

METHODS OF KNOWLEDGE INTEGRATION IN INTER- AND TRANS-DISCIPLINARY RESEARCH

Professor Gabriele Bammer

Dates: March 6, 2012
June 4-15, 2012

Evaluation:

Evaluation will be based on participation in the interactive sessions demonstrating application of the concepts and methods to the individual research projects, as well as appropriate critique of fellow students' projects.

SCHEDULE AND PREPARATION:

March 6 Skype video call (10 am – 12 noon Vienna time; 8 – 10 pm Canberra time)

Introduction to a framework for thinking about knowledge integration methods.
Students to present individually on how the framework relates to their projects.
General discussion.

Required preparation:

- 1) Chapters 3-8 of Bammer, G. (2012) *Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems*
- 2) Review of resources at <http://i2s.anu.edu.au/resources>

Assignment

Students to have sent me 1-2 page project outlines no later than Friday February 24th.

Monday June 4, 2012, 9.00 – 12.00

Lecture: Recap and extension of the framework for thinking about knowledge integration methods

Interactive session: Link methods and projects to theoretical foundations introduced by Christian Pohl

Optional preparation:

- 1) Chapters 1, 2 and 33 of Bammer, G. (2012) *Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems*

Tuesday June 5, 2012, 10.00-17.00 (lunch 12.00-13.30)

Lecture: Making research results useful for policy and practice change

Interactive session: Making research results useful for policy and practice change applied to the projects

Required preparation:

Chapters 17-22 of Bammer, G. (2012) *Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems*

Optional preparation:

One resource on 'policy engagement' from the Overseas Development Institute (ODI) website <http://www.odi.org.uk/resources/> (you can also find some of these resources at <http://i2s.anu.edu.au/resources/tools/policy-and-practice-support>).

Wednesday June 6, 2012, 10.00-17.00 (lunch 12.00-13.30)

Lecture: The importance of unknowns

Interactive session: How unknowns are dealt with in the projects

Required preparation:

Chapters 10-15 of Bammer, G. (2012) *Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems*

Optional preparation:

Read one or more entries about unknowns from Michael Smithson's blog

http://www.bestthinking.com/thinkers/science/social_sciences/psychology/michael-smithson?tab=blog

eg.

http://www.bestthinking.com/thinkers/science/social_sciences/psychology/michael-smithson?tab=blog

2) http://www.ted.com/talks/kathryn_schulz_on_being_wrong.html

Tuesday June 12, 2012 10.00-17.00 (lunch 12.00-13.30)

Lecture: Systems thinking and modelling

Interactive session: Use of systems thinking and modelling in the projects

Required preparation:

Chapter 14 "Integrated systems modelling of complex human-environment systems in Scholz, R.W. (2011). *Environmental Literacy in Science and Society: From knowledge to decisions*. Cambridge: Cambridge University Press, pp 341-372.

Optional preparation:

Badham, J. (2010). 'A compendium of modelling techniques'. *Integration Insights* #12 (May) http://i2s.anu.edu.au/sites/default/files/integration-insights/integration-insight_12.pdf

Thursday June 14, 2012 10.00-17.00 (lunch 12.00-13.30)

Lecture: Scoping, boundary setting, framing, values and making the most of difference

Interactive session: Scoping, boundary setting, framing, values and making the most of difference in the projects

Required preparation:

1) Bammer, G. (2008). 'Enhancing research collaboration: Three key management challenges'. *Research Policy*, 37:875-887 (for scoping, boundary setting and dealing with difference)

2) George Lakoff's website for blogs or other material on framing eg

<http://georgelakoff.com/2011/12/11/how-to-frame-yourself-a-framing-memo-for-occupy-wall-street/> or http://www.huffingtonpost.com/george-lakoff/a-good-week-for-science_b_470500.html

Friday June 15, 2012 10.00-17.00 (lunch 12.00-13.30)

Lecture: Dialogue, common metric based methods and other integration and implementation methods

Interactive session: Integration and implementation methods in the projects

Wrap-up

Required preparation:

1) Chapter 2 "Integrationsmethoden – ein Überblick über Einzelmethode für die transdisziplinäre Forschungspraxis" in Bergman, M., Jahn, T., Knobloch, T., Krohn, W., Pohl, C. and Schramm, E. (2010). *Methoden transdisziplinärer Forschung: Ein Ueberblick mit Anwendungsbeispielen*. Frankfurt: Campus Verlag. Pp 47-137.

OR

2) McDonald, D., Bammer, G. and Deane, P. (2009). *Research Integration Using Dialogue Methods*. Canberra: ANU E-Press;

http://epress.anu.edu.au/dialogue_methods_citation.html