

World Café: What are the challenges to Interdisciplinary teaching and how can we overcome them?

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1. Amuse-bouche

Challenges and barriers to engaging with interdisciplinarity at the University of Warwick were shared (Appendix A).

2. Entrée

Groups were asked to define interdisciplinarity. Suggestions from each of the 5 Padlets have been summarised and themed. It was agreed that this seems to be a much used, but unfortunately unclear and evolving term with more than 20 different terms being used, often interchangeably, like multidisciplinary, transdisciplinary, non-disciplinarity, collaboration. A combined definition utilising the most common terms and themes is suggested:

- Purposeful
- integration (navigate between and beyond)
- of knowledge, perspectives and methods
- from multiple disciplines
- to approach, analyse and solve authentic complex problems, and
- co-create new insight and unique enhanced understanding

A few phrases used give vivid 'pictures' of the term encapsulating the theme in a phrase ie. 'Drilling holes in silos', 'Building bridges of knowledge' and 'Becoming renaissance people'.

3. Main Course

Participants were asked to brainstorm what the challenges/barriers are to interdisciplinarity in T&L and identify possible solutions. These have been tabulated from the various Padlets.

Challenges/Barriers to ID in T&L	Possible solutions
Disciplinary grounding vs interdisciplinary skills / Finding common ground	Creating thinking spaces / opportunities to listen to and learn from each other to find areas of interconnectedness and possible synergies; Cross-faculty social connections; Bring in external organisations to validate interdisciplinary study/work
University structures - Disciplinary silos	Creating a culture that embraces interdisciplinary, values it, talks about it - making time for/incentivising 'thinking spaces', innovation, collaboration; An ID centre to provide leadership
Authentic ID challenges/problems for assessment	Allow external stakeholders to define challenges - they do not think in disciplines; Bend the assessment rules; Exploit institutional opportunities like placement modules; Experiment with new ideas like design web/app; write blogs; Greater freedom in module proposals
Staff workload and disciplinary resource allocation	Emphasise the benefits of collaborative working; Incentivise ID developments (reward and recognition); Provide training for staff on how to be effective interdisciplinarians
Lack of confidence outside own discipline / Familiarity of assessment/teaching methods	Start with ID from the start of the programme; Flexibility to assessment - removing barriers to academic processes that limit choice and freedom; Identify, share and celebrate good practice
Resistance to change / Risk averse / Getting buy-in	Encourage curiosity and seeing value of ID; More room for taking risks and make this explicit to students; Incentivise ID; Rethink the way modules and courses/programmes are structured; Breaking down the research vs teaching dichotomy; More explicitly linking interdisciplinarity to lifelong learning/happiness index; More non-credit bearing opportunities to experience ID so that it doesn't feel so much of an education risk for students; Commitment from Institution/Faculty level for ID; Need critical mass of engaged colleagues
Space in already full curriculum / Academic Regulations and PSRBs	Advocate for more flexibility in curricula; encourage/advocate for ID by design; more 'grand challenge' style lecture series that link disciplines
Limited contact time with students	Get rid of lectures, run workshops across programmes
Modular structure of learning	Ask students for the themes, topics, controversies they are interested in - they will often be interdisciplinary

Appendix 1:

Institutional Review of Interdisciplinarity Executive Summary

*May-Dec 2018 - Russ Kitson, Jo Wale, Vasanthi Subramonia Pillai, Bo Kelestyn
(with support from the WIHEA Interdisciplinarity Learning Circle)*

Interviews were held with key members of staff from 17 departments to provide a snapshot of interdisciplinary activities. Each department described their ethos, interdisciplinary teaching and learning practices and outlined their evaluation of the challenges and barriers to their department engaging with interdisciplinarity. The student perspective was collected via questionnaires circulated to SSLC representatives and to participants on five Warwick Secret Challenge workshops.

Main Challenges and Barriers



The main challenges and barriers identified were:

- Inconsistent use of terminology resulting in differing interpretations of what is meant by interdisciplinarity across student and staff groups.
- Inconsistent reporting of interdisciplinary activities (and their impact) due to the lack of a joined-up approach in reporting KPIs across departments coupled with issues arising from the structure/wording of national surveys e.g. NSS.
- A non-sharing attitude arising from significant institutional and departmental structural and policy issues which has resulted in a lack of information sharing, empathy towards each other's challenges and willingness to innovate and engage in interdisciplinary activities.
- Institutional barriers arising from the institutional model for income distribution and the uncoordinated institutional approach to CATS tariffs, timetabling, module registration deadlines and procedures for granting students approval to take external modules.
- Resource constraints arising from unequal distribution of teaching workload and a focus on REF and teaching income.
- Disciplinary language and assessment methods impacting upon the student experience of external students.
- Insufficient low risk opportunities that bear less attainment risk for students, and administrative and teaching quality implications for staff.
- A lack of incentives, at institutional and departmental level, to champion, support, offer training and give recognition for engaging with interdisciplinary teaching and learning.
- Outside influences such as the curriculum requirements of professional accrediting bodies and the geographical location of departments.
- Insufficient management of expectations to enhance the student experience. Poor communication to both staff and students of the interdisciplinary offerings available.

Next Steps

The recommendations to overcome these barriers/challenges are:

- Instigate a wider discussion on the institutional definition of interdisciplinarity and long-term ambitions.
- Develop new methods for measuring the impact of interdisciplinary teaching and learning within departments.
- Clarify the income distribution model and reflect contributions to interdisciplinarity in teaching workloads.
- Standardise operational procedures e.g. timetabling, module registration procedures, CATS tariffs across the University
- Where appropriate design curriculum, programmes and modules with interdisciplinarity in mind and with potential for any student, regardless of disciplinary background, to enrol and participate in these effectively.
- Design and incentivise students to participate in more low risk and extracurricular interdisciplinary opportunities.
- Identify and support departmental interdisciplinarity champions, and reward engagement appropriately.
- Encourage engagement with scholarship of teaching and learning and offer training on interdisciplinarity to staff.
- Create tools and resources for more effective communication and information sharing between departments, for example, through the development of an online portal to raise awareness of the benefits of interdisciplinary teaching and learning with the aim of promoting and increasing the visibility of interdisciplinary-related opportunities available to students at Warwick.