

Quality in Interdisciplinary and Transdisciplinary Postgraduate Research Supervision



Institute for
Sustainable
Futures

Acknowledgements + Intent

This workshop is the primary dissemination outcome of a Fellowship from the Australian Learning and Teaching Council awarded to Cynthia Mitchell in 2006 entitled 'Zen and the art of transdisciplinary postgraduate research'.

It brings together insights and experiences from

- International literature on the nature of inter- and transdisciplinary research, doctorate-ness and examination practices
- Organisational praxis in inter- and multi-disciplinary research units
- Individuals: a wide range of supervisors, students and examiners of inter and trans-disciplinary postgraduate work collaborated and participated in events in Australia and Sweden.

Responsibility for this work rests with Cynthia, and she'd love to hear your feedback on this workshop - contact her at cynthia.mitchell@uts.edu.au

What's in this workshop is one response to the challenge of recognising quality in inter- and trans-disciplinary work.

It's a work in progress - the intention is to develop a community of practice, rather than provide 'the answer'.

Focus and Structure

Topic: Quality criteria for interdisciplinary (ID) and transdisciplinary (TD) postgraduate research and its outputs (e.g., paper, thesis, exegesis, etc)

Twin foci:

- **What** might these criteria be?
- And what can supervisors and students **do in practice** to help develop, evidence, and strengthen them in the outputs of such work?

Structure of activities reflects this focus on ‘what’ and ‘how’

Workshop Objectives

- > To provide an opportunity to reflect on and be explicit about how quality may be evaluated in ID and TD postgraduate research
- > To explore resonance or otherwise with emerging criteria for good quality ID/TD postgraduate research
- > To explore and develop pedagogical guidance for
 - students' capacity to demonstrate the criteria
 - supervisors' capacity to guide student's development
 - [examiners' and reviewers' capacity to evaluate]

We will learn most by sharing experiences, questions, and quandaries, so responses will be collected and collated and returned to all .

Learning from experience: a suggestion for 'rules of engagement' for today's workshop

- > Tolerate discomfort and unresolved tension - they can lead to new knowledge, understanding, trust
- > Be sensitive to “aha” moments
- > Engage with balanced generosity – enquiring, listening & sharing
- > Practice tolerance & trust
- > Be sensitive to “arrivals”
- > Create & use reflective opportunities
- > Manage discontinuities
- > Sustain enquiry
- > Remember everyone involved is a “real person” with the potential to engage with the whole self and many ways of knowing

Introductions

In less than a minute

- your **name**
- **where** you're from
- a brief vignette about **why** you're here today e.g.
how you came to be wondering about quality in ID
and TD research...

Part 1: Overview

Why do we need ID and TD research as well as disciplinary research?

How is it different ?

What criteria might be useful for evaluating the quality of such work?

There is a gap between the problems we face, and disciplinary approaches to resolving them



- > Government and society calling on researchers to generate outcomes that contribute to resolving manifest and pressing problems
- > The problems facing society are increasingly ‘wicked’ and interdependent, and often relate to sustainability
- > Intractable problems need a different approach

Individual disciplines are essential, and inadequate by themselves.
Inter- and transdisciplinary approaches hold some promise.

The characteristics of TD research set it apart from disciplinary research

- > Problem focus
 - Explicit intent to create change around consequential problems as they arise in the world: complex, multi-dimensional, interface of human and natural systems
- > Evolving methodology
 - Interpenetration of disciplinary epistemologies in the development of evolved and evolving (dynamic, iterative) methodology
- > Collaboration
 - Researchers, stakeholders and community together define problem, id resources and criteria to (re)solve them, generate shared formal and informal knowledges

These characteristics have important implications for ID and TD higher degrees and their supervision

Two key features for TD postgraduate training and research emerge from TD research praxis

1. Number and nature of disciplines and ways of knowing involved is many and varied
2. Engagement is explicit, deep and intentional



TD research is personally challenging, requires humility, and seeks to integrate different ways of knowing from a non-denominational starting point.

That requires deep epistemological awareness.

ID and TD research degrees differ from disciplinary higher degrees in important dimensions

- > ID and TD research is new, growing rapidly, and easy to do badly - “quality rules” are not yet established
- > ID and TD research implies some element of change creation and impact beyond peer-reviewed knowledge – that is, the outcomes are different
- > Working across disciplines means different types of “breadth” and “depth” – it takes time to ‘get’ different epistemological positions and their implications

All this means new supports and processes are necessary for students, supervisors, examiners, and research administrators

The criteria outlined here were co-created iteratively through a 3 part process

- > Synthesise literature on doctoralness and examination to extract key principles
- > Reflect on experience of supervising, examining, and graduating ID and TD students from ISF's program
- > Ask experienced ID and TD supervisors, students, and examiners to reflect on and amend the criteria in a series of workshops and retreats

The resulting criteria are robust, coherent, and complete, and are best viewed as guides rather than rules.

3 criteria focus on the need for a critical orientation to the work

- > Critically aware, coherent argument
- > Critical, pluralistic engagement with appropriate literature and other artefacts
- > Evidence of critical reflection/reflexivity on own work

A critical orientation is fundamental to personal epistemological awareness, which is fundamental to transdisciplinary work.

A further 3 criteria focus on the process

- > Alignment between epistemology, theory, methodology, claims, and enquiry space
- > Mastery of the process and/or outcomes
- > Effective communication for diverse audiences

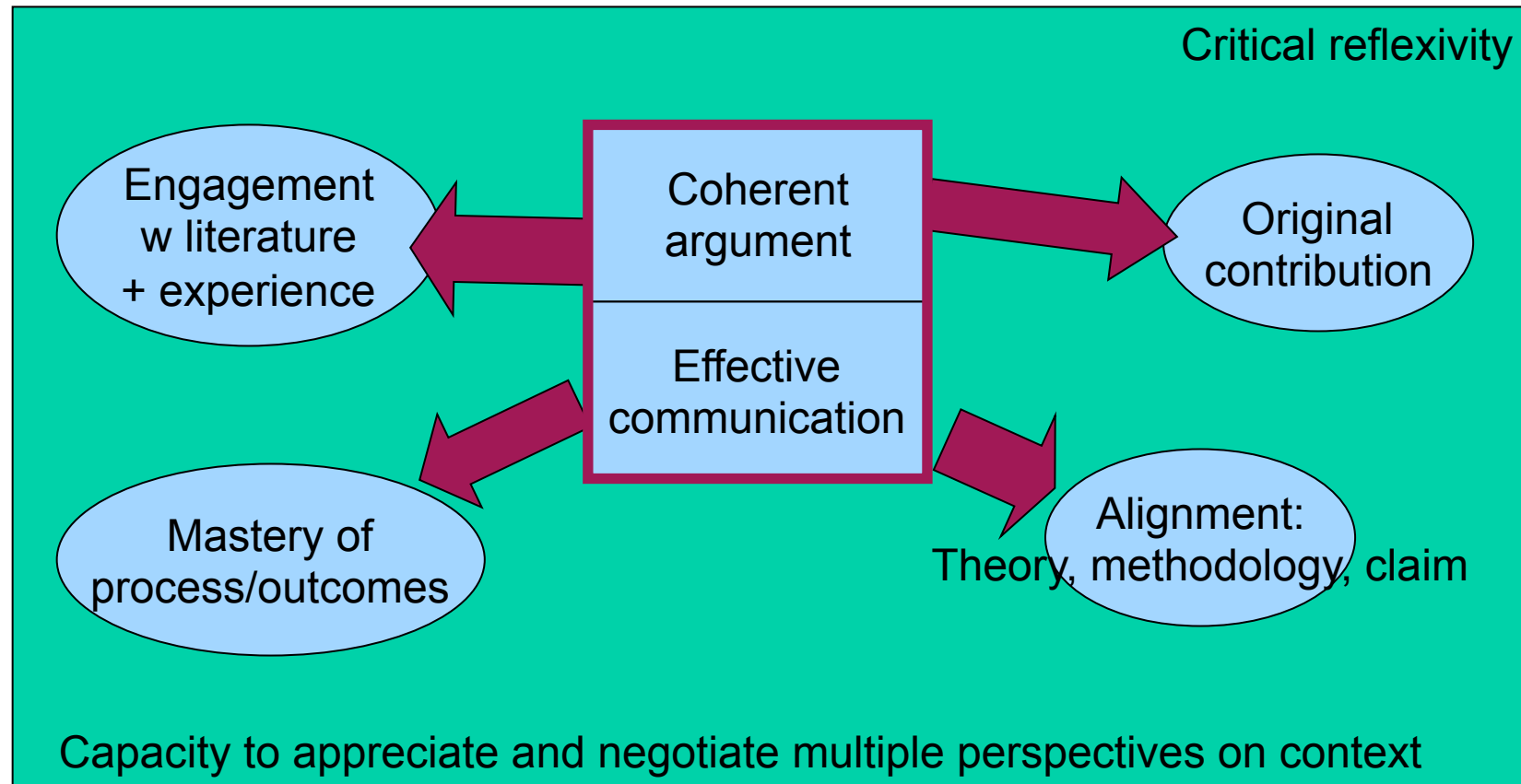
Knowing your audience so you can convincingly explain and evidence underlying coherence and consistency is fundamental to good research

The conventional contribution criterion is broadened and expanded

- > Original and creative contribution to knowledge and/or practice

The significance of the contribution in graduate ID and TD research is in its originality and creativity i.e., look for the contribution in synthesis and integration rather than analytical depth and precision

The criteria are inter-related, not 'stand alone'



This is just one representation. There are many possibilities.

Reflecting on the criteria and their resonance or otherwise...

- > Key question: in what ways (positive and negative) do these criteria **resonate** for you?
- > See Criteria Assessment Worksheet for details:
 - Quiet time (10 min)
 - Groups of 3 (20 min)
 - All together (20 min)

We will collect EVERYTHING you write so we can type up and share with everyone here.
Please, make it LEGIBLE.

Quiet time (10 min): resonant criteria

Work quietly, by yourself.

Start with the criterion that resonates most strongly.

Make **legible** notes about what it has meant in practice for you, in writing, supervising, or examining a thesis, both in terms of what worked well and what failed.

Then move on to another criterion and do the same...

This space allows us to capture detailed responses. They will be typed up and shared with the whole group afterwards. These stories are likely to be the most meaningful when you revisit these workshop notes in a few months time.

Small groups (20 min): assessing the criteria

1. In groups of 3, work through the criteria in the order that suits you best. Spend just a couple of minutes on each criterion, capturing your main thoughts about its usefulness or otherwise
2. Then, spend a couple of minutes at the end on this:
What criterion could you lose? Why?
What criterion needs to be reworded? How?
What new criterion simply must be added? Why?

This space works best for those who like to talk things through. It allows you to test your responses with others. We'll collect these too, and share afterwards.

All together (20 min): reflecting on criteria

Share your lead ideas.

Leave out ideas we've already heard.

This space provides immediate learning opportunities for the whole group, because it surfaces the diversity of experiences and responses within the group.

Break time – 15 minutes

Part 2: Overview

**What do these criteria mean for the
PRACTICES of supervisors and students
(and examiners and research degree
administrators) of inter- and trans-
disciplinary postgraduate research degrees?**

Feelings of not knowing, quandaries, blind alleys... All are both more likely and more profound

2nd year ID PhD student:

In my single disciplinary honours thesis, I pretty quickly came to a point of confidence in the literature/topic. I've been waiting for the same feeling of confidence in the topic for my ID PhD, and it gets further away the more I read.

