
Enabling collaborative practices

'Collaboration promises a way to distribute the burden and ownership of wicked problems while harnessing a broader range of expertise and perspectives through which to understand the problems and make them more tractable.'

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Contents

| | | | |
|---|-----------|--|-----------|
| Preface | 1 | References | 23 |
| Chapter 1: Enabling collaborative practice: a guide | 2 | Chapter 3: Critical systems tools to support collaborative practice | 26 |
| Chapter 2: Enabling collaborative practice: a practical model | 5 | Introduction | 26 |
| Introduction | 5 | Two settings for collaborative tools | 27 |
| Methodology | 6 | Two practical tools to support collaborative processes | 28 |
| Methods | 7 | Applying the Four Windows | 29 |
| Immersion | 7 | Questions of efficiency and reliability | 29 |
| Sense-making | 7 | Questions of effectiveness and functions | 30 |
| Analysis | 8 | Questions of meaningfulness | 30 |
| Testing | 8 | Questions of fairness and recognition of different knowledge | 30 |
| Findings | 8 | <i>Figure 1: Ulrich's 'Eternal Triangle'</i> | 31 |
| Exploring the model: salient variables | 8 | Using the tool | 31 |
| <i>Figure 1: Enabling constructive collaborative practice. A model of salient variables found to support collaborative practice to guide contested land and water decisions in New Zealand.</i> | 10 | Critical Collaboration Model (CCM) | 31 |
| Materiality | 10 | Salience, credibility and legitimacy | 31 |
| Meaning | 12 | <i>Figure 2: Ulrich's eternal triangle</i> | 32 |
| History | 14 | Constructing the model | 33 |
| Competence | 16 | <i>Figure 3: Prototype critical collaboration model</i> | 33 |
| Commitment | 17 | Constructing the model | 33 |
| Group competence | 17 | <i>Figure 4: Critical collaboration model</i> | 33 |
| Organisational competence | 18 | Using the model | 34 |
| Discussion | 20 | Discussion | 34 |
| Conclusion | 22 | Conclusion | 35 |
| Acknowledgements | 23 | References | 36 |

Preface

This publication is for those participating in, considering or reviewing collaborative processes.

As we say in Chapter 2: “*Collaboration promises a way to distribute the burden and ownership of wicked problems while harnessing a broader range of expertise and perspectives through which to understand the problems and make them more tractable. In some situations, the hope has been that a collaborative process will make contentious decisions more socially robust, resilient to stakeholder challenge and, therefore, enduring. However, the option for collaborative process will require commitment and resourcing. A basic question, then, is what will it take to make investment in collaborative processes more likely to be worthwhile.*”

There are three chapters included here:

CHAPTER 1: Enabling Collaborative Practice – a guide (a summary of four categories of conditions, capabilities and capacities that influence the success of collaborative processes)

CHAPTER 2: Enabling Collaborative Practice: a practical model (a report on our research and a full version of our findings)

CHAPTER 3: Critical Systems Tools to Support Collaborative Practice (a paper applying two systems tools to collaboration).

The first two chapters result from our research as part of the ***Our Land and Water National Science Challenge***. The research involved in-depth interviews with practitioners involved in collaborations in Wellington, Canterbury and Southland. We set out to learn from those attempting collaboration what factors are important for success. Our findings cluster into a model of four kinds of significant influences: materiality (key resources), history (what else is happening at the time), meaning (how key parties make sense of their situation, role and opportunity), and competence (skills, attitudes and knowledge that parties bring to a collaborative process). The usefulness of our findings is that they highlight factors to pay attention to for those planning, reviewing or seeking to improve collaborative processes. They are a kind of checklist of things to look at. We don't provide a recipe for collaboration, nor do we attempt to quantify a desired amount of any of the factors; but our evidence is that the factors we have included in the model work together to contribute to the success or dysfunction of collaborations.

A full discussion on our approach has been published in the academic literature ¹.

The third chapter is a conference paper ² that offers two approaches for dealing with a fundamental challenge of collaborations. As we say in that chapter:

Differences of worldview and/or of power can threaten collaborative processes at their core, potentially leading to despair, unsatisfactory trade-offs, or inequitable processes and outcomes. . . . The process of harnessing multiple perspectives and sets of expertise in order to work together on a common issue is highly complex.

