THE AUSTRALIAN NATIONAL UNIVERSITY

DRAFT COURSE OUTLINE

THE ART AND SCIENCE OF INTEGRATION AND IMPLEMENTATION
A SHORT-COURSE FOR RESEARCH LEADERS

**Monday May 30 2011, 6-9pm
and
9am-5pm, Tuesday May 31 to Thursday June 2, 2011**

This outline is indicative only. The organisers reserve the right to change the content of the course components and their order. We will aim to tailor the course according to the experience and needs of the participants. A final course outline will be available before the course commences.

Course rationale

You will see that this course devotes a considerable amount of time to sharing information between the participants to build compilations of shared concepts and methods. The rationale underpinning the course is that:

a) for progress to be made in (i) synthesising knowledge across disciplines and stakeholders, (ii) thinking more comprehensively about unknowns and (iii) integrating knowledge and unknowns to provide support for decision makers and practitioners, a framework for systematically thinking about these domains is needed. The course provides such a framework.

b) research groups tackling complex real-world problems have used and developed a range of relevant concepts and methods, but there is no forum in which these can be shared. It is hard enough within areas such as population health or environment and even harder between areas. If we could find a way to draw on the extensive experience that exists, all of our work would be much richer. In the course, faculty will certainly share what we know, but we also want to capture the wide-ranging knowledge that participants will bring.

Pre-course preparation

When you lodge an expression of interest in the course, you will be asked to provide a brief bio and a weblink to your research, as well as to answer some specific questions. This is to allow us to choose a 'balanced' group of participants with complementary skills and interests, as well as to allow us to tailor presentations and discussion to the level of expertise in the group.

Our plan is to provide an electronic forum where the experiences of participants can be recorded and shared to provide an on-going resource for the whole group. We will therefore ask you to bring a laptop to the course. We will also want to work with you to ensure that all the relevant log-ins work before the course commences.

We will also ask you for a photo and for permission to use some of the information you provide to establish a course webpage.

Day 1: Dinner 6-9pm, Monday May 30, 2011
Introductions

Overview of the key elements of the framework (see attachment)

Day 2: 9am-5pm, Tuesday May 31, 2011

Synthesis of Knowledge from Disciplines and Stakeholders

9.00-10.30	Overview of 5 questions and key elements Discussion	Lead: Gabriele Bammer Support: Jen Badham
10.30-11.00	Morning tea	

11.00-12.30	Systems thinking
	  - overview
	  - individual reflection on use of systems
	    concepts
	  - compilation of concepts used by group
		Lead: Jen Badham Support: Gabriele Bammer

12.30-1.30	Lunch	

1.30-3.00	Dialogue methods
	  - overview
	  - individual reflection on use of dialogue
	    methods
	  - compilation of approaches used by group
	  - introduction to dialogue methods project
		Lead: David McDonald Support: Gabriele Bammer

3.00-3.30	Afternoon tea	

3.30-4.30	Organisational enablers and barriers
	  - overview
	  - individual reflection on enablers and
	    barriers
	  - compilation of what works and strategies
	    for overcoming barriers
		Lead: Alice Roughley Support: Gabriele Bammer

4.30-5.00	Wrap-up	Lead: Gabriele Bammer Support: Alice Roughley
Homework	Tying up of loose ends in reflections on how framework applies to own work	

Objectives:
1. Each participant understands the essential elements of the framework, as applied to knowledge synthesis
2. Each participant has applied the framework to their own research
3. A compilation has been developed for the group (that each participant has contributed to) on
   - formal systems concepts used
   - dialogue methods used
   - what works in terms of organisational enablers for knowledge synthesis
   - successful strategies and ideas for overcoming organisational barriers to knowledge synthesis.

Day 3: 9am-5pm, Wednesday June 1, 2011

Comprehensive Understanding and Management of Unknowns

9.00-10.30	Importance of unknowns and imperfection Overview of 5 questions and key elements Discussion	Lead: Gabriele Bammer Support: Jen Badham
10.30-11.00	Morning tea	
11.00-12.30	Ways of understanding unknowns - overview of taxonomies; mapping of disciplines; other factors - individual reflection on understanding unknowns - compilation of understandings in the group	Lead: Michael Smithson Support: Gabriele Bammer
12.30-1.30	Lunch	
1.30-3.00	Ways of managing unknowns - overview of reduction, banishment, acceptance, exploitation, surrender, denial - individual reflection on management strategies used - compilation of understandings in the group	Lead: Michael Smithson Support: Gabriele Bammer
3.00-3.30	Afternoon tea	
3.30-4.30	Tradeoffs and dilemmas - overview - individual reflection on tradeoffs and dilemmas - compilation of group experience	Lead: Michael Smithson Support: Gabriele Bammer
4.30-5.00	Wrap-up	Lead: Gabriele Bammer Support: Michael Smithson
Homework	Tying up of loose ends in reflections on how framework applies to own work	

Objectives:
1. Each participant understands the essential elements of the framework, as applied to comprehensive understanding and management of unknowns.
2. Each participant has applied the framework to their own research.
3. A compilation has been developed for the group (that each participant has contributed to) on
   i. different ways of understanding unknowns
   ii. methods used to manage unknowns
   iii. tradeoffs and dilemmas experienced.

Day 4: 9am-5pm, Thursday June 2, 2011

Providing Integrated Research Support for Policy and Practice Change

9.00-10.30	Overview of 5 questions and key elements Discussion	Lead: Gabriele Bammer Support: David McDonald
10.30-11.00	Morning tea	
11.00-12.30	Using theory to think of policy making as a system - overview - individual reflection on how think of policy making - compilation of understandings in the group	Lead: David McDonald Support: Gabriele Bammer
12.30-1.30	Lunch	
1.30-3.00	Modelling for knowledge synthesis, managing unknowns and providing support to policy and practice - overview - individual reflection on modelling methods used - compilation of methods used by group	Leads: Jen Badham Support: Gabriele Bammer
3.00-3.30	Afternoon tea	
3.30-4.00	Wrap-up for this domain	Lead: Gabriele Bammer Support: Jen Badham
4.00-5.00	Wrap-up for course Development and maintenance of an alumni network	Lead: Gabriele Bammer Support: Jen Badham

Objectives for Providing Integrated Research Support for Policy and Practice Change:
1. Each participant understands the essential elements of the framework, as applied to providing integrated research support for policy and practice change.
2. Each participant has applied the framework to their own research.
3. A compilation has been developed for the group (that each participant has contributed to) on
   i. insights theory provides to understanding the policy process
   ii. modelling methods used.

Objectives for Course Wrap-up
4. Each participant has a good overview of the framework and its application to their own research
5. There is a resource based on the compilations the group has developed of a range of relevant concepts and methods
6. An alumni group has been established.

ATTACHMENT

Overview of the key elements of the Integration and Implementation Sciences Framework

I. Three domains for dealing with complex real-world problems:
1. Improving understanding – synthesis of relevant knowledge from disciplines and stakeholders
2. Consideration of remaining unknowns – comprehensive understanding and management of unknowns
3. Providing integrated research support for policy and practice change – combining what is known about the problem (from the synthesis of disciplinary and stakeholder perspectives) and the analysis of unknowns to provide support to decision makers and practitioners who have to act on the problems.

II. A five-question framework for systematically tackling each domain:
2. What is the research aiming to achieve and who is intended to benefit in terms of knowledge synthesis, comprehensive consideration of unknowns and provision of integrated research support for policy and practice change?
3. What is being dealt with in terms of knowledge synthesis, unknowns and provision of integrated research support for policy and practice change?
4. How are the knowledge synthesis, comprehensive consideration of unknowns and provision of integrated research support being undertaken, by whom and when?
5. What is the context for the research in terms of knowledge synthesis, comprehensive consideration of unknowns and provision of integrated research support for policy and practice change?
6. What is the outcome of the research in terms of knowledge synthesis, comprehensive consideration of unknowns and provision of integrated research support for policy and practice change?

i.e.
1. For what and for whom?
2. Of what?
3. How, by whom and when?
4. Context?
5. Outcomes?

III. Key elements:

Systems thinking Scoping and boundary setting Problem framing Values Harnessing and managing differences Iteration and evolution	Question 2
Big picture issues Legitimacy Organisational barriers and enablers	Question 4

IV Key methods – Question 3

Knowledge synthesis	Dialogue methods Modelling, product, vision Common metric
Comprehensive understanding and management of unknowns	Reduction Banishment Acceptance Exploitation Surrender Denial
Providing integrated research support for policy and practice change	Communication Advocacy Engagement