

7. Context?

Developing a systematic way to take context into consideration—in other words, weighing up ‘*What circumstances might influence the synthesis of disciplinary and stakeholder knowledge?*’ is an underdeveloped aspect of I2S.¹ Three areas are considered here: one general and two specific.

1. The overall context of the problem. This is the circumstances that led to the research and that may be influential during its conduct, such as the problem’s history, the geographical locations in which it occurs and cultural differences between those affected and those charged with responding to the problem.
2. The sources of authorisation or legitimacy for the knowledge synthesis and how they affect what is investigated.
3. The organisational facilitators of and barriers to undertaking the synthesis of disciplinary and stakeholder knowledge.

Overall Context

It may be useful to start with two examples examining context retrospectively. First, let us return to the building of the atomic bomb. The important contextual factor was World War II (1939–45), which explains why, in scoping the problem, there was minimal attention to social, environmental and health impacts. In the circumstances of a major war including these aspects in the synthesis was not a high priority.

Second, the World Commission on Dams was established against a background of increasing controversy about large-scale dams and a worldwide stalemate in the building of dams where opponents were causing delays and therefore huge cost overruns.² There had been a change in the power balance, with those adversely affected by dams gaining influence through collective action and the transnational anti-dam movement.³ This was allied to a shift in perceptions about appropriate governance, with increasing demands that governments consult their citizens before acting on their behalf.⁴ These circumstances help explain

1 One characteristic that I2S shares with the social sciences is an appreciation of the importance of context. Unlike the natural sciences, which seek universal laws, the social science disciplines and I2S address issues that are often highly context specific.

2 World Commission on Dams (2000). Note that this is partially disputed by McCully (2001).

3 Khagram (2004).

4 World Commission on Dams (2000).

why the Commission came into existence and why the knowledge synthesis included so many perspectives, as the Commission was trying to be an effective mediator between all the interests.

The general challenge is to find useful starting points for taking context into account in planning knowledge synthesis—in other words, figuring out which circumstances are likely to be most pertinent and how to address them. There is significant overlap with scoping the problem, as many contextual factors—such as the problem’s history or geography—correspond to the disciplines that would be considered as part of the scoping process. This is an area that is likely to benefit from the insights of social scientists, in particular.

Tasks for the I2S Development Drive
Collect case examples dealing with overall context relevant to the knowledge synthesis.
Work with a range of social scientists to produce a guide for how context can be taken into account.

Authorisation

The sources of authorisation or legitimacy for any research, including integrative applied research in general and synthesis of disciplinary and stakeholder knowledge in particular, are usually closely tied to the finances. Indeed the provision of funding is, in itself, a major source of legitimacy. For most research, receiving support from a recognised funding source is all that is needed for an investigation to be seen as legitimate and to go ahead;⁵ however, in certain cases, such as when projects are large in scale or politically sensitive, authorisation may be more complex. In particular, obtaining backing from influential organisations or individuals may be critical for the research to proceed.

This is illustrated by the establishment of the World Commission on Dams, which was unanimously recommended by the 35 representatives of pro- and anti-dam interests at a 1997 workshop hosted by the World Conservation Union and the World Bank.⁶ It seems likely that both the co-sponsorship and the unanimous recommendation by opposing forces were essential for the Commission’s legitimacy, giving it both power and moral authority. Power would have come through the standing of the World Conservation Union and the World Bank. Moral authority would have been derived from the balance of

5 This is not completely correct, as approval from a properly constituted committee that reviews the ethics of the research is now generally also required.

6 IUCN—World Conservation Union and the World Bank Group (1997); Scudder (2001); World Commission on Dams (2000).

interests represented by influential players on both sides of the dams debate. Moral legitimacy was further built by striving for balance in opposing views among the 12 commissioners and the 68-member stakeholder forum, as well as the broad funding base drawing on 53 public, private and civil society organisations.^{7,8}

As well as providing legitimacy, however, both funding and backing can also impose limitations. Funding success may be patchy, so that only some aspects of a research program may eventuate. Constraints on what is undertaken or how can be imposed by organisations that auspice research or members of boards that oversee research. Authorisation therefore shapes the way integrative applied research is approached, including what knowledge is synthesised and how, through both what the funding will support and other restrictions resulting from the legitimisation process.