Chapter 3, then, applies two well established frameworks from the systems thinking literature to suggest ways of working with diversity in groups. The first framework ³ proposes four sets of practical questions on which all participants in a collaborative process will need to be satisfied for productive collaboration to happen. It attempts to alert organisers and participants to potential misunderstanding or resistance in collaboration. The approach reflects our experience of finding it useful to monitor unconscious processes in groups, and of making such processes explicit enough to be addressed. The approach we propose suggests pathways to work through such misunderstandings and resistance.

The second framework applied in Chapter 3 is our synthesis of two systems approaches ⁴. It is a development of a framework developed as part of work with public health officials described elsewhere⁵.

¹ Nicholas, G., & Foote, J. (2020). Interpreting practice: Producing practical wisdom from qualitative study of practitioner experience. *International Journal of Social Research Methodology*, DOI: 10.1080/13645579.2020.1799635. <https://doi.org/10.1080/13645579.2020.1799635>

² Nicholas, G. (2021, July 9). Critical systems tools to support collaborative practice. *ISSS 2021 Annual Conference*. ISSS 2021 Annual Conference, On line. <https://www.issss.org/online-2021-public/>

³ From Flood, R. L. (1999). *Rethinking the Fifth Discipline: Learning within the unknowable*. Routledge.

⁴ Ulrich, W. (2000). Reflective practice in the civil society: The contribution of critically systemic thinking. *Reflective Practice*, 1(2), 247–268. Ulrich, W. (2003). Beyond methodology choice: Critical systems thinking as critically systemic discourse. *Journal of the Operational Research Society*, 54, 325–342. Cash, D. W., Clark, W., Alcock, F., Dickson, N., Eckley, N., & Jager, J. (2002). *Saliency, Credibility, Legitimacy and Boundaries: Linking Research, Assessment and Decision Making* (Research Working Paper No. 02–046). Harvard University, John F. Kennedy School of Government.

⁵ Nicholas, G., Sharma, S., Walton, M., Hepi, M., & Hide, S. (2021). Critical collaboration model: An enhanced model to support public health collaboration. *Health Promotion International*, daab075. <https://doi.org/10.1093/heapro/daab075>

CHAPTER 1:

Enabling collaborative practice: a guide

What conditions, capabilities and capacities influence the success of collaborative processes?

MATERIALITY

- Sufficient resources
- Receiving system
- Design, strategy, administration
- Host/Kaitiaki governance and management protection
- Alternative structures of accountability
- Room for emergent practice
- Participation of key parties

MEANING

- Conceptual underpinnings
- Participants identification with kaupapa¹
- Group sense of ownership and agency
- Sense of legitimacy
- Participant sense of identity, responsibility and mandate
- Focal issue is seen as complex

COMPETENCE

PERSONAL:

- Openness
- Commitment
- Strength/Confidence

GROUP:

- Ability to reflect on questions and the 'frame'
- Social capital between participants
- Facilitation
- Technical expertise
- Patience to take time
- Ability to respect and discover differing worlds and knowledge

ORGANISATIONAL:

- Governance and management trust the process
- Openness to change and re-framing
- Distinction between collaboration and consulting
- Available fit for purpose technical expertise

HISTORY

- Development and implementation of scope, horizon, composition
- Credible and legitimate partners providing mandate and sponsorship
- Perceived system failure or system frustration
- Decision and commitment to share power
- Commitment to Te Tiriti o Waitangi² and relationship with Mana Whenua³
- History between parties
- Political mandate and opportunity for key parties
- Positive experiences of engaging community-based expertise
- Bounded opportunity – temporal imperative

**Key variables
for design,
evaluation or
trouble shooting
collaborative
practice**

¹ Agreed basis for action (Māori)

² A treaty establishing partnership between the British Crown and NZ indigenous tribes

³ Indigenous people with local authority over land (Māori)

MATERIALITY

Resources for a collaborative process

Sufficient resources

For example, **time, funding, technical support and facilitation**

Organisational receiving systems

Systems for receiving outputs need to be in place, known and accessible

Design, strategy and administration

A framework of design, strategy and administration requires at least these attributes:

- Participating institutions committed to **Māori rangatiratanga**
- Key partners and stakeholders perceive design and implementation **processes** as credible and legitimate (probably through the involvement of key partners)
- **Scope** of the proposed collaboration is defined: interim goals, targets and outcomes; long-term desired outcome; relationship with selected leadership at various levels of governance
- Participants understand and agree to **processes of deliberation and decision-making**
- Allowance for time and processes required to **build relationships** and mutual appreciation of motivation within the collaboration
- Commitment to nurture, review and renew the various aspects of **enabling soft-infrastructure** throughout the collaborative practice

'Protection' by governance and management

Host organisations have structures of governance and management that understand the **nature and requirements of collaborative processes** and protect the opportunity to grow and practice collaboration

Alternative structures of accountability in organisations

Participating organisations **accountability and reporting** expectations

Room for emergent practice

Ability to **avoid rigidity or standardisation** of what is involved in collaborative practice

Participation from key parties

Degree to which all the relevant parties to a problem are **seen to be involved**

MEANING

How key parties make sense of their situation, role and opportunity

Conceptual underpinnings

The **conceptual underpinnings** that organisers and participants bring to the practice

Participant identification with the principles and ideas underpinning the work

Participants have sufficient **'stake' in and commitment to the kaupapa** guiding the work

Group sense of ownership and sense of agency in relation to the process and outcomes

Confidence or belief that the process can **result in decisions and action**

Sense of legitimacy

Perception of appropriate involvement and processes in establishing the collaboration

Participant sense of identity, responsibility and mandate

The extent to which participants see themselves as **participating as individuals or as representatives**

The extent to which participants **identify with the good of a community**, beyond personal or more limited advantage

Focal issue is seen as complex or 'thorny'

Shared perception that the focus of a collaborative practice has sufficient complexity that it needs a new approach

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Forthcoming publication:

Nicholas, Graeme, Maria Hepi, and Wayne Duncan. in preparation. *Enabling collaborative practice: a practical model.*

COMPETENCE

Skills, attitudes and knowledge that parties bring to a collaborative process

Participant competence

Openness to change; to the other; and to other worldviews and knowledge systems

Commitment to the kaupapa (agreed foundation for action); to the common good and long-term outcomes; and to respectful relationships

Strength and confidence to cope with critique; to contribute knowledge and perspectives; to represent the collaborative process and outcomes to stakeholders beyond the collaboration

Group competence

Ability to **reflect on questions and the 'frame'**; to not take the obvious or presenting question for granted
Collaborative practice both depends on and contributes to **social capital between participants**

Facilitation: help the group focus on solutions and move to decisions, communicate well and inclusively, focus on relationships, group-work skills, conceptual underpinnings, put own ego to one side, personal resilience and being self-referenced, willing to own authority (not waiting for permission)

Technical expertise:

- to help participants consider the likely consequences of possible courses of action in a particular situation
- to source and present credible data
- responsive to community and 'lay' questions and data

Patience to take time:

- for building and sustaining relationships and trust
- to take in and consider the inherent complexity of issues and the social complexity of diverse perspectives

Ability to **respect and discover differing worlds and knowledge**

Organisational competence

Governance and management **trust the process**
Capacity for political risk, alternative forms of accountability and some measure of power sharing

Openness to change and re-framing

Competence to reconsider assumptions about how the world and the organisational role are framed

Distinction between collaboration and consulting

Capacity to distinguish between working together (collaboration) and asking for input (consulting).

Available and **fit-for-purpose technical expertise**

HISTORY

Features of the particular period of history, its politics, institutions and dynamics

Development and implementation of scope, horizon and composition

How the **scope and horizon** of a collaborative practice have been developed

Credible and legitimate partners providing mandate and sponsorship

Credible and legitimate sponsors mandating the process help other parties to take it seriously and commit to it

Perceived system failure or systemic frustration

Partners and stakeholders believe it is **worth trying something new**, because other approaches have failed

Decision and commitment to share power

Potential participants who hold power decide, before embarking on a collaborative process, to **share power**

Commitment to Te Tiriti o Waitangi (Treaty of Waitangi) and relationship with mana whenua

The degree to which the role and priority of mana whenua as expressed in the **Treaty is honoured**

History between parties

How parties to a collaborative practice have related to one another in the past

Political mandate and opportunity for key parties

The degree to which participants have **authority to make commitments and take actions**

Positive experiences of engaging community-based expertise

Participants' **experiences of engaging** with other forms of expertise

Bounded opportunity or temporal imperative

The extent to which this moment in history has some **urgency and/or distinctive opportunity** that could constrain or drive collaboration

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CHAPTER 2:

Enabling collaborative practice: a practical model¹

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Abstract

What conditions, capabilities and capacities influence the success of collaborative processes? This paper summarises the methodology and findings of research to discover key factors affecting collaborative processes by looking through the eyes of those practicing what they recognise as collaborative practice.

