

# Chapter 2. Using the dialogue methods in this book

## Identifying and classifying the dialogue methods

In this section, we provide an overview of the dialogue methods, describing how we classify them. It is useful to reiterate that our aim is to present group conversation processes to jointly create meaning and shared understanding about real-world problems by bringing together knowledge from relevant disciplines and stakeholders.

The challenging issue for identifying relevant dialogue methods and classifying them relates to just what is being integrated. From an initial understanding of what (structured) dialogue might integrate, we developed a list of elements we believed were possibly being integrated—these included facts, judgments, visions, values, interests, epistemologies, time scales, geographical scales and world views. These provided the basis for further interrogating the literature on dialogue and hunting out case studies. In terms of the elements we identified, we found dialogue methods specifically geared to integrating judgments, visions, world views, interests and values.

In this way, we determined that there were two broad classes of dialogue methods for research integration: those that were useful for gaining a broad understanding of a problem and those that were useful for honing in on a particular aspect of a problem.

We put methods for integrating judgments together to make up the class of methods for gaining a broad understanding. In forming a judgment, a person takes into account the facts as they understand them, their personal goals and moral values, and their sense of what is best for others as well as themselves (Yankelovich 1999). Most of the dialogue methods we identified fell into this group and they are citizens' jury, consensus conference, consensus development panel, Delphi technique, future search conference, most significant change technique, nominal group technique, open space technology, scenario planning and soft systems methodology.

The second class of methods focuses on a particular aspect of understanding a problem. We identified methods specifically geared to four aspects: integrating visions (appreciative inquiry), world views (strategic assumption surfacing and testing), interests (principled negotiation) and values (ethical matrix).

Before moving on to describe these groups of methods, it might be useful to outline how we think they could be used for research integration, or more particularly how we think they should not be used. We do not believe that

research integration needs to slavishly identify every element of knowledge and then institute a process for bringing together all the disciplinary and stakeholder perspectives on each element. Instead, for most problems, a method for developing broad, shared understanding, as identified in our first class of methods, will be more than adequate. For some problems, however, it can be particularly important to tease out one aspect. For example, in the peri-urban land-use illustration, understanding different values about progress and growth, conserving the environment and providing equity for all citizens (in terms of access to housing, in this case) will be integral to developing shared understanding, so that a dialogue method targeted at values can be particularly helpful.

Similarly, for other problems, differences in visions can be particularly pertinent. Vision here relates to aspirations about dealing with the problem. For example, if the problem under investigation is the different life expectancy between rich and poor members of a community, different ultimate aspirations can affect the ability to bring different perspectives together. Those whose vision is to use the community as a case study to develop national policy tackling multiple facets of poverty will approach the problem differently from those whose aspiration is to improve employment opportunities for the disadvantaged in that one area. When the problem is such that the disciplinary and stakeholder experts are likely to have widely different visions, methods focusing on understanding these could be necessary.

The same logic applies to world views or mental models, which are the assumptions that each of us hold about how the world works in relation to the problem under consideration. That logic also applies to interests, which are our motivations for getting involved in understanding the problem.

We therefore classified the methods we identified as useful for research integration as follows.

## **I. Dialogue methods for understanding a problem broadly: integrating judgments:**

- citizens' jury
- consensus conference
- consensus development panel
- Delphi technique
- future search conference
- most significant change technique
- nominal group technique
- open space technology
- scenario planning
- soft systems methodology.

## II. Dialogue methods for understanding particular aspects of a problem: integrating visions, world views, interests and values:

- appreciative inquiry: integrating visions
- strategic assumption surfacing and testing: integrating world views
- principled negotiation: integrating interests
- ethical matrix: integrating values.

As with all classifications, the boundaries between different groups are not hard and fast. This is compounded further by the flexibility with which particular methods can be applied. Nevertheless, we suggest that the classification we present here provides a workable beginning that can be used as the basis for further development of dialogue methods for research integration.