Task for the I2S Development Drive

Gather case examples describing funding, endorsement and other forms of authorisation, along with any restrictions on knowledge synthesis.

Organisational Facilitators and Barriers

The third contextual issue is organisational facilitators and barriers, which can impact on synthesis of disciplinary and stakeholder knowledge. Here the focus is on the research organisations. It may be useful to think about structure and culture separately. For example, structural issues can include the disciplinary mix in an organisation, the availability of seed funding to encourage cross-disciplinary collaboration and organisational financial mechanisms. If a centre established to examine global climate change does not include any social scientists, for instance, it is probably less likely that good social science research will be part of the knowledge synthesis. In contrast, seed funding to encourage collaborations between researchers who have not worked together before may increase the numbers of disciplines included in the knowledge synthesis.⁹ Similarly, barriers to sharing money across different parts of an organisation may

7 World Commission on Dams (2000). The Commission worked within a budget of just less than US\$10 million (Scudder 2001).

8 For a taste of the politicisation referred to in footnote 1 of this Chapter, instructive perspectives are provided by two insider accounts, which argue that the Commission's desire for balance was exploited by the anti-dam movement representatives, who also outmanouvered the pro-dam and government interests (McCully, 2001; Briscoe, 2010). In addition, Briscoe argued that the broader context (the strong influence of "red-green" coalitions – a combustible mixture of rich-country anti-capitalists and environmentalists"), allowed the anti-dam movements to usurp the legitimate role of governments.

9 The Australian Research Alliance for Children and Youth (ARACY) effectively used seed funding to promote such new collaborations <http://www.aracy.org.au/index.cfm?pageName=apply_for_seed_funding> (accessed 10 August 2011).

work against joint funding applications and reduce disciplinary scope. Cultural factors can include organisational attitudes towards stakeholders and norms regarding idea exchange. If the organisation's leaders are antagonistic towards particular stakeholders, such as big business or particular non-government organisations, it is less likely that their perspectives will be included in the knowledge synthesis. If it is 'the done thing' that everyone attends morning or afternoon tea breaks or annual retreats, this may facilitate cross-fertilisation of ideas between disciplines.

It is easy enough to speculate on the importance of organisational structure and culture for knowledge synthesis, but there is little published evidence of actual impact. Given that organisations involved in knowledge synthesis are likely to differ substantially in structure and culture (in both obvious and subtle ways), it may also not be sensible to look for generic facilitators and barriers. For example, an organisation composed entirely of natural scientists may have a long history of collaborating with one or more social science organisations, so that its own disciplinary limitations are not an issue. Similarly, financial managers may be adept at finding ways to work around obstacles that stand in the way of sharing grant income. Then again, organisations may have regular gatherings of their researchers, but the focus may be on discussing sport, political events and gossip rather than exchanging research ideas.

A more useful way forward may be to design a series of questions that prompts integrative applied research teams to reflect on their organisation's structure and culture, to identify facilitators and barriers, and to find ways to overcome the barriers and maximise the facilitators. This could include questions like

- which disciplines are represented in the organisation; which ones regularly work together; are there collaborators outside the organisation
- with which stakeholders is there a history of working; are any arenas consistently missing; what determines the stakeholder groups involved
- have there been problems in the past in sharing funding; what impact did these have and were ways found to overcome them?

Recording and sharing such observations may help spark ideas about ways to overcome barriers. Even if the circumstances are quite different, learning about how other integrative applied research teams have overcome problems may generate fresh thinking in a team that is facing particular obstacles.

Task for the I2S Development Drive
Compile case examples describing the diversity and impact of organisational barriers and facilitators.

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