Challenges of Designing Interdisciplinary Postgraduate Curricula: Case Studies of Interdisciplinary Master’s Programmes at a Research-intensive UK University

Orkhon Gantogtokh and Kathleen M. Quinlan

Interdisciplinary Learning and Teaching: Frameworks and Practice
The University of Sheffield

7 April 2016
INTERDISCIPLINARY CURRICULUM-MAKING

• Why are we researching interdisciplinary curriculum-making?

• Emerging movement of interdisciplinarity in higher education - to address the world problems

• Intellectual, organizational, social, structural and pedagogical challenges
RESEARCH QUESTIONS

1. ‘What are the challenges of designing interdisciplinary postgraduate curricula?’

2. ‘How could we respond to the challenges?’
METHOD

- Qualitative case study design

- Two programmes aspiring to interdisciplinarity: An applied social science programme and a health science programme

- Interviews with Course Directors, Head of Administration, Module Leads, Teachers, a Teaching Fellow and an Associate Course Director.
1. Difficulty in teaching students from varied disciplinary background

...I think the challenge was really being able to give this insight on health economics in a limited time to people that, in most of the cases, are starting from scratch; and at the same time keep the content at master level, so you didn’t want to make it too simple (HOML)

One of the biggest challenges in delivery is making sure that people who are at the far end of the competency area don’t get bored, and the people who are at the low end of the competency area don’t get lost (HTF)
2. EXCESSIVE WORKLOAD

- Excessive workload for students due to overload of content, assessment, contact hours, and readings

  Of course everybody has got their own interest and own ideas about what would be useful so we ended up with quite long list of things that might go into the course. It was difficult to prioritize the most important things (SML1).

Second term was much more challenging because it was information-heavy, session-heavy, it is a lot to take in, and there weren’t any free sessions, students find it quite challenging, that is reflected in their feedback (HCD ML1).
3. INCOHERENT CURRICULA

- Lack of curriculum integration, collaborative culture, wider perspective, and pedagogical approaches to facilitate integrative learning

...you obviously need to consider the implications of what you teach in a wider perspective. It is more challenging because you need to know a bit of everything (HOML).

This is something, I would say, is true in interdisciplinary courses. In general, people fight for their corners (SCD-ML). I think that is a part of the reason why we ended up moving [this] module into a separate core rather than continuing trying to do it as a joint course with [other discipline]. If you got totally separate perspectives, it is just confusing...There were other practical [organizational] challenges. I think that [interdisciplinary] approach might have worked if we had a bit more continuity and [more negotiation] (SML1).

What came clear this year, while Module Leads are putting a lot of effort within their module, they hadn’t really looked to the other modules, so things were overlapping (HCD-ML2).
Figure 1: Gantogtokh, O & Quinlan, K (2016) 'Challenges of Designing Interdisciplinary Postgraduate Curricula: Case Studies of Interdisciplinary Master’s Programmes at a Research-intensive UK University', Conference ‘Interdisciplinary Learning and Teaching: Frameworks and Practice’, The University of Sheffield, 7 April 2016
Organizational elements which provide favourable conditions for coherence-building.

Logical connections of content, structure and sequence

Integrative learning in the teaching and learning processes

Assessment, evaluation and refinement

This framework for coherence-building is based on Stark (1986) and Knight (2001)
ORGANIZATIONAL ELEMENTS

High levels of interaction and collaboration
- Regular events to promote interdisciplinary dialogue, collaboration and networking
- Sharing of the same physical space

Other organizational elements:
- HR: full-time staffing, effective recruitment and retention strategies, and reward structures that support teaching.
- Adequate financial resources
- Professional development training for academics
- Involvement of external parties - advisors
- Leadership with consensus and flat management structures
What we learned

- Awareness of the complex nature of interdisciplinary curricula.
- Specific strategies that have emerged for coping with these challenges.
- Four elements of coherence-building, focusing on organizational element.
THANK YOU!