Chapter 4. Dialogue methods for understanding particular aspects of a problem: integrating visions, world views, interests and values

Introduction

Having discussed 10 dialogue methods for integrating judgments, we turn now to four methods that are useful for understanding particular aspects of a problem—namely, visions, world views, interests and values. A dialogue method addressing each of these is described, illustrated and discussed in this chapter. The methods are: for integrating visions — appreciative inquiry; for integrating world views — strategic assumption surfacing and testing; for integrating interests — principled negotiation; and, for integrating values — ethical matrix.

Integrating visions

We use vision here in the sense of a mental view or image of a goal that does not yet exist in place or time. Visions are important in research in terms of the overarching aspirations that a particular study seeks to contribute to. Integration is important for developing a shared vision or for accommodating different visions. For example, as we discussed earlier, within the same study, some researchers could have a grand vision such as alleviating national poverty, while others could be focused on improving employment opportunities for a particular group.

As with all the specific methods, we suggest that a method for integrating visions is used only when this is particularly salient in the research integration process. For many research questions, the issue of accommodating different visions will not be particularly important and a broad integration method, such as those outlined in the previous chapter, will be more than adequate. Sometimes, however, ensuring an understanding of the different visions of the research participants is essential to moving forward on integration and in such cases the method described here can be particularly useful.

Dialogue methods focusing on visions can also be helpful in setting an overarching vision, especially when this might motivate and direct the activities of the research team. For example, rather than the research just being conducted for its own sake, there might be a higher goal that the research can contribute to. Research on improving integrity systems in policing, for example, can be construed in terms of improving policing operations narrowly or as enhancing the role of policing in contributing to the rule of law in a democracy.

The research integrator would be expected to identify that integrating visions was salient to addressing a particular research question. Sometimes this would be evident before the dialogue process started; at other times, it would become clear once the process was under way. They would then take the lead in organising the dialogue to integrate visions. The purpose is generally to align the overarching goals of the members of the research team and the stakeholders to help them work to a common outcome, or at least compatible goals, in order to smooth the path of the research and its implementation.

We found one method for integrating visions: appreciative inquiry.

Integrating world views

World views or mental models are the underlying assumptions about how the world works that guide our understanding and actions. In a research integration context, the world views of those involved in the research are likely to include assumptions about the problem being addressed and the research process.

In terms of the problem being addressed, there could be differing assumptions about the importance of various aspects of the problem and the roles of diverse actors. For example, in a research project about heroin overdoses, there could be different assumptions about the role that drug-using peers can play. Some of those involved in the research might assume that peers were generally present at an overdose and would take action if they knew what to do. Others might assume that most overdoses occurred when someone used alone and, in any case, even if someone else was present, they would be more likely to run away than to render assistance. These differences in assumptions play out in terms of the stakeholders included in the dialogue and the questions asked of them. In the example presented, one group would argue for heroin users to be included in the dialogue and would ask about their actions in the case of an overdose, whereas the other would see these stakeholders and that question as irrelevant.

In terms of the research process, there could be differing assumptions about the purposes of the dialogue, the importance of various aspects of the process, whether or not consensus should be reached and what should be done with the results. For example, some participants might assume that everyone involved had an equal standing, that reaching consensus was crucial and that the relevant decision makers would act on the results. Others might assume that the judgments of more powerful groups had greater salience, that there just needed to be a show of consensus to end the process and that decision makers would be presented with the results to consider along with other inputs. If such differences in assumptions were not made explicit and were not resolved, participants might find themselves at loggerheads, without really understanding why.

Identifying differences in assumptions is often a positive rather than a negative experience. It can be energising to realise that others view the world differently and it can open up a broader range of possibilities for understanding and action. For example, if one group of participants in a dialogue had the world view that young people were responsible for their own alcohol consumption and another assumed that drinking was greatly influenced by availability, advertising and the actions of licensees, bringing them together could provide a richer understanding and a multi-pronged action strategy.

As with the other specific aspects of research integration, the research integrator would be expected to identify that integrating assumptions was salient to addressing a particular research question, either before or during the process. They would take the lead in organising the dialogue to integrate assumptions. This could be used to enrich the conversation or to remove stumbling blocks.

We found one method for integrating world views: strategic assumption surfacing and testing.

Integrating interests

Interests are what motivate us. Making a profit, personal advancement, concern about those less fortunate and a desire to protect a piece of wilderness are all examples of interests. Such motivations provide the reason why stakeholders and researchers choose to tackle a particular problem. As well, there are interests for becoming involved in a particular research project. Individual researchers could be motivated by the chance of publication, access to a specific data set, the opportunity to work with a particular individual and so on. For community groups, decision makers and other stakeholders, interests in becoming involved in the research could include wanting to see a problem gain legitimacy, ensuring that their point of view is heard or wanting to see something done about a problem.

Interests are important for research integration because conflicting interests can prevent progress from being made on an issue. Resolving such clashes in motivations can be essential for research to lead to effective decisions and practice-based change.

Negotiation is the usual method for resolving divergent interests, but many forms of negotiation are about one side winning at the expense of the other. These are not consistent with the aim of dialogue to 'jointly create meaning and shared understanding' (Franco 2006:814). One form of negotiation, however—principled negotiation—stands out as different and is consistent with the aims of dialogue.

Principled negotiation is the only form of dialogue for integrating interests that we have come across to date and is therefore the only method dealt with here. While it was developed as a conflict-resolution tool, integrating interests using principled negotiation can occur before conflict comes to a head. For example, it can be useful early in research when an understanding of different motivations can be used to shape the details of the research and the rewards for the various research participants.

The research integrator would be expected to identify, as with the other specific aspects of research integration, that integrating interests was salient to addressing a particular research question, either before or during the process. They would take the lead in organising the dialogue to integrate interests.

