

Integration and Implementation Sciences (I2S): what would an underpinning discipline look like?

Relevant conference theme: concepts and methods



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and

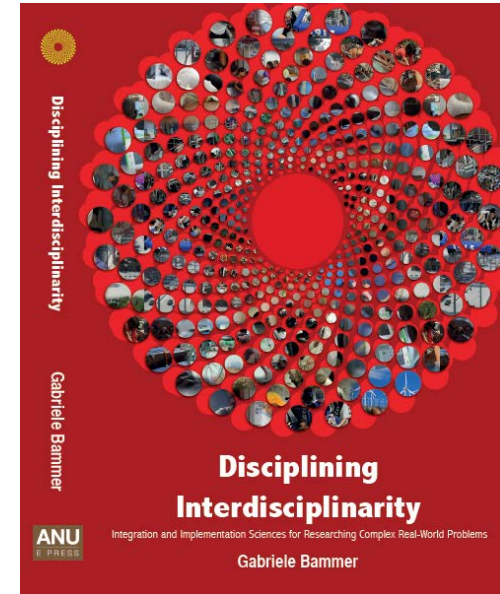
ARC Centre of Excellence in Policing and Security (CEPS)

Based on the book...

Bammer, G. 2013

*Disciplining Interdisciplinarity:
Integration and Implementation
Sciences for Researching Complex
Real-World Problems.*

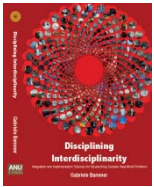
ANU E-Press.



<http://epress.anu.edu.au/titles/disciplining-interdisciplinarity>

Available free on-line

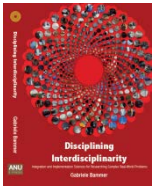
Core argument in Disciplining Interdisciplinarity... 1



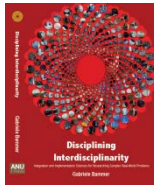
We need to differentiate kinds of
'interdisciplinarity'

Book focus: teams (from various disciplines and stakeholder groups) working on complex real-world problems

Core argument in Disciplining Interdisciplinarity... 2



Differentiate kinds of ‘interdisciplinarity’:
teams focused on complex problems

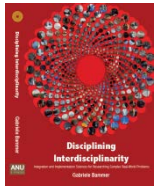


A new research style

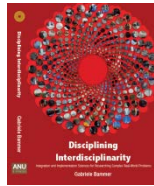
Book suggests: integrative applied research.

*This would provide an agreed, precise,
overarching term to describe only investigations
involving several disciplinary experts and
stakeholders investigating a shared complex
real-world problem.*

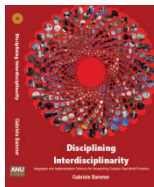
Core argument in Disciplining Interdisciplinarity... 3



Differentiate kinds of ‘interdisciplinarity’:
teams focused on complex problems



A new research style: *integrative applied research*



An underpinning discipline:

Book suggests: Integration and Implementation Sciences (I2S)

Core argument in Disciplining Interdisciplinarity... 4



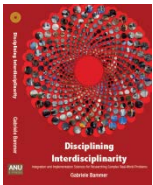
Differentiate kinds of 'interdisciplinarity': *teams focused on complex problems*



A new research style: *integrative applied research*



An underpinning discipline: *Integration and Implementation Sciences (I2S)*



A Big-Science project:

Book suggests: I2S Development Drive

This aim is to bring together everything we already know

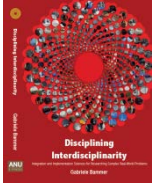
Let's concentrate on...



Differentiate kinds of 'interdisciplinarity': *teams focused on complex problems*



A new research style: *integrative applied research*



An underpinning discipline: ***Integration and Implementation Sciences (I2S)***



A Big-Science project: *I2S Development Drive*

Integration and Implementation Sciences (I2S): Aim

I2S sets out to provide a way to organise
all the tools and concepts that have
been developed in:

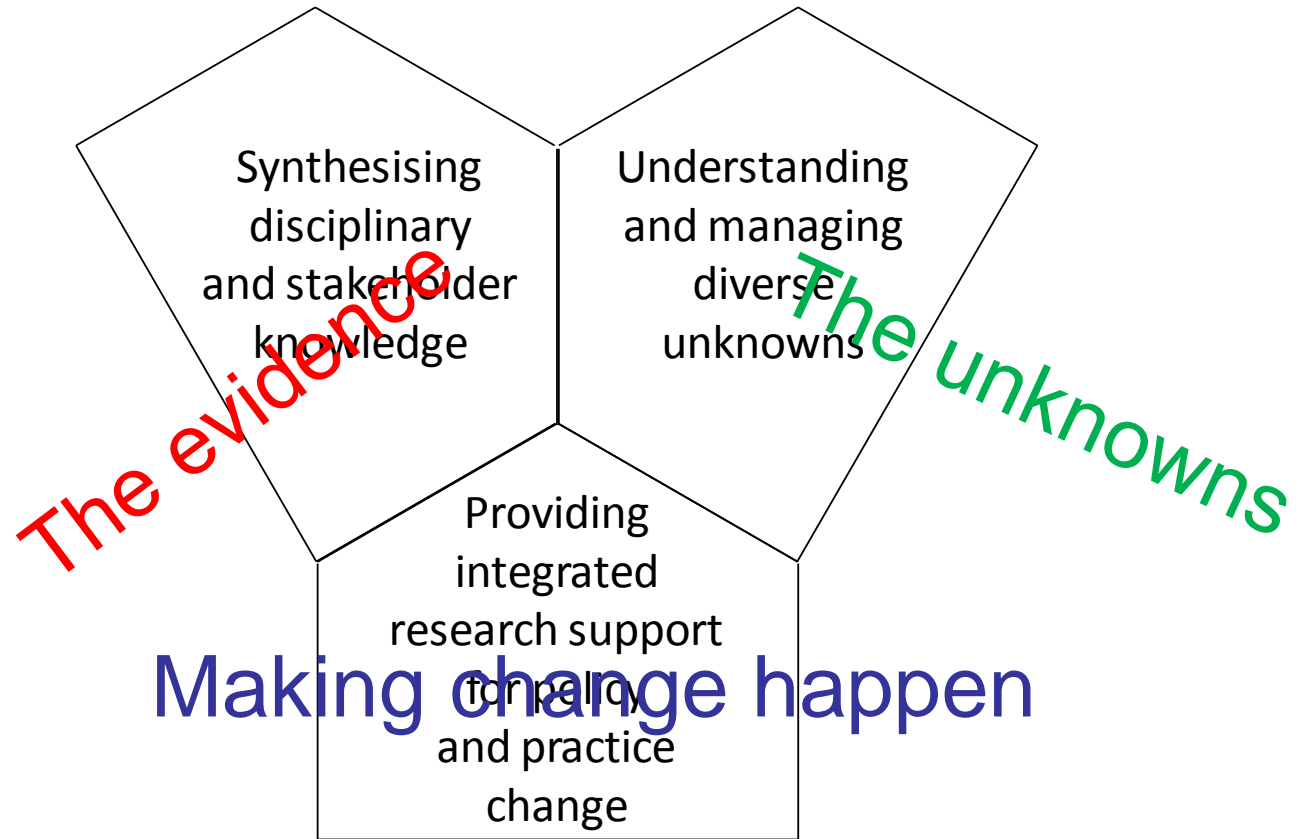
interdisciplinarity management science integrated assessment
adaptive management implementation science multidisciplinarity
complexity science modelling and simulation policy science impact evaluation
system dynamics sustainability science systems thinking
public engagement action research ecological economics decision sciences
team science theory of change project management post-normal science
systemic intervention transdisciplinarity operations research
mode 2 coalition theory cybernetics Integration and Implementation Sciences (I2S)

Integration and Implementation Sciences (I2S): Organising framework

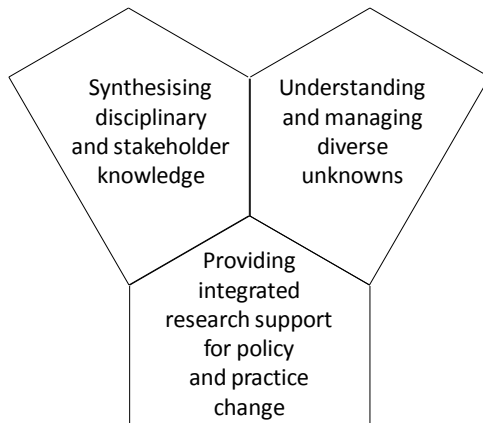
Three domains

5 Questions

Three domains of I2S



Five questions... for Knowledge Synthesis

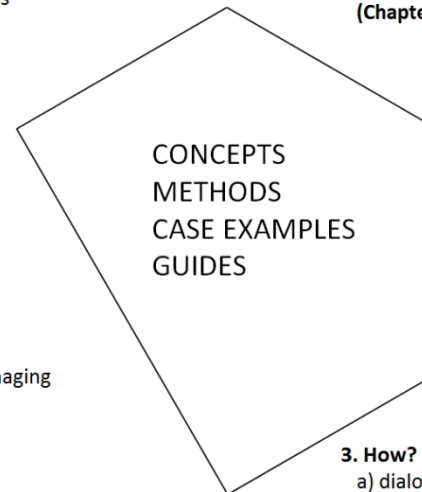


1. For what and for whom?

What is the knowledge synthesis aiming to achieve?
Whose perspectives will be included?
(Chapter 4)

2. Which knowledge?

a) systems view
b) scoping
c) boundary setting
d) framing
e) values
f) harnessing and managing differences
(Chapter 5)



5. Outcome?

Were good choices made for
a) aims and beneficiaries
b) knowledge synthesised
c) methods and processes
d) dealing with context
(Chapter 8)

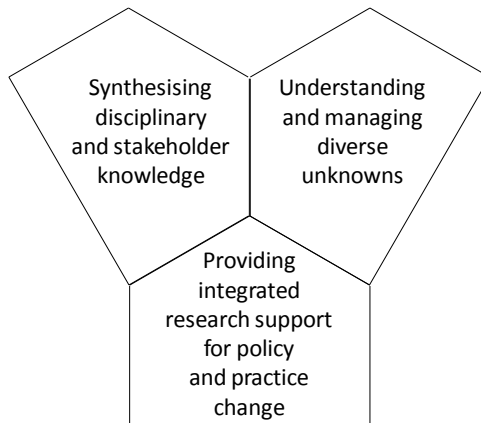
4. Context?

a) big picture
b) authorisation
c) organisational facilitators and barriers
(Chapter 7)

3. How?

a) dialogue based
b) model, product or vision based
c) common metric based plus by whom and when
(Chapter 6)

Five questions... for Unknowns



4. Context?

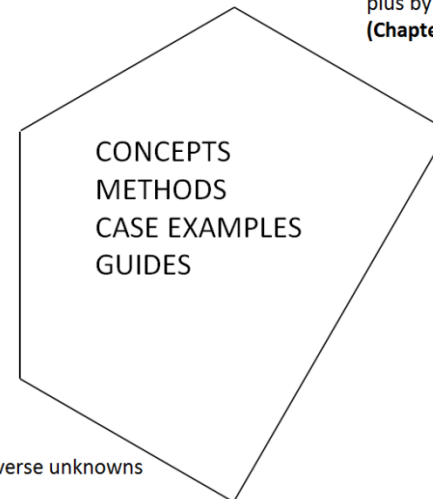
- a) big picture
 - b) authorisation
 - c) organisational facilitators and barriers
- (Chapter 14)**

3. How?

- a) reduction
 - b) banishment
 - c) acceptance
 - d) surrender
 - e) exploitation
 - f) denial
- plus by whom and when
(Chapter 13)

5. Outcome?

- Were good choices made for
- a) aims and beneficiaries
 - b) unknowns tackled
 - c) methods and processes
 - d) dealing with context
- (Chapter 15)**



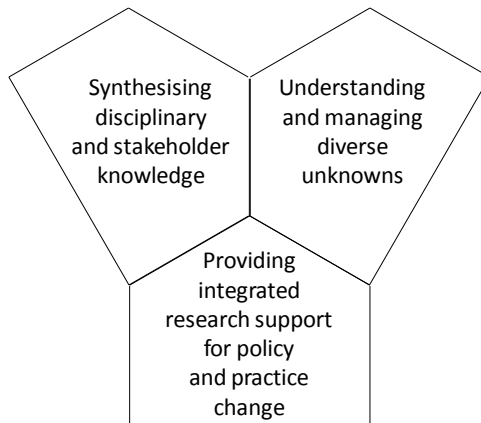
1. For what and for whom?

- What is the consideration of diverse unknowns aiming to achieve?
Whose perspectives will be included?
- (Chapter 11)**

2. Which unknowns?

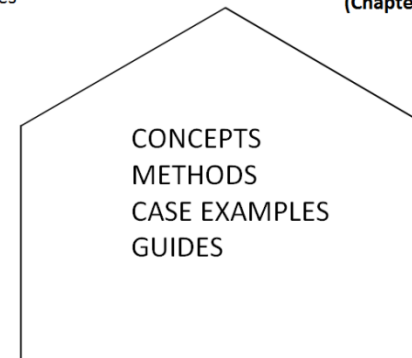
- a) systems view
 - b) scoping
 - c) boundary setting
 - d) framing
 - e) values
 - f) harnessing and managing differences
- (Chapter 12)**

Five questions... for Providing Integrated Research Support



1. For what and for whom?
What policy and practice change is being supported?
Who will be targeted?
(Chapter 18)

5. Outcome?
Were good choices made for
a) aims and beneficiaries
b) aspects of policy and practice targeted
c) methods and processes
d) dealing with context
(Chapter 22)



2. Which aspects of policy and practice?
a) systems view
b) scoping
c) boundary setting
d) framing
e) values
f) harnessing and managing differences
(Chapter 19)

4. Context?
a) big picture
b) authorisation
c) organisational facilitators and barriers
(Chapter 21)

3. How?
a) communication
b) advocacy
c) engagement
d) fresh thinking on complex problems plus by whom and when
(Chapter 20)

For more on I2S

<http://i2s.anu.edu.au>



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Poster details:

This digital poster was prepared for the First Global Conference on Research Integration and Implementation, <http://www.I2Sconference.org/>