Before moving on to issues concerning the application of these methods, it is also important to point out that, by and large, the dialogue methods we investigated were devised for some purpose other than research integration. For many, it is an easy, logical move to increase their applications to include research integration. For some, however, expanding their use to research integration requires a different way of thinking about the method. For example, the nominal group technique falls into the former category. This is a highly structured method to assist participants in pooling their judgments about an issue, involving the generation, recording and discussion of, and voting on, ideas. As we illustrate in the relevant section of this book, there are clear examples of how this is useful in research integration. On the other hand, using principled negotiation for research integration requires thinking about this method in a novel way. Principled negotiation was originally devised as a conflict-resolution method but its techniques—for identifying interests, generating options for meeting the range of interests ascertained and developing fair ways to resolve differences in interests—can also be applied in situations where there is no conflict, but where people seek to understand and accommodate each other's motivations. Interestingly, while one of us (Gabriele Bammer) has used principled negotiation in this way in large collaborative projects, we have been unable to find any documented examples of its use as a research integration tool. To assist the reader to understand how readily each method can be transposed to research integration, we provide a genealogy of the method and a commentary on its use in research integration in the description of each method.

While this is the first published compilation and analysis of dialogue methods for research integration, other sources cover some of the methods dealt with here and additional methods that we have excluded from this book, having judged that they are either not dialogue methods or are not useful for research integration. They apply quite different classificatory schemes. Examples include the following, and a fuller list is in Appendix 2:

- Start and Hovland (2004), *Tools for Policy Impact: A handbook for researchers*. Some 31 tools are covered in this source, classified into research tools for policy impact, context assessment, communication and policy influence.
- Carson and Gelber (2001), *Ideas for Community Consultation: A discussion on principles and procedures for making consultation work*. This source includes four of the methods we have covered, but its focus is community consultation.
- Keating (2002), *Facilitation Toolkit: A practical guide for working more effectively with people and groups*. This includes 20 tools. While the facilitation of dialogue is an important component of many of the methods we describe, our focus is not on facilitation as such, as is the case in Keating's publication.
- Urban Research Program, Griffith University (2006), *URP Toolbox*. This 'toolbox' contains 63 tools that can be used to improve the quality of stakeholder involvement in decision making, particularly regarding environmental sustainability. Again, it covers some of the dialogue methods discussed in this book.

Appendix Table 3.1 provides an extensive list of methods—some drawn from these publications—that we have used as a starting point for identifying dialogue methods for research integration.

## Applying the dialogue methods in this book

### Flexibility

As we pointed out in the section on classification, some of the methods are broadly applicable, while others are more narrowly targeted. We have suggested that the latter methods are used when an in-depth focus on a particular aspect of knowledge—such as interests or world views—is especially apposite. Experienced research integrators can also combine methods in helpful ways. For example, in the process of using a broad method, it could become evident that differing values or some other attribute are blocking the development of shared understanding, so that a method to specifically deal with this could be gainfully combined with the broad method. Thus, methods can be used in conjunction with others, either sequentially or nested. In the case we present on seeking agreement on the core operational strategy of a Cooperative Development Agency in the United States (see under strategic assumption surfacing and testing), it was recognised that reconciling two conflicting sets of assumptions regarding top-down versus bottom-up approaches was essential for moving forward. In this case, strategic assumption surfacing and testing was used to make clear the assumptions of the two main groups of stakeholders. This was nested within a soft systems methodology approach, which aimed to develop more general joint meaning and understanding. Combinations of the general techniques could also be useful. For example, a case study we describe integrating judgments for dealing with *Salmonella* infection started with the nominal group technique and

followed it with a Delphi technique (the example can be found under Delphi technique), drawing on the different strengths of each method for particular aspects of the problem they were addressing.

Such flexibility in application of the techniques is critical for successfully using dialogue methods for research integration. It is the mark of a successful research integrator to be able to do this and such skill is built through training and experience. By endeavouring to provide a more systematic approach to dialogue methods for research integration, we are not seeking to undermine this vital flexibility in application. Instead, we aim to enhance it, by broadening appreciation of the range of available methods, as well as providing numerous examples illustrating how the methods have been applied.

## Preparing to use a dialogue method

It is also worth noting that using many of the dialogue methods for research integration involves significant preparatory work. Further, some dialogue methods involve a series of meetings, interspersed with other activities. Some also require substantial action after the event to finish the integrative task. While our focus in the descriptions that follow is on the dialogue event itself, we also flag these other aspects.

## Areas not covered in this book

The book does not provide some of the essential ingredients for successfully applying these dialogue methods, such as facilitation and other group management skills. For example, it does not consider important areas such as managing power differences between participants, managing intransigent participants or keeping to time limits. Our primary audience will already have many of these skills. For novices, this compilation is intended to be used in conjunction with training by experienced experts.

Furthermore, the book does not deal with critical areas such as the selection of participants or taking action based on the results of the dialogue; these are covered by other aspects of Integration and Implementation Sciences, particularly 'framing, scoping and boundary setting' and 'providing research support for decision making' (see Appendix 1).

## How to read this book

This book has opened with an introductory and framing discussion and a clarification of what it covers and what is out of its scope. The next two chapters present the 14 dialogue methods, illustrating their role in research integration. The concluding chapters discuss differentiating between the methods—clarifying which methods are particularly useful for which integrative challenges—and the appendices place the dialogue methods into a broader context of Integration and Implementation Sciences.

Our descriptions of each of the dialogue methods are accompanied by one or more examples of their use in research integration. These examples are structured around six questions that we have found to be helpful in thinking systematically about research integration and documenting its application.

1. What was the integration aiming to achieve and who was intended to benefit?
2. What was being integrated?
3. Who did the integration?
4. How was the integration being undertaken?
5. What was the context for the integration?
6. What was the outcome of the integration?

As we demonstrate in the cases that follow, the questions can be used in any order, and can be combined. Further details on the use of this descriptive and analytic framework are provided in Appendix 1 and Bammer (2006a).

In Table 2.1, we provide an overview of how well the examples illustrate each particular method. First, we document the range of topic areas in which we have been able to find examples and where we had to resort to examples in areas outside environmental management, public health, security and technological innovation, or outside research integration. Second, we describe the participant groups each method is primarily useful for—that is, discipline and stakeholder experts, discipline experts only or stakeholders only—and which of these are illustrated by the case studies. Third, we describe whether the research role in the example is clearly integrative.

In Table 2.2, we describe some additional characteristics of each method:

- a. the usual number of participants
- b. the characteristics of the dialogue process
- c. whether the locus of control lies with the participants or the organisers
- d. how highly structured the method is
- e. the extent to which preparatory or integrative work outside the dialogue is required
- f. particular strengths
- g. major limitations.

**Table 2.1 How well the examples illustrate each particular method**

Method	Cases					Participants			Research integrator role clear?
	Environment	Public health	Security	Technological innovation	Other	Disciplines and stakeholders	Disciplines only	Stakeholders only	
<b>I. Dialogue methods for understanding a problem broadly: integrating judgments</b>									
<i>Citizens' jury</i>	√	√				Yes			Yes, if the organiser
<i>Consensus conference</i>				√		Yes			Yes, if the organiser
<i>Consensus development panel</i>		√					Yes		Yes
<i>Delphi technique</i>	√	√	√	√		Yes			Yes
<i>Future search conference</i>		√				Yes			No
<i>Most significant change technique</i>	√							Yes	Yes
<i>Nominal group technique</i>	√	√				Yes			Yes
<i>Open space technology</i>		√				Yes			Yes
<i>Scenario planning</i>	√				Business	Yes	Yes?		Yes
<i>Soft systems methodology</i>			√			Yes			Yes
<b>II. Dialogue methods for understanding particular aspects of a problem: integrating visions, world views, interests and values</b>									
<i>Appreciative inquiry</i>		√			Organisational development	Yes			No
<i>Strategic assumption surfacing and testing</i>					Business and not research integration	Yes			Yes, if facilitator
<i>Principled negotiation</i>		√ (social work example)				Yes			No
<i>Ethical matrix</i>				√		Yes			Yes, if organiser/facilitator

**Table 2.2 Additional characteristics of each method**

Method	Usual number of participants	Characteristics of dialogue process	Locus of control (participants or organisers)	Degree of structure in the method	Requirement for additional preparatory or integrative work outside the dialogue	Particular strengths	Major limitations
<b>I. Dialogue methods for understanding a problem broadly: integrating judgments</b>							
<i>Citizens' jury</i>	18–24 citizens, a microcosm of the public	Meet for 4–5 days, hear from expert witnesses, deliberate and present recommendations on final day	Participants	Highly structured	Significant preparation	Efficient Develops informed inputs to decision making	Only the views of citizens are elicited, not other stakeholders
<i>Consensus conference</i>	12–25 citizens, a representative sample of the public	Need for a preparatory weekend then 2–4 days	Participants	Highly structured	Significant preparation	Efficient Develops informed inputs to decision making	Only the views of citizens are elicited, not other stakeholders
<i>Consensus development panel</i>	About 15 panellists plus an open number of conference participants	Panel receives inputs from expert speakers over 1 ½ days, develops a draft consensus statement, discusses it with conference participants and releases it to the public	Organisers	Highly structured	Significant preparation Comments on draft statement invited after the dialogue	Independent panellists synthesising a body of research evidence and producing their consensus position on it	Applicable only where a substantial body of scientific evidence has been published on a topic, and where the level of controversy is not so great as to preclude its synthesis and the panel producing a consensus statement
<i>Delphi technique</i>	Varies from just a few to hundreds	Operates by mail, email or Internet. Participants respond to organisers' questions; responses are shared; usually three rounds	Organisers	Highly structured	Significant preparation	Taps knowledge and judgments of experts while avoiding the dominance by particular individuals that can occur in face-to-face dialogue	Resource intensive Organisers require significant management and integrative skills



**Table 2.2 (continued)**

<i>Future search conference</i>	Varies from about 60 to hundreds	Round-table plenary and small group discussions leading to the development of agreed visions and action plans	Organisers re process, participants re contents	Highly structured	Limited preparation needed but strategies followed— that is, implementation of action plans	Can integrate stakeholders and Focuses on post-conference action	Participants might not be able to find consensus re the nature of the problem and/or actions needed  Commitment to follow-up action could be strong at the conference but dissipate soon afterwards
<i>Most significant change technique</i>	Scores to hundreds	Change stories gathered in group discussion or in writing and reviewed at various levels in a hierarchical organisation	Organisers	Highly structured	Significant preparation, implementation and follow-up	Informs senior managers Gives voice to the less powerful stakeholders Focuses on program outcomes and their drivers	Other techniques— dialogic and other—needed to gain a full understanding of the situation, outcomes, attribution and future action needed
<i>Nominal group technique</i>	Small groups of up to about 12	Face-to-face small group dialogue to generate, record, discuss and vote on ideas in such a manner as to minimise power differentials between participants	Organisers	Highly structured	Little required	Avoids the dominance by particular individuals that can occur in face-to-face dialogue	Requires a degree of shared understanding of the problem and willingness to listen and compromise
<i>Open space technology</i>	Any number, from a small group to thousands	Participants work together in small groups with like-minded people on topics they have identified as priorities	Participants	Fairly unstructured	Little required	Diversity among the participants Encourages creativity and lateral thinking Can produce action plans for implementation after the OST event	Requires clarity about the issue being addressed and willingness to listen and compromise  The unstructured nature of the OST events is problematic to some potential participants

Table 2.2 (continued)

Method	Usual number of participants	Characteristics of dialogue process	Locus of control (participants or organisers)	Degree of structure in the method	Requirement for additional preparatory or integrative work outside the dialogue	Particular strengths	Major limitations
<i>Scenario planning</i>	Variable, but not so many as to impede small group processes	Expert facilitators guide small group discussions, which produce the scenarios	Organisers	Highly structured	Detailed documentation of the scenarios is often undertaken outside of the dialogue	People with expert knowledge about a field address uncertainty	Selection of participants tends to shape the outcomes of the process Challenges exist in linking the scenarios developed to decision making and action planning
<i>Soft systems methodology</i>	Variable, but not so many as to impede small group processes	Participants engage in debate to understand others' world views and perceptions of a problem in its context, and then develop action plans to address it	Organisers	Can be highly structured (Mode 1) or more free-flowing and adaptive to circumstances (Mode 2)	Little required	Valuable in developing action plans to deal with complex social situations where the nature of the problem, its origins and what to do about it are unclear	The surfacing of participants' world views, and discussing their implications for understanding and addressing an issue, is challenging to some participants The method is not widely known and relatively few examples of its application and outcomes are documented

Table 2.2 (continued)