Integrating values

Values are the moral stance that underpins the research. We use a definition from *The Oxford English Dictionary* (1989): 'the principles or standards of a person or society, the personal or societal judgement of what is valuable and important in life.'

Values are important in research integration because, as with visions, world views and interests, appreciating differences in values can enrich the understanding of the research question, as well as identifying potential or real sources of conflict.

The importance of accommodating different values in research of real-world problems is becoming increasingly recognised. In the area of natural resource management research and practice, for example, Lockwood (2005) described methods for including values in environmental choices. Further, a project on ethical tools funded by the European Union (<http://www.ethicaltools.info/>) set out to improve ethical assessment 'by broadening the values considered and/or stakeholder involvement'. The researchers in that project were particularly concerned about the ethical issues involved in the introduction and application of new technologies in agricultural and food production and pointed out that it was unlikely that a single ethical tool would be adequate for a full ethical assessment—a point also made by Lockwood (2005). One of the tools to which they point is the ethical Delphi, an application of the Delphi technique to ethical issues (Millar et al. 2007).

The research integrator would be expected to identify, as with the other specific aspects of research integration, that integrating values was salient to addressing a particular research question, either before or during the process. They would take the lead in organising the dialogue to integrate values. This could be used to enrich the conversation or to remove stumbling blocks.

We deal here with one of the methods the European Union researchers recommended: the ethical matrix. They also pointed out that the consensus conference and the Delphi technique could be modified to deal with values.

Appreciative inquiry: integrating visions

Description

Appreciative inquiry is a dialogue method that brings together members of an organisation to clarify, develop and integrate their visions about their joint endeavours by identifying what is good about their visions and how to move the organisation to a higher level of goal attainment. The process produces better understanding of the present situation and future possibilities and facilitates better decision making through its focus on the team's strengths. While it is generally used in an organisational context, it appears that it can be readily applied to research integration.

Appreciative inquiry is based explicitly on a constructivist world view—that is, an understanding that our perceptions of reality are socially produced and reproduced, rather than representing fixed, external realities. An important implication of this position for appreciative inquiry is that our realities are open to change when we see the world through different eyes.

Appreciative inquiry works from a set of eight assumptions.

1. In every society, organisation or group, something works.
2. What we focus on becomes our reality.
3. Reality is created in the moment, and there are multiple realities.
4. The act of asking questions of an organisation or group influences the group in some way.
5. People have more confidence and comfort to journey to the future (the unknown) when they carry forward parts of the past (the known).
6. If we carry forward parts of the past, they should be what is best about the past.
7. It is important to value differences.
8. The language we use creates our reality. (Hammond 1998)

The most important characteristic of appreciative inquiry is its focus on what has worked well within a team or organisation, in contrast to the more common approach of identifying problems (what has not worked well) and analysing these. As appreciative inquiry proponents regularly point out, if 95 per cent of a company's clients express satisfaction with how the company meets their needs, why bother to analyse the 5 per cent of failures when far more can be learned, and the company can become far more effective, by analysing what is going well with the other 95 per cent?

The implementation of appreciative inquiry occurs in four phases:

- appreciating and valuing the best of 'what is'
- envisioning what 'might be'
- dialoguing 'what should be'
- envisioning 'what will be'.

This covers the '4-D' cycle of appreciative inquiry: discovery, dream, design and destiny.

People who use appreciative inquiry in organisational development and other applications report that participants in the group discussions readily become energised, animated and captured by the power of the process, with its emphasis on what works rather than on deficits, and the shift in shared attitudes from fixing problems to building on past successes.

In terms of research integration, appreciative inquiry is a method to clarify visions of the researchers and stakeholders and to draw them together into a shared vision for the future of the research. That then forms the basis of decision making about how the research team might operate in the future, and what goals it should work towards attaining.

Examples of its use in research integration

1. Public health: meeting the needs of elderly people in transition from hospital to the community

What was the context for the integration?

Significant challenges exist in the health and social welfare systems in meeting the needs of elderly people discharged from hospital into the community, many without adequate support available from their families or community agencies.

What was the integration aiming to achieve and who was intended to benefit?

Appreciative inquiry was used to bring together people from 37 agencies who were concerned about this problem (Reed et al. 2002). It involved clarifying agency personnel visions for better hospital discharge experiences for older people and developing action plans to help turn these visions into reality. The process was structured explicitly to elicit a variety of different visions and to narrow these down to a small number, agreed on by participants, that could be turned into realistic action plans.

What was being integrated?

The agencies invited to participate included older people's organisations, community and hospital trusts, local government, community organisations and others in the healthcare sector. In addition to these key groups, other significant organisations, such as gas and electricity suppliers, participated. The individuals involved had a variety of backgrounds, including health professionals such as nurses and doctors, and lay people from older people's organisations.

Who did the integration and how was it undertaken?

The appreciative inquiry exercise was initiated by sending letters of invitation to 37 local agencies in the Newcastle Health Authority in the United Kingdom. Seventy-one people expressed interest in participating.

Three workshops were held. The first introduced the appreciative inquiry method and trained participants in it. In particular, they developed interviewing and recording skills. They were tasked to interview people in their organisations, the community and so on using the core appreciative inquiry dialogic approach. This entailed the following steps:

- Interviewers asked people to tell them about a time when they felt that a hospital discharge had gone well
- Interviewers then asked probing questions to explore what people had valued about their contribution to that discharge experience and what they felt had helped them to contribute
- Interviewees were asked to imagine that a miracle had occurred overnight that had helped discharges to go well every time
- They were then asked to tell the interviewer what would be different about the world after the miracle, what would be in place, what would be happening and what the results would be (Reed et al. 2002).

At the second workshop, the data from the interviews were discussed in detail to identify what the participants thought were the key themes. As part of this process, the facilitators combined a nominal group approach with appreciative inquiry to ensure that all had an equal opportunity to contribute to the evolving consensus. At the third workshop, provocative propositions were developed and discussed, and from that action plans were developed.

