Making sense of the “tangled beast”

Inter- / Trans-disciplinary writing

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Sources & Resources: Engaging with the Academic Community

ELT’s EAP Conference 2019

University of St Andrews
MSc Sustainable Development
Student Profile

- 35-50 students annually
- More mature age range
- Return to study
- Prior disciplinary background – wide range
- 10+ nationalities
- "NS", ESL, EFL
SD capstone project
Before 2017-18

Problems
• Summation of studies
• Relevance to students’ future careers
• Motivation
• Employability
• Creativity

15,000-word dissertation
MSc Sustainable Development Capstone Project

1. Literature review
   • 5,000 words

2. Policy brief/Data project
   • 3,000 words

3. Reflective evaluation
   • 1,000 words
Academic literature review

• outline and critique the academic evidence underpinning your chosen SDG and focus area.

• synthesise existing evidence, identify benefits, opportunities, challenges and gaps in knowledge that need to be acknowledged and addressed in order to develop a strong evidence-base to underpin the governance and practices involved in progressing towards your chosen SDG.

• if you can show that it will provide information that is currently absent from or limited in academic sources, you may draw on ‘grey literature’.

SD5098 Module Handbook 2018-19
Policy brief

• distil the academic evidence presented in the literature review into a policy-relevant communication format, making it accessible to a non-academic audience.

• provide a brief overview of one or more policies that are relevant to your chosen SDG and present a balanced overview of the research evidence, current uncertainties and how the academic evidence can help meet policy needs in your chosen study area.

• identify policy implications/recommendations arising from the academic evidence and how these affect progress towards your chosen SGD

• read about the communication of science to help you assess what to select and how to effectively present this for a policy audience.

• note that the term ‘science’ is used here in its broadest sense to mean a body of knowledge that is obtained and organized in a systematic manner; it does not refer to natural or physical sciences only.

SD5098 Module Handbook 2018-19
Reflective evaluation

• explain and justify how you translated the Academic literature review into a Policy brief
• outline the reasons why you selected the information that you presented in the Policy brief
• outline why you decided to omit other evidence that you used in your Academic literature review.
• explain how these choices enabled you to maximise policy relevance whilst also presenting a critical and balanced overview that is tailored towards the interests of a non-academic audience
Insessional Provision

**Remit:** Equip the students with the communication skills necessary to complete the capstone project

- embedded into the capstone project module
- co-delivered with the module coordinator through workshops
- on-demand workshops, one-to-one iELS tutorials, Diss Week in iELS
What does the School say about itself? - website

School of Geography & Sustainable Development

We are a leading centre for scholarship in geography and sustainable development, and aim to integrate the study of the earth system with its landscapes, peoples, places and environments. We teach and research across the breadth of the geography discipline, also bringing together expertise in the social and natural sciences to examine and develop the principles and practice of sustainable development. Research in Geography at St Andrews was ranked top in Scotland and fifth in the UK by the 2014 Research Excellence Framework.
What does the School say about the programme? - website

Highlights

• **Interdisciplinary teaching** provides multiple perspectives. Students are taught by **experts from disciplines** across the University and beyond.

• **Practical experience** supplements **leading theory**.

• **Skills development** is integral.
What does the School say about the programme? – poster in School

Key features:
• A process that requires rigorous thinking about the interconnections and interdependencies of the physical, social, and intellectual worlds;
• Multiple pathways towards alternative futures;
• Recognition of a diversity of perspectives and new models of knowledge production and exchange

M.A. or B.Sc. in Sustainable Development
The overall goal of the SD Programme is to enable students to critically interrogate the principles, practice and plurality of sustainable development and contribute to the evolution of innovative, interdisciplinary thinking and action necessary to move towards more sustainable futures.

Original features of the SD Programme at St Andrews
• Inter and multi-disciplinary, spanning across and bridging the Social and Natural Sciences, and the Arts and Humanities;
• Flexible structure that allows students to pursue their own individual interests;
• Research-orientated;
• Problem-based learning;
• Holistic and interdisciplinary thinking;
• Provides a broad and well developed set of analytical and transferable skills that prepares excellent graduates;
• Strong record of graduate employability in a variety of settings
• Students’ diversity
Continuum of disciplinary relationships

Reproduced from presentation slides of M. Christen, 2015, University of Basel
Communities of Practice
(Lave & Wenger, 1991)
Communities of Practice
(Lave & Wenger, 1991)

Althea’s journey

SD
Palaeontology
Biology
Communities of Practice
(Lave & Wenger, 1991)

Althea’s journey

Biology

Palaeontology

School of Geography & SD

SD
Communities of Practice
(Lave & Wenger, 1991)

SD Master’s students’ journey

Althea’s journey

SD

School of Geography & SD

Palaeontology

Biology

UG Disc.
Where do we go from here?
2018-19 Workshop: Why is reading in SD so hard?

- Your parent discipline aka “academic tribe”
- What’s involved in inter- / trans-disciplinary reading?
  - New ways of understanding
  - Inter- / Trans-disciplinary communication
1. Your parent discipline aka “academic tribe”
expertise
communities
projects
problems/issues
evidence

philosophies of knowledge

• what can we know?
• how can we know it?
Reading for Argument

2017-18
Reading critically
Components of argument
- Position/conclusion
- Supporting arguments
- Evidence
e.g. statistics, case studies, etc.

2018-19
Reading beyond your discipline
Components of argument
- Position/conclusion
- Supporting arguments
- Evidence
e.g. statistics, case studies, etc.

Philosophy of knowledge approaches, assumptions
2. What’s involved in inter-/trans-disciplinary reading?

a. New ways of understanding
Where am I coming from?
Dialogic reading (deep not surface reading)

‘When reading academic literature, my starting point is always that I attempt an open approach. But I’m also in dialogue with it. I enter discussions in a different way. Um. And I always relate it to something, and twist and turn it and . . . and sometimes I also just experience it, because then I’m completely on board and find it fantastic and then I feel like the text opens up and becomes . . . a universe that I can step into and say: Yes! You just made me look at my subject this way!’

Katan & Barts, 2018: 11
Differences

• research philosophy
• focus of RQs
• conceptual approaches
• methods & techniques
• legitimate evidence
• what counts as research
2. What’s involved in inter- / trans-disciplinary reading?

b. Inter- / Trans-disciplinary communication
Communicating Across/Between Disciplines

“One of the most basic challenges in interdisciplinary engagement arises from the fact that different disciplines have very different ways of understanding things, dealing with things and representing things: What may be of fundamental importance in one discipline may be of no more than peripheral relevance in another. When disciplines engage, these differences need to be negotiated...”

Choi & Richards, 2017:
Where is the author coming from?

• Which “academic tribe” do they come from?
  • Internet search for disciplinary affiliation
  • What are the disciplines of their collaborators?

• Which discipline(s) do they draw on in their thinking?
  • Which journals do they publish in?
  • What does that tell you about them as an academic tribe member?
Considerations in inter- / trans-disciplinary reading

• **Intellectual**
  • Conceptual foundations for developing new knowledge *in your mind and the author’s mind*
  • Basis for establishing common ground *in your mind and the author’s mind*
  • Complementarity of knowledge – can you think beyond cognitive dissonance?
  • Ability to assess quality of your thinking *and the author’s*

• **(Inter)Personal**
  • Being open to the philosophical orientations of others re: knowledge construction
  • Ability to read/listen attentively e.g. same technical term – different meanings; same concept, different term
  • Mutual respect
  • Values diversity of thought → Willingness to engage with different perspectives
Note taking – graphical transfer

Halpern, 2014: with my additions
Sources & resources: A bi(bli)ography