The paper treats practitioners as co-creating, with the researchers, knowledge on collaborative practice to guide contested land and water decisions. Collaboration is viewed as an emergent social practice rather than as a method or technology, and draws on three sources of information to

develop a model of critical variables for constructive collaborative practice: immersion in collaborative practice, in-depth interviews and a sense-making workshop with practitioners. The resulting model follows logic used by Ostrom's modelling of attributes and variables of diverse social-ecological systems. We use an augmented version of the social practice theory of Shove, Pantzar and Watson to model critical variables for collaborative practice under four headings: materiality, competence, meaning and history. Finally, the paper discusses implications and relevance of the model.

Key words:

social practice; collaboration; resource management;

Introduction

In many parts of the world, decisions on how to uphold multiple and potentially competing values in relation to water quality and use have demanded new approaches. Indeed, decisions of this kind have been described as 'wicked problems' (Rittel and Webber 1973) because they are not susceptible to linear logic or conventional problem solving (Innes and Booher 2015). One direction of innovation has been to devise processes and frameworks for broader participation in advice, governance and management in relation to, for example, freshwater decision making (Ansell and Gash 2008). New Zealand has introduced several such approaches (Hughey et al. 2017; Pirsoul and Armoudian 2019). As Sinner and Berkett (2014) have described, there has been a movement from a paradigm of scientific management (decisions guided by science alone), through incorporating an analysis of values, to collaborative approaches. As they put it:

Rather than seeing resource management issues as 'problems to be solved or optimised', we see them as complex systems and 'situations to be improved' (Sinner and Berkett 2014).

This paper reports research to discover key factors affecting collaborative processes in guiding land and water decisions. The aim of the study is to provide evidence-based support for those considering or attempting collaborative processes by highlighting key variables seen as important to success by those working in the field. The collaborations informing this research were not ones of joint policy decision making; they were intended to provide collaborative policy advice to decision makers. The enquiry looks through the eyes of those practicing what they recognise to be collaborative processes. The overall question of the research was: *what conditions, capabilities and capacities influence the success of collaborative processes?* Capabilities, being attributes such as skills, attitudes and knowledge that contribute to collaborative practice; capacities, being the material, personnel and temporal resources needed to sustain collaborative practice; and conditions, being the precursors, and organisational and social context that may impact collaborative practice. The findings are presented here as a model of factors that practitioners of collaboration see as

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critical to successful collaborative processes. The purpose of the model is to organise our findings in relation to generic categories that can be compared with the findings and experience of others, and to guide decision-makers in commissioning, designing, facilitating, evaluating or improving collaborative practice.

The research was part of a broad research programme in New Zealand (Robson et al. 2017) "to enhance the production and productivity of New Zealand's primary sector, while maintaining and improving the quality of the country's land and water for future generations" (Our Land and Water 2019). This paper contributes to that programme by offering practical wisdom derived from practitioner expertise for those considering or responsible for collaborative approaches to maintaining and improving the quality of land and water. While collaborative approaches have been adopted by various authorities, what makes them work and worthwhile is not obvious, and "if not done well, [they] can result in significant costs in time and money as well as poor outcomes for those affected" (Butcher et al. 2019).

Other recent authors have explored collaborative processes from perspectives different than ours. For example, Emerson, Nabatchi and Balogh (2012) seek to address the lack of agreed definitions and frameworks for studying collaboration. Robson-Williams et al. (2018) examine the specific role of scientists supporting collaborations. Heikkila and Gerlak (2016) take a longitudinal view to understand change over time in collaborative processes. As Butcher et al. (2019) comment, much of the international literature focuses on comparative case studies to identify 'success factors'. Meanwhile, several studies have been done assessing New Zealand approaches to collaboration (e.g., Brower 2016; Cradock-Henry et al. 2017; Duncan 2013; