

24. Introduction

This section brings together and examines the interactions among the three domains: synthesising disciplinary and stakeholder knowledge, understanding and managing diverse unknowns and providing integrated research support for policy and practice change. While it is helpful to differentiate between the domains to make research on complex real-world problems manageable, it is also important to remember that such distinctions are a construct, that the boundaries are not sharply defined and that what happens at the interfaces of the domains must be taken into account. There are different kinds of interactions, which include the following.

- Phenomena that are not very evident in any one domain becoming more prominent when I2S is considered as a whole; for example, some of the policy makers and practitioners considered in Domain 3 are also stakeholders dealt with in Domain 1. As described in Chapter 2, treating these separately is helpful for understanding each domain, but the overlap between these two groups must also be taken into account.
- Spin-offs from one domain that affect the others; for instance, if practitioners are able to help formulate the questions for knowledge synthesis and dealing with diverse unknowns, they may also be more motivated to implement the research findings.
- Efficiencies from considering the domains together, such as the ability to use some dialogue and modelling methods across more than one domain.

A related issue is that of congruence between the approaches in the three domains. Incompatibility can lead to conflict and stymie progress. This can occur if different values, for example, govern how each domain is tackled. Imagine if a democratic research approach is used to involve a wide range of stakeholders in Domains 1 and 2, but the integrated research support for policy or practice change is then driven by maximising profitability. Many of the stakeholders involved in the knowledge synthesis and dealing with diverse unknowns could rightly feel that their time was wasted. On the other hand, identifying and overcoming inconsistencies can strengthen the integrative applied research. In the example just presented, the realisation that there was a problem with congruence could have been used to modify either the approaches to knowledge synthesis and dealing with unknowns or the implementation, thereby improving the research overall.

This section will inevitably recap key issues for each of the three domains. Where possible, I will present these with a different slant and will build on

them. Let us then examine the aims of integrative applied research and I2S in a new light. Overall, integrative applied research aims to help tackle complex real-world problems through

- assisting policy makers and practitioners in developing and implementing improved decisions and actions
by
- providing more comprehensive understanding of the problem or generating fresh thinking about it
through
- bringing together relevant disciplinary and stakeholder knowledge
and
- an appreciation of, and management strategy for, the diverse range of remaining unknowns.

The discipline of I2S underpins integrative applied research with

1. a five-question framework, which provides a systematic approach to conducting the research and providing integrated research support
2. an array of options in relevant concepts, methods and case examples
3. guides to relevant knowledge from outside I2S.

In presenting I2S as a whole, the five-question framework becomes the following.

1. What is the integrative applied research aiming to achieve and who is intended to benefit? (For what and for whom?)
2. What is the integrative applied research dealing with—that is, which knowledge is synthesised, unknowns considered and aspects of policy and practice targeted? (Which knowledge, unknowns and aspects of policy and practice?)
3. How is the integrative applied research undertaken (the knowledge synthesised, diverse unknowns understood and managed, and integrated research support provided), by whom and when? (How?)
4. What circumstances might influence the integrative applied research? (Context?)
5. What is the result of the integrative applied research? (Outcome?)

As in the foregoing sections, each of these questions is considered in turn. Figure 24.1 provides a summary of the new ideas presented for each question along with the chapters in which they are relayed.

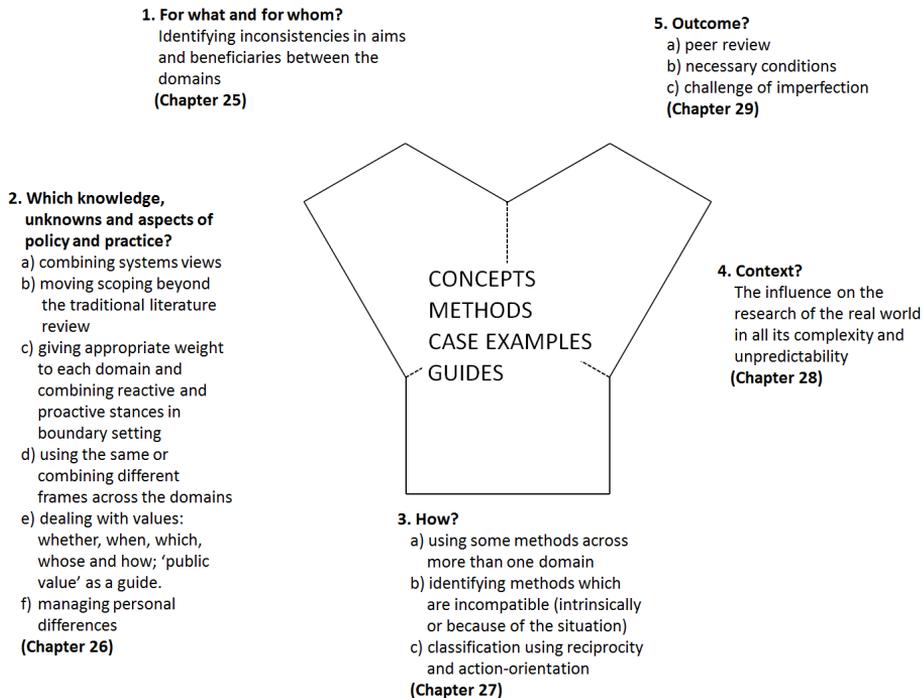


Figure 24.1 The Storeroom for I2S as a Whole

Source: Author's illustration.

Consideration is also given to additional tasks for the I2S Development Drive in compiling the relevant concepts, methods and case examples, as well as guides to relevant knowledge from outside I2S. This section concludes by reviewing the whole role of I2S specialists in integrative applied research teams, especially in providing expertise across the three domains.

This text is taken from *Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems*, by Gabriele Bammer, published 2013 by ANU E Press, The Australian National University, Canberra, Australia.