This process brought to light the diverse visions for better post-hospital experiences for older people in the community and collapsed and prioritised these into a manageable set of themes and action plans. The breadth of the visions elicited and integrated through the process is revealed in the following list of provocative propositions developed in the third workshop:

1. Every worker/patient/carer knows exactly what other workers do
2. Every worker has the opportunity within their job to develop and use networks across the system
3. Every worker takes responsibility to act on information that they hold or receive about the person and their circumstances

4. There is a process for checking up to ensure that the person going home is managing and has received all the services they were expecting
5. There is co-ordination of the process of going home to avoid duplication and/or gaps in the services and support provided
6. Resources and funding are co-ordinated to avoid disputes or time-consuming negotiations
7. All patients are given individually tailored information and support to ensure choice and ownership of their own health/social care
8. There are joint care plans (held by the patient) and shared documentation/information
9. Care is flexible and responsive and there is a fall back strategy. (Reed et al. 2002:41)

What was the outcome of the integration?

The researchers responsible for this process (Reed et al. 2002) reported that most of the participants were pleased with the appreciative inquiry process to which they had contributed. They pointed out, though, some of its limitations, including the perception that it ignored problems (by focusing on the positives), the challenges to the evaluation of the process and the fact that (on this occasion) the quality of the action plans was adversely affected owing to the limited participation in the process by high-level decision makers. Nonetheless, this is an example of the integration of the visions of a range of actors keen to improve the organisational responses to older people's needs in such a manner as to produce a set of action plans to make that a reality.

Action plans were developed based on the propositions developed. These were as follows:

- the development of an information pack, to be accessible to all patients, carers and agencies, about support services and resources for people going home from hospital
- holding an event for people involved in training and staff development
- each agency should identify key people to oversee the process, including follow-up
- a person-centred care plan should be developed that is easy to understand and that includes the views of users and carers. The group knew of some developments in this area and agreed to explore them further (adapted from Reed et al. 2002).

2. Organisational development: developing a code of ethics in a university department in South Africa

What was the integration aiming to achieve and who was intended to benefit?

The appreciative inquiry approach was used in a department within a South African university to develop a code of ethics and an approach to ethical management that realised a shared vision of 'what "could be", rather than "what was"' with respect to departmental ethics (van Vuuren and Crous 2005:403).

Who did the integration and how was it undertaken?

Thirty-six members of a university department attended a 12-hour appreciative inquiry intervention, spread over three sessions. Group processes facilitated by two industrial psychologists (the processes were not described) were used to clarify the topic ('a vision for ethics'), the discovery phase identified what was going well and desires for an ethical future, and the dream phase identified 18 important issues that were distilled to four core themes. In the design phase, provocative propositions were developed and discussed and the destiny phase produced the new code of ethics and plans for its implementation.

What was the outcome of the integration?

Participants were unanimous that the process and product exceeded their expectations. Through the appreciative inquiry approach to dialogue, participants of all ranks in the organisation were able to develop and share their individual visions for its ethical future and produce an integrated vision, which all shared, in the form of a code of ethics and an action plan for its implementation. The appreciative inquiry method created better understanding of the issues and the way forward, integrating the visions of the members of the department about how ethics could become core business within the organisation.

What was being integrated?

All the academic and administrative staff of the university department were invited to participate and 36—all but two—agreed to do so. Further information about the participants was not provided.

What was the context for the integration?

The appreciative inquiry exercise was conducted within an academic department of a large, state-funded South African university: the University of Johannesburg. It was undertaken in the context of improving the governance of the department, specifically to realise the staff's desire to create 'an ethical way forward' for the department (van Vuuren and Crous 2005:408).

Commentary

The two case studies show that appreciative inquiry focuses on developing a shared vision, rather than trying to accommodate different visions. The value of the process is that it leaps ahead with the assumption that a shared vision is important and achievable, rather than trying to clarify and accommodate differences in current visions. This will not be beneficial for all cases of research integration, so other methods for integrating visions will also be required.

Both of the cases deal with stakeholders only and disciplinary knowledge is not brought to bear. Even though the second case involves members of an academic department, disciplinary expertise is not relevant to moving forward on the problem in this instance.

In both cases, researchers organised the dialogue, but there was little description of their roles. Both cases were focused on improving practice rather than improving understanding about an issue.

The embedding of the nominal group technique in the first case is particularly interesting and illustrates the diverse ways in which dialogue methods can be used. For simplicity, in our general presentation, we have characterised specific methods, such as appreciative inquiry, as subservient to or embedded in more general methods, such as the nominal group technique. In this case, however, appreciative inquiry and the question it addresses are clearly dominant, with the nominal group technique playing a subservient role in one part of the appreciative inquiry process.

While research integration, as we define it in this book, does not seem to be the usual way in which appreciative inquiry is used, it is possible to imagine its use by a research team, comprising disciplinary experts and stakeholders, to develop an overarching goal for a particular project. For example, one can imagine a team, such as the commissioners of the World Commission on Dams, using a method such as appreciative inquiry to develop the overarching goal of the commission to achieve 'development effectiveness', where 'decision-making on water and energy management will align itself with the emerging global commitment to sustainable human development and on the equitable distribution of costs and benefits' (see also Bammer 2008a; World Commission on Dams 2000:xxxiii). We are not suggesting that this is what the World Commission on Dams has really done, but it provides an example of research integration that readers might be able to identify with.

Origins and genealogy

David L. Cooperrider coined the term 'appreciative inquiry' from his doctoral research at Case Western Reserve University, Cleveland, Ohio, in the first half of the 1980s. The ideas and methods he developed were rapidly taken up and extended by others. Appreciative inquiry is still developing and being applied in many different sectors under the leadership of Cooperrider and others.

Further reading on appreciative inquiry

Appreciative Inquiry Commons n.d., *Appreciative Inquiry Commons*, Weatherhead School of Management at Case Western Reserve University, <http://appreciativeinquiry.case.edu/>

Cooperrider, D. L. and Whitney, D. K. 2005, *Appreciative Inquiry: A positive revolution in change*, Berrett-Koehler, San Francisco, Calif.

Hammond, S. A. 1998, *The Thin Book of Appreciative Inquiry*, Second edition, Thin Book Publishing Company, Plano, Tex.

Hammond, S. A. and Royal, C. (eds) 1998, *Lessons From the Field: Applying appreciative inquiry*, Practical Press, Plano, Tex.

Watkins, J. M. and Mohr, B. J. 2001, *Appreciative Inquiry: Change at the speed of imagination*, Practicing Organization Development Series, Jossey-Bass/Pfeiffer, San Francisco, Calif.

Strategic assumption surfacing and testing: integrating world views

Description

Strategic assumption surfacing and testing is a method for integrating world views developed in an organisational context. It is based on the premise that '[w]e all live our lives according to the *assumptions* we make about ourselves and our world. To cope better, we need to surface those assumptions and to challenge them. New assumptions then become springboards to effective change' (Mason and Mitroff 1981:vii, emphasis in original).

This method assists participants to understand a problematic situation and explore strategies for dealing with it. As the name indicates, its central element is bringing to the surface the assumptions that underlie people's preferred approaches to an issue, and challenging them. Sometimes this challenging results in a particular strategy being discarded and participants adopting a competing one. On other occasions, however, integration occurs through the synthesis of previously inconsistent assumptions, resulting in a new strategy that accommodates the differences between those held initially, and which is stronger than the components from which it arises.

Four principles underlie the strategic assumption surfacing and testing method: it is adversarial, participative, integrative and 'managerial mind supporting'.

> - *Adversarial*—based on the belief that judgments about ill-structured problems are best made after consideration of opposing perspectives.
> - *Participative*—it seeks to involve different groupings and levels in an organisation, because the knowledge and resources needed to solve complex problems and implement solutions will be distributed around a number of individuals and groups in the organisation.
> - *Integrative*—on the assumption that the differences thrown up by the adversarial and participative processes must eventually be brought together again in a higher order synthesis, so that an action plan can be produced.
> - *Managerial mind supporting*—believing that managers exposed to different assumptions will possess a deeper understanding of an organisation, its policies and 'problems'. (Flood and Jackson 1991:123–4)

The four steps used in the method are as follows:

- *Group formation:* gathering as many as possible of those involved in, and affected by, a situation and splitting them into small groups according to their views on key issues. It is important to minimise the conflicts *within* each group and to maximise the differences *between* groups. The orientation to the problem held by each group should be directly opposed by at least one other group.

- *Assumption surfacing and rating:* identifying the preferred strategy or position that each group is adopting, then revealing and quantifying (if possible) the assumptions on which it is based. Techniques used include stakeholder analysis, assumption specification and assumption rating.
- *Intra-group and inter-group dialectical debate:* each group developing the case for its position and then discussing them all in a single, large group. The process is dialectical 'if it examines a situation completely and logically from two different points of view' (Mason and Mitroff 1981:129). A key analytical question that facilitates dialogue in this stage is 'What assumptions of the other groups do each group find the most troubling?'.
- *Final synthesis:* achieving an accommodation among participants to find a practical way forward. Discussion of key assumptions leads them to be modified and a new strategy to be developed, based on the modified and agreed-on assumptions. This is the process through which the visions and world views of the participants become integrated. If agreement cannot be reached—if synthesis is not possible—participants might agree on a program of research or other action to further clarify assumptions and/or to try out a particular strategy and evaluate it. Knowledge gained from those steps can shed further light on the conflicting assumptions, facilitating subsequent synthesis of positions (adapted from Flood and Jackson 1991; Mason and Mitroff 1981; Midgley 2000).

This approach to strategic planning has been contrasted, by its originators, with the two dominant approaches—namely, the 'expert' approach, in which an organisation establishes a planning unit to largely do the managers' work for them, and the 'devil's advocate' approach, in which middle managers prepare and submit plans to senior managers for cross-examination (Mason and Mitroff 1981:127–9).

The strategic assumption surfacing and testing method was developed as a contribution to strategic planning. It has great potential where conflicting views on the nature of a problem and what to do about it are held, where the proponents are willing to work in groups to explore these issues and are open to hearing and understanding others' views, with the aim of finding accommodation between the originally conflicting positions. Being willing to reveal, explore and expose to criticism the assumptions that one brings to the process, and a concomitant willingness to challenge others' assumptions, are essential to the achievement of synthesis.

Example of its use in integration

Despite the potential of the strategic assumption surfacing and testing method for research integration, we have not been able to find any recent cases that illustrate this well with respect to the specific role of research. As a result, the following case example comes from the business sector.

Business: seeking agreement on the core operational strategy of a Cooperative Development Agency in the United States

What was the context for the integration?

A Cooperative Development Agency in the United States—known as 'Winterton' for the purposes of the case study—had the aim of fostering and promoting commercial and industrial activity in its county. As with all Cooperative Development Agencies, it worked to achieve its goal through cooperative enterprises—that is, business entities owned and usually managed by the people who worked in them (Flood and Jackson 1991).

What was the integration aiming to achieve and who was intended to benefit?

Agency staff wished to analyse the agency's methods of operating, improve its marketing activities and identify ways to more efficiently serve the people in the county in which it was located. They wished to identify the optimal organisational structure for attaining its goals. Their overarching goal was to improve the quality of services to the people of the county while remaining true to the values and norms of the cooperative movement.

What was being integrated?

