunch
METMUNCH ARE A MANCHESTER METROPOLITAN UNIVERSITY STUDENT ENTERPRISE NETWORK WITH A PASSION FOR SUSTAINABLE AND NUTRITIOUS FOOD.

WE DO TRAINING, COMMUNITY POP-UPS AND IMAGINATIVE SCIENCE PROJECTS.

WE DON'T DO ORDINARY!
EAUC Launches The SDG Accord

This global initiative is to ensure the SDGs are embedded throughout across post-16 education. It was born from members' ideas at the EAUC Conference in Lancaster this year. More here.
Institutional Scaffold: Internal
The Sustainable and Ethical Enterprise Group (SEEG)

A number of passionate individuals have been involved in growth of SEEG. This inter-disciplinary group from across the university have come together to develop SEEG from its nascent conceptual beginnings to its present state as a fully functional cluster with a far-reaching impact. We believe that such a diverse group is vital to overcome the complex challenges associated with sustainability and responsible innovation, enabling us to draw from a range of skills and experiences, to offer insights on solutions to such challenges.

.......... Research;
Teaching & Learning;
Engagement & Impact with Practice and Policy
SEEG Landscape and Topics

- Place, waste, territory, (Manchester)
- Social Enterprise, networks & Communities
- Entrepreneurship & (Institutional) Entrepreneurs
- Education for SD
- Natural Ecosystems Governance & Management
- Emerging Technologies & Responsible Innovation
- Organisations & Institutional Change
Training the ‘Innovation for Sustainability’ leaders of the future: Lessons, delivery and prospective reflections on the I4S project

http://www.abis-global.org/projects/i4s

Sally Randles
Chair of Sustainability and Innovation
Manchester Metropolitan University
UK
Pen-portrait of the (Out-turn) Early Stage Researcher under Engaged Scholarship for Social Purpose ‘Ambidexterity’ model

Academic rigour:

• Deep and comprehensive knowledge of the academic field – theoretical and empirical: knowledge of renowned and upcoming centres and institutes.

• ‘State of the Art’ in your field: key debates and directions for future research. New Knowledge ‘Contribution’

• Critical/reflexive on the authors who went before..

• Produce PhD thesis ‘of standard’ + 3 academic papers

• Mobility: Developing international (academic/peer) networks. Conferences

• Teaching and Learning (Pedagogy)

Entrepreneurial:

• Mobilising resources/bidding for grants (calls, criteria)

• Project management: Management of grants, people, administration (& financial)

• Juggling multiple projects!

• Focus on deliverables, outputs, communication & dissemination

• Experimentation /exploitation (innovation/delivery)

Systems Thinking:

Transformative Practice & Change

Agents: Action Research
... At Manchester Met
Centre for Excellence in Learning and Teaching

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Education for Sustainability and Responsible Innovation: Enquiry and Project Based Learning in a Blended Context

EdSusRes+EPBL

- **12 months** (Sept 2017/18)
- **Stage 1 - Comprehensive Literature Review**
- **Stage 2 - Intervention Stage 1** - Capturing and recording the EPBL and blended learning design elements, and translating them into training and curriculum ‘building-bricks’ to intervene in each course ‘Business Ethics’ and ‘Professional Geographer’
- **Stage 3 - Intervention Stage 2 ‘Implementation Trials’** : ‘Business Ethics’ (Business School: Business & Management Elective: 150 students, u/g Yr3) ‘Professional Geographer’ (School Science & Envt : 90 students u/g Geography)
- **Stage 4 – Dissemination** : University-wide w/shop; production EBL Guidelines & internal journal article.
- **The Team** : Valeria Vargas; Helen Wadham/Konstantina Skritslovali; Theresa Nicholson; Eleanor Hannan
Pedagogy into Practice
MSc Sustainability, Technology & Innovation Management (STIM)

• In development: Approvals, Design & Modify with industry, Enrol Sept 2019

• Inter-disciplinary recruitment & delivery (Management & Science and Engineering)

• Term 1: Underpinning Knowledge
  • Innovation Studies:
    • innovation systems; socio-technical systems; ecological & biosphere systems, sustainable production & consumption;
    • Innovation, technology management, LT change and transformation
  • Sustainability & Environmental Science: in global governance & SDGs

• Term 2: Uses Enquiry & Problem Based Learning (put the societal problem in the centre of cross-disciplinary team-projects based in Sc & Eng Research Centres): E.g. Waste2ResourceInnovation & Circular Economy; Energy transitions & fuel-cell innovation; Ecosystems governance & Biodiversity... With relevant industry & policy actors

• Term 3: Problem-based research dissertation
New EU H2020 Marie Sklodowska Curie Innovative Training Network Bid (with ABIS)

- Doctoral & Early Stage Researchers
- I-SCEEE : Innovation for Sustainable Circular Economies & Enterprises
- Partners : Core from ‘i4s’ +++
- Added partners from the last ABIS Colloquium (Oct 2017)
- 14 PhD research projects on ‘Sustainable Circular Economy’
- Incorporate all the pedagogy/ learning from i4s and Man Met into ESR Training & Research Programme
- Submission Jan 2018
Conclusions

- Institutional Scaffold
- Pedagogy into Practice
- In the delivery of new programmes incorporating cross-disciplinary training for Sustainability & the SDGs
- Turning-out Sustainability Professionals and Leaders of the Future