Method	Usual number of participants	Characteristics of dialogue process	Locus of control (participants or organisers)	Degree of structure in the method	Requirement for additional preparatory or integrative work outside the dialogue	Particular strengths	Major limitations
<b>II. Dialogue methods for understanding particular aspects of a problem: integrating visions, world views, interests and values</b>							
<i>Appreciative inquiry</i>	Varies from a small number to scores	Typically involves a work team engaged in small group dialogue to develop shared visions	Organisers	Structured	Preparation required to orient participants to the AI perspective	Can be a valuable organisational development tool that focuses on the future of the organisation	Participants need to be oriented towards ignoring current problems with the organisation's operations and, instead, focus on its future
<i>Strategic assumption surfacing and testing</i>	Varies from a small number to scores	A number of small groups with common assumptions, and dialectic debate plenary sessions	Organisers	Structured	Significant preparation	As a planning tool, it can reveal the diverse assumptions held by participants and find accommodations between them	Participants must be willing to expose, through dialogue, their underlying assumptions and have them challenged through dialectic debate
<i>Principled negotiation</i>	Generally small numbers (often two people) but can be two or more negotiating teams of any functional size	Willingness, on the part of all participants, to understand the interests that the others bring to the negotiating table, and to find a position acceptable to all	Participants	Moderately structured	Little preparation	Can eliminate conflict between the participants, leading to a mutually acceptable resolution	Participants sometimes find it difficult, or they are unwilling, to separate the people from the problem and to focus on participants' interests, not positions
<i>Ethical matrix</i>	Small groups	Round-table discussion to identify and reach consensus on the ethical implications of the issue being addressed and the relative importance of those implications	Participants	Highly structured	Can involve little or a lot of preparation, depending on the approach taken	Reveals the values that participants hold or ascribe to stakeholders not present, and weighs their relative importance using a structured framework	Participants must be willing and able to discuss value issues, and to empathise with stakeholders not at the table, identifying and analysing the values and ethical issues that underlie the topic

Key source documents for each method are provided as part of its description to assist readers wishing to further investigate particular methods, including developing skills in applying them. Literature citations provided within each section are detailed in the list of references that concludes this book.

Further comment on the examples presented in this book to illustrate different dialogue methods is also warranted, especially as the examples are intended to help readers think about how the methods can be applied. We present the best examples we could find and, while we could not search all the literature, we did attempt to cover a broad swathe of research publications (see Appendix 3). For some methods—for example, the Delphi technique—we were spoilt for choice. We found examples in each of our four areas of application and for various ways of combining discipline and stakeholder inputs, so that we could illustrate a range of ways of applying the method in research integration. More commonly, however, there are gaps in our illustrations. We usually could not find an example in each of the areas of environment, public health, security and technological innovation. More importantly, the examples of research integration that are demonstrated are often limited and, for some methods such as principled negotiation, non-existent.

We also note that most of the examples we have found concentrate on stakeholder input. Examples where different disciplinary or expert perspectives were brought together were less common, and illustrations combining disciplinary and stakeholder inputs were rare. That is not to say that the participants in dialogue for research integration always have to conform to a particular stereotype. On the contrary, the point we are making here is that the illustrations we are able to provide cover only a limited array of possibilities in terms of bringing various perspectives together.

In our search for examples, wherever possible, we chose those where researchers were prominent: in organising the dialogue, as facilitators, as participants, as ‘expert witnesses’ and/or in documenting the dialogue. Because the role of researchers as integrators is not, however, yet well defined or established—for example, through a crosscutting discipline of Integration and Implementation Sciences—the tasks of the researchers in our examples are not always integrative or even clearly described.

Overall, we focus on description of dialogue methods, rather than analysis or evaluation. This reflects the fact that little analysis or evaluation of individual methods has been undertaken and published with respect to dialogue, let alone comparative analyses. Towards the end of this book, however, after we have presented each method, we take a first analytical step. We use a hypothetical problem based on concerns about amphetamine use in young people to illustrate an aspect of the problem each dialogue method is ideally suited to address. For the dialogue methods aimed at providing a broad understanding of a problem,

we then tabulate which other methods can be used to address that aspect of the problem. Our aim is to help readers begin to differentiate between dialogue methods, allowing them to choose those most appropriate for a specific research integration task.

As we have outlined in the introduction, we see this book as charting new territory in linking dialogue methods to research integration. While this book is as comprehensive as we can make it based on published material, gaps and limitations remain, as we outline above. We believe, however, that we have demonstrated 'proof of concept', and that further attention to this area is likely to be worthwhile and productive. Considerable scope exists for further development of dialogue methods for research integration and for researchers as Integration and Implementation Sciences specialists. Our aim here is to lay the foundations for that development.