The staff of the agency worked together with the aim of developing agreement about how the organisation should be structured so as to best implement the shared values of the cooperative movement. Different staff members had strongly conflicting visions about the optimal organisational arrangements, and different stakes in the outcomes, which needed to be synthesised for the organisation to achieve its goals within its business environment.

How was the integration undertaken and who did the integration?

The staff of the Cooperative Development Agency, with the support of external expert facilitators, attempted to integrate their world views. They used the soft systems methodology to do this. At an early point, it became clear that participants in the process fell into two opposing factions, one of which favoured a top-down approach to the agency's operations and the other a bottom-up approach. The top-down approach was one in which the agency identified business opportunities and recruited people into cooperatives to respond to those opportunities. The bottom-up approach, more closely reflecting the norms of cooperatives, emphasised assisting people thinking about engaging in business to form cooperatives and then seek out business opportunities.

Strategic assumption surfacing and testing was used to deal with this deep conflict; the aim was to do so quickly, without getting into the details of the governance arrangements but simply to reach agreement—a synthesis of assumptions—so that the soft systems methodology exercise could continue. In this sense, the strategic assumption surfacing and testing method was nested within the dominant soft systems method.

The standard four stages of the method were followed. *Group formation* presented no challenges, with the staff readily falling into two groups: one strongly favouring the top-down approach and the other the bottom-up approach to the operation of the agency. The two groups were separated and each went through the *assumption surfacing* stage by using stakeholder analysis, assumption specification and assumption rating. The two groups identified different groups of stakeholders and the assumptions linked to each. For example, the top-down supporters identified the unemployed as stakeholders, along with an assumption about the credibility of the agency, in the eyes of funding bodies, with respect to job creation. The bottom-up group identified potential clients as stakeholders along with the assumption that they lacked group cohesion. The two groups joined together again for *dialectical debate*. They found little common ground and little ability to modify their differing lists of key stakeholders and the assumptions linked to each, with the result that no *synthesis* emerged from the dialectical debate.

What was the outcome of the integration?

Although the process did not produce synthesis of the assumptions of participants, it nonetheless had some positive outcomes: 'Consensus was…reached on particular matters such as the need to seek out sources of information about business opportunities, to research other top-down experiences, and on the desirability of some experiments with a modified top-down approach (which were, indeed, carried out)' (Flood and Jackson 1991:132).

Commentary

This example embeds strategic assumption surfacing and testing within a broader soft systems methodology. It is an excellent demonstration of the point we make more generally about how a specific method can be used to resolve a challenge discovered when a method for achieving broader understanding is used. In this case, however, it was not successful in resolving the conflict that became evident.

It is noteworthy that we could not find an example of the application of this method in a research integration context. It is, however, conceivable how it could be used in this way. If we consider, for example, a research question about how the health sector should respond to violent clients, we could imagine bringing together various stakeholders and exposing their assumptions about clients' responsibility for violence. We might also add disciplinary perspectives—for example, from psychology, sociology and clinical research.

This dialogue method is also noteworthy for being intentionally adversarial: dialectic debate about the validity of people's assumptions is at its core.

Origins and genealogy

This method is part of what Midgley (2000:193) refers to as the second wave of systems thinking in which '"systems" were no longer seen as real world entities, but as constructs to aid understanding. The emphasis was on dialogue, mutual appreciation and the inter-subjective construction of realities.' Mason and Mitroff (1981) adapted the approach to systems thinking explicated by C. West Churchman, turning some of his ideas into the step-by-step strategic assumption surfacing and testing method.

Further reading on strategic assumption surfacing and testing

Dash, D. 2007, *SAST Methodology*, Xavier Institute of Management, Bhubaneswar, India, <http://www1.ximb.ac.in/users/fac/dpdash/dpdash.nsf/pages/CP_SAST>

Flood, R. L. and Jackson, M. C. 1991, *Creative Problem Solving: Total systems intervention*, Wiley, Chichester, New York.

Mason, R. O. and Mitroff, I. I. 1981, *Challenging Strategic Planning Assumptions: Theory, cases, and techniques*, Wiley, New York.

Midgley, G. 2000, *Systemic Intervention: Philosophy, methodology, and practice*, Kluwer Academic/Plenum Publishers, New York.

Principled negotiation: integrating interests

Description

An important challenge for research integration is to accommodate the different interests of the researchers and other stakeholders. Principled negotiation, also known as negotiation on the merits or 'getting to yes', is an effective way of achieving this.

Fisher et al. (1991) have developed four steps for principled negotiation:

1. separate the people from the problem
2. focus on interests, not positions
3. generate a variety of possibilities before deciding what to do
4. insist that the results are based on some objective standard.

Separating the people from the problem requires recognising that any problem has two components—the relationship and the substantive or content issue—and that they often become intertwined. In terms of problem solving, there are three aspects of relationships to be mindful of: emotions, perceptions and communication.

With respect to *emotions*, a key element of principled negotiation is to recognise and understand our own emotions and those of our partners. Sometimes it can be helpful to make explicit how we are feeling and to encourage our collaborators to do the same, thus acknowledging the legitimacy of emotions. The aim of principled negotiation is to channel emotions into a productive vision of working side by side to bridge differences (or, if there is conflict, to attack the problem).

With respect to *perceptions*, everyone has their own version of reality. A common problem is that we misinterpret others' intentions. It is important to try to see the issue from the other person's perspective, while acknowledging that understanding is not the same as agreeing.

With respect to *communication*, clarity in this area is important for bridging differences or solving mutual problems. Essentially, communication founders when people do not listen, do not hear, misunderstand or misinterpret. In brief, it is important to listen actively in order to better understand, and to be tolerant and slow to take offence.

Focusing on interests, not positions recognises that it is generally hard to find mutually satisfactory resolution between competing positions. It is therefore important to shift the focus from positions to interests.