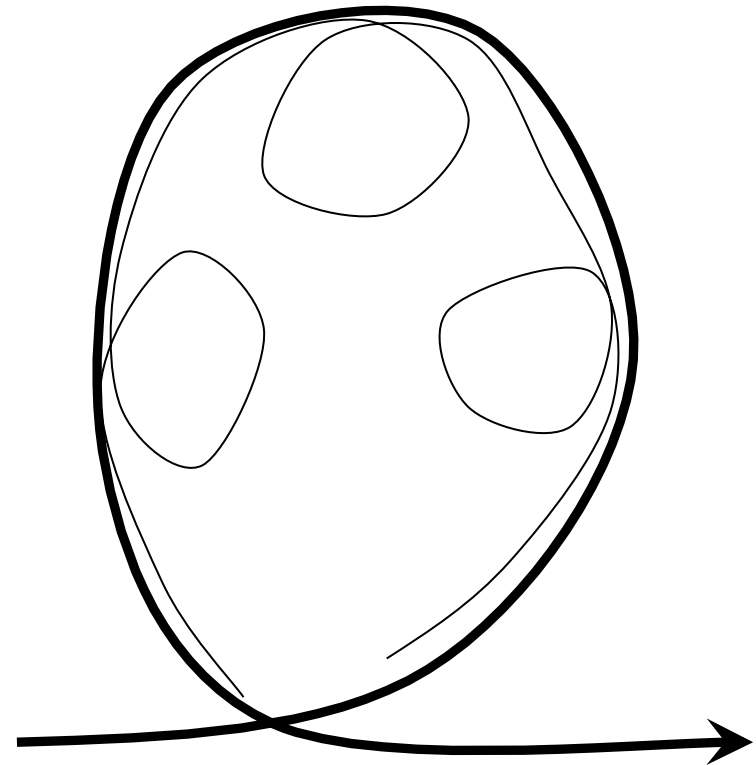
ID and TD Supervisors need a rich toolbox of tips and tricks that includes and extends beyond disciplinary 'good practice'.

Particular tools and ideas suit particular stages in a research degree

For what stage is the idea most helpful?

1. Working out what to do
2. Doing it
3. Making sense of it

A research student likely moves through these stages in many small cycles, within the overarching cycle of the degree



The challenge for the supervisor is to identify the right idea at the right time.

Good practice ideas take on special importance in the ID/TD domain

- Elevator pitches
- Journalling and Branding
- Argument Maps

Supervisors of good quality TD HDRs need some extra tricks up their sleeve.

Some ideas are relevant only in ID/TD domain

- Devil's advocate role plays
- Meta-epistemological check-in

ID/TD supervisors need a good degree of epistemological awareness and respect for diversity themselves to make these ideas work in practice.

Adding to the pool of formative actions: dimensions to think through

- > Focus on formative actions - things to do / resources to use, at different points along the way
- > What's the idea
- > Why is it such a good idea – how does it help?
- > What criterion does it address?
- > When would it be useful? What's the trigger?
- > What would it take to make it work?

If you're here, you're in this space already,
so chances are, you've got stories to tell that
others will want to hear

Capturing your experience and ideas (25 min)

Get together with someone like you (eg a newer supervisor, a student in later stages, someone with lots of experience in supervising this kind of work)

Spend a few minutes sharing your ideas for practice – things you've heard about or done or just come up with now

Now, for the 2 or 3 favourite ideas between you, fill out the proforma. Please, write **legibly**.

Remember the more information you give for each idea, the more useful it will be for others.

So focus on ensuring **quality**, not quantity, of ideas.

Sharing ideas for practice

Each pair has 30 seconds

Decide on the best idea from your partnership.

Share the highlights of idea with the rest of us (often, the best way to do this is if it was person A's idea, then person B does the sharing, but it's up to you)

This gives all of us an immediate extension to our repertoire of good ideas for practice. You can follow up the details later when we provide the workshop notes.

Evaluating today (10 min)

Spend 5 minutes quietly filling out the evaluation worksheet – the focus is on your learning, not my performance, so it's important for you!

Then we'll quickly share any ah-hahs/changes or clashes/concerns or suggestions for doing things differently

Wrap up

PLEASE make sure we have all your worksheets.

Workshop notes and outcomes will be written up and distributed in 2 weeks

Sharing everyone's contact details has been a rich source of support in other workshops... We'll do that here unless you tell us otherwise.

...thanks