Behind opposed positions lie shared and compatible interests, as well as conflicting ones. The process of identifying interests therefore usually clarifies where real disagreements lie and, because some interests will be shared or complementary, the areas for conflict will generally be smaller than first thought.

Listening with respect, showing courtesy and emphasising concern to meet the basic needs of the other person direct the focus to interests. In addition, people applying this method try to be specific about their own interests and how important they are to them. The goal is to frame a joint attack on the difference or problem that will accommodate the interests of both parties.

Generating a variety of possibilities before deciding what to do. When using the *principled negotiation method*, generating options for action can often be the hardest step to get partners to participate in. Fisher et al. (1991) suggest that there are four particular obstacles to this: premature judgment, searching for a single answer, assumption of a 'fixed pie', and thinking that no-one else is able to assist in problem solving.

The temptation to leap to a solution before considering the options is often coupled with the assumption that there is only one 'right' answer, rather than an appreciation that there are generally many ways in which interests can be met. Further, it can also be a trap to assume that there are no additional resources that can be brought into play (a 'fixed pie'). The key is to see the areas of difference or conflict as *shared* problems requiring *shared* solutions. Seeing them as simply the partner's problem can result in the partner developing solutions that do not take our interests into account.

The most widely used method for generating a variety of possibilities is brainstorming, in which participants are encouraged to rapidly put forward ideas, while at the same time withholding judgments on their merits. Encouraging interaction at speed, without in-depth discussion, tends to circumvent narrow thinking and opens up the possibility of creative solutions. The idea is to search for mutual gains, to dovetail different interests and, if necessary, to give all partners an easy way of backing away from previously stated positions. It is essential to look forward and to leave past disagreements to one side.

Looking for a fair solution, based on the merits. Once options have been generated, the next step is to evaluate them and to find a fair solution based on their merits. It helps to be concrete but flexible—in other words, to work through the options in detail, but to treat the options as illustrative rather than fixed. The commitment has to be to address participants' interests (not positions) and, by pushing hard on the interests, partners can stimulate each other's creativity in thinking up mutually advantageous solutions. 'Be hard on the problem, soft on the people.' The aim here is to move the solution away from a notion of partners giving in to each other towards one in which both are deferring to a fair solution. They are yielding to principle, not pressure. Developing an agreement should be framed as a joint search for objective or fair criteria and this will promote reasonableness, fair play and trustworthiness.

Principled negotiation is a powerful dialogue method in research integration where strengthening partnerships through addressing conflicting or apparently conflicting interests is important. It promotes accommodation of different interests not only between researchers, but between researchers and policy-makers, service providers, businesses and community groups. In a recent follow-up to the original work on principled negotiation, Fisher and Shapiro (2005) identify five ‘core concerns’ that motivate people: appreciation, affiliation, autonomy, status and role. Considering these can be useful in teasing out the dimensions for accommodation in a research project. When disputes in integrative research arise, this method can also be useful for resolving them.

Example of its use in a public health problem: a social worker uses principled negotiation to advocate for their clients’ rights[1]

In the social work profession, principled negotiation has been characterised as ‘a new tool for case advocacy’, with ‘case advocacy’ being defined as a way to ‘obtain resources or services for clients that would not otherwise be provided’ (Lens 2004:506). For the social worker, advocating for clients’ entitlements often entails discussions with officers of public sector agencies who have the power to provide or withhold helping services. Sometimes these discussions are confrontational, with the social worker demanding that the services be provided to their client and the official stating that they will not be provided because the client falls outside the entitlement rules, because of funding/service shortages, and so on. Principled negotiation is a viable—indeed, preferred—alternative to demanding that the services be provided, an alternative that integrates the interests of the public sector service gatekeeper with those of the social worker advocating for her or his clients.

This was illustrated in the case of a 95-year-old woman, living in her own home and suffering from a variety of debilitating medical conditions. She needed assistance with almost all her daily requirements and also needed overnight supervision as she was prone to wandering. The local government social service agency had been providing 24-hour, split-shift cover by personal carer aides but wanted to reduce this to a full-time live-in aide. The problems were that the aide needed to be awake and able to assist the client throughout the night and there was nowhere in the home for the aide to sleep at other times. The client’s social worker used principled negotiation to challenge the department’s decision to reduce the level of services and to advocate, on the client’s behalf, with the officer responsible for the decision (Lens 2004). (It is not completely clear, in Lens’ paper, if this is a report on a real case or a composite, illustrative example.)

The social worker applied four rules of principled negotiation: separating the person from the problem, focusing on interests not positions, inventing options for mutual gain, and insisting on using objective criteria.

- Separating the person from the problem was illustrated by the social worker refraining from complaining that the officer's decision reflected incompetence and insensitivity to the elderly. Instead, the point was made that '[m]y client is very ill and in need of continued services. How do you think we can help her?' (Lens 2004:508).
- Focusing on interests, not positions entailed maintaining a direct statement of the client's interests but not adopting a rigid position from the beginning of the principled negotiation. The officer stated that 'I must tell you again the agency does not have unlimited funds', to which the social worker responded, 'As I understand it, your interest as a government agency is to be fiscally cautious while also helping people…Perhaps there is a way we could work together to get the agency to provide appropriate coverage…it would avoid placement in a nursing home, which would cost the agency even more' (Lens 2004:510).
- Inventing options for mutual gain occurred in the exchange just quoted, in which the phrase 'appropriate coverage' was used rather than the social worker demanding a particular type of coverage. This was based on a brainstorming session undertaken to identify other options, before the negotiations were initiated.
- Insisting on using objective criteria was important in this case, applying the principled negotiation dictum that 'principle, not pressure' is a key to attaining a win-win position. The social worker had checked the details of the client's legal entitlements before initiating the negotiation. In discussion with the officer, the social worker refrained from exclaiming 'You don't know what you are doing and are unaware of the law', instead calmly stating, 'Please correct me if I am wrong, but it is my understanding that the regulations require a split shift when patients such as [the client] cannot do daily activities and their safety is jeopardized' (Lens 2004:511).

Throughout the principled negotiation session, the social worker maintained the focus on advocating for the client, but did so in a manner that revealed and dealt with the interests of both parties (the client and the government agency), acknowledging that both had valid interests that needed to be taken into account. It was found to be possible to integrate the interests of both parties to reach a mutually satisfactory, win-win outcome.

Commentary

Individuals and organisations have various interests and sometimes they conflict, or have the potential to conflict. It is not difficult to imagine circumstances in which members of a research team have interests that conflict (for example, several members of a team may want to be the first author on a publication). Furthermore, at the beginning of an interdisciplinary research project it would be possible to identify potential conflicts through principled negotiation and to deal with them before they become problematic. Since different interests inevitably exist in the interfaces between researchers and users of research in policy and practice settings, scope also exists here for principled negotiation to be used to avoid problems and/or deal with them as they arise.

We have not been able to locate any published reports of the use of principled negotiation by researchers seeking to improve research integration, so we have illustrated this method with an example from public health that does not have a research focus. Nonetheless, we see great potential for its application to research.

Origins and genealogy

Principled negotiation, as described here and documented by Fisher et al. (1991), is a product of the Program on Negotiation based at the Harvard Law School (<http://www.pon.harvard.edu/>). The program was established in 1983 and operates through a consortium of three universities: Harvard, Tufts and Massachusetts Institute of Technology (MIT). It builds on proposals concerning negotiation styles proffered in the early years of the twentieth century by Mary Parker Follett (the originator of the term 'conflict resolution') and others.

Further reading on principled negotiation

Fisher, R., Ury, W. and Patton, B. 1991, *Getting to Yes: Negotiating an agreement without giving in*, Second edition, Random House, London (a five-page summary is on the web site of the University of Colorado's Conflict Research Consortium, <http://www.colorado.edu/conflict/peace/example/fish7513.htm>).

Fisher, R. and Shapiro, D. 2005, *Beyond Reason: Using emotions as you negotiate*, Viking, New York.

Ethical matrix: integrating values

Description

The ethical matrix is a method developed by Mepham (2000) for rational ethical analysis. It comes from the discipline of applied ethics and is based on the acknowledgment that, in modern pluralistic society, the various actors involved in a given issue hold different and potentially conflicting values. Since decisions have to be made, and a potential exists for overriding the values of some stakeholders in the process, it could be useful to have available a structured process for surfacing, weighing and integrating those values in the decision-making process. The ethical matrix was developed to meet those needs.

The ethical components of the method reflect 'commonsense morality'. They are derived from the work of Beauchamp and Childress (2001) on bioethics that has been widely taken up in medicine and medical ethics. Beauchamp and Childress introduced the 'four principles approach' through which decision makers were guided to consider four core values: non-maleficence (doing no harm), beneficence, autonomy and justice. Mepham has combined the principles of non-maleficence and beneficence to become 'respect for wellbeing'.

The ethical matrix is an analytical tool and in itself is value neutral. It has the three principles (wellbeing, autonomy and justice) on the horizontal axis. On the vertical axis one lists the interest groups—that is, the people, organisations, communities, and so on—who stand to be affected by the decisions being made. The task then is to identify and document the ethical impacts of the matter under consideration in each cell of the matrix. While this task can be undertaken through desk-based research, it is also a dialogue tool when undertaken through group discussion. As Mepham (2000:168) clarifies in relation to introducing a new technology, 'actors (e.g., members of a regulatory committee) are asked to imagine themselves to be members of each specified interest group in turn, and to assess the ethical impacts of the introduction of the proposed technology'.

Once the cells of the matrix have been filled in, its users need to weigh the relative importance of the issues identified. Different people might give different weights to a given potential ethical impact on a particular interest group. Through discussion, the users of the matrix reach agreement about how the options under consideration, if implemented, will affect the different interest groups with respect to their wellbeing, autonomy and entitlement to justice. They seek to reach consensus.

As noted above, ethical matrices can be developed as a desktop exercise (for example, Food Ethics Council 2001) or as a participatory exercise with interest groups (the steps involved are detailed in Mepham et al. 2006). A mixed approach has also been used, in which subject-matter experts and ethicists develop the ethical matrix (that is, they fill in the boxes in the matrix) and then workshop it with stakeholders to produce '[a] practical consensus on the content of the matrix…followed by a weighing of the most important values' (Kaiser and Forsberg 2001:193).

The ethical matrix is a tool for identifying and analysing the potential ethical impacts of decisions. It is particularly applicable when decision makers bring to the table and/or have awareness of diverse values potentially influencing their decisions, and feel that these need to be integrated to produce a decision that is value informed and that has been attained in an explicit manner: 'While it might guide individual ethical judgements, the principal aim of the Matrix is to facilitate rational public policy decision-making by articulating the ethical dimensions of any issue in a manner that is transparent and broadly comprehensible' (Mepham 2000:169).

It deals head-on with the reality that, in decision making on important issues facing communities, 'some values seem to weigh heavier than others' (Kaiser and Forsberg 2001:193). Integrating stakeholders' values through developing an ethical matrix can reduce the potential for decision makers to ignore the values of the weakest actors.

Example of its use in research integration

Technological innovation: identifying the stakeholders of bio-remediation projects, and ethical issues involved in bio-remediation

What was the context for the integration, what was the integration aiming to achieve and who was intended to benefit?

Bio-remediation is a technological innovation in which micro-organisms and/or plants are used to locate, degrade or remove pollutants from the environment. Some people see it as a sustainable approach to dealing with environmental pollutants at a time when the use of landfill for the disposal of pollutants is becoming increasingly less sustainable. The UK Biotechnology and Biological Sciences Research Council commissioned a study into the feasibility of using these technologies in the United Kingdom using dialogue methods to focus on the potential social and ethical issues involved (Mepham et al. 2006).

What was being integrated?

The potential impacts on four 'stakeholder' groups—users of bio-remediation methods, affected citizens, technology providers and the environment—were examined. This was done through five focus groups: a non-governmental organisation (NGO), a national women's organisation, a technology/regulator group and two general public groups.

Who did the integration and how was it undertaken?

The ethical matrix tool was used in five focus groups. Each group used the ethical matrix to identify the potential impacts of bio-remediation for four stakeholder groups, taking into account the principles of wellbeing, autonomy and justice. The approach taken was: 'Participants considered whether the application of the technology might infringe [on] or respect the principles as applied to each of the interest groups. Participants were also asked to examine the types of formal and informal policies that might enhance respect for the ethical principles for the chosen interest groups' (Mepham et al. 2006:37).

The following ethical matrix resulted:

Respect for:	Wellbeing	Autonomy	Justice
Users	Efficacy, safety and remuneration	Freedom to adopt or not adopt	Fair treatment in trade and law
Affected citizens	Safety and quality of life	Democratic decision making	Individual and regional justice
Technology providers	Commercial viability and working conditions	Ability to innovate	Equitable trading (market) system
Environment	Protection of the environment	Biodiversity of biotic populations	Sustainability of the environment

Source: Mepham et al. 2006: 37.

Examples of the issues raised in group discussions were:

- with respect to the cell covering the principle of wellbeing and the interest group of affected citizens (that is, safety and quality of life): 'When building houses on bioremediated sites, concerns were raised that not all contamination may be "removed". Concerns [were] expressed regarding impacts on vulnerable groups (e.g. children) and possible risks from growing fruit and vegetables'
- with respect to the autonomy/environment cell (that is, biodiversity of biotic populations): 'Concerns [were] expressed regarding potential impacts on wildlife from phytoremediation (e.g. poisoning, bio-accumulation)' (Mepham et al. 2006:38–9).

What was the outcome of the integration?

Participants' deliberations about the values important to each of the four identified interest groups, set out in the cells of the matrix, resulted in a conservative orientation to the use of bio-remediation They generally took a precautionary approach rather than enthusiastically embracing the new technology. In other words, the integration of participants' values that occurred through the discussions, producing the agreed-on lists of ethical concerns illustrated above, led to the conclusion that the value issues or challenges involved in the innovation were formidable. Participants were generally satisfied with this tool, with more than 85 per cent stating that the ethical matrix contributed positively to the discussions (the balance expressed neutral views), helping them to attain group consensus on the ethical issues involved and their relative importance.

Commentary

The ethical matrix is a tool for integrating the values held by different stakeholders in an initiative, or for anticipating what their values might be and how they will be differentially impacted on by the options available for implementing the initiative. A particular strength is in raising the salience of values and value conflicts, and the importance of dealing with these in research integration. The method is grounded in people's own ways of seeing values, rather than using an imposed framework, and is conceptually straightforward.

The example provided goes beyond research integration to involve, in the values exploration and integration, a number of other entities—namely, an NGO group, a national women's organisation, a technology/regulator group and two general public groups. A narrower focus on research integration would have occurred if the participants were researchers, from various disciplines, using the method to reveal and explore the values underlying their individual practice and their disciplinary orientations. Similarly, the ethical matrix could have been completed through dialogue between researchers and decision makers, achieving similar goals of transparency about values and their impacts on evidence-based decision making.

While the surfacing of values (filling in the cells of the matrix) is a strength of the method, a weakness is that it does not provide any clear guidelines for how to move towards a consensus on the values so identified. Methods for discussing and reaching agreement on the relative importance of the opposing values brought to the surface, and on the relative impacts on the different stakeholders of the initiative being examined, are not included in the process. Instead, users rely on skilled facilitators to guide this process and assist the participants to find consensus through group discussion.

There are probably occasions in which people could use the ethical matrix effectively to identify important stakeholders and to elicit the value issues important to them, but are unable to reach consensus on the relative weight of the conflicting values and the implications for action flowing from this. When much diversity exists between participants—for example, in an interdisciplinary research team or a situation in which researchers, policy people, practitioners and affected communities are involved—significant challenges may exist in finding consensus on values.

It is possible that using another dialogue method to integrate the judgments of participants (or of another group of stakeholders) about the relative importance of the values brought to the surface and of the likely impacts of the intervention, could follow the ethical matrix exercise. The Delphi technique or the nominal group technique would be suitable for this task.

Origins and genealogy

This tool was introduced by Professor Ben Mepham, Special Professor in Applied Bioethics at the Centre for Applied Bioethics at the University of Nottingham, in 1994. Since then it has been applied and modified in various settings, focusing on a range of ethical issues, many of which deal with food security and natural resource management. The UK Food Council (<http://www.foodethicscouncil.org/>), of which Mepham is a member, has used the ethical matrix tool extensively and promotes its further development and application.

Further reading on the ethical matrix

Food Ethics Council n.d., *Ethical Matrix*, Food Ethics Council, <http://www.foodethicscouncil.org/ourwork/tools/ethicalmatrix/introduction>

Mepham, B., Kaiser, M., Thorstensen, E., Tomkins, S. and Millar, K. 2006, *Ethical Matrix Manual*, LEI, The Hague, <http://www.ethicaltools.info/content/ET2 Manual EM (Binnenwerk 45p).pdf>

Schroeder, D. and Palmer, C. 2003, 'Technology assessment and the "ethical matrix"', *Poiesis & Praxis: International Journal of Technology Assessment and Ethics of Science*, vol. 1, no. 4, pp. 295–307.

Endnotes

[1] This case example is not structured around the standard six questions (Appendix 1) owing to the characteristics of the dialogue method and the limitations of the source material on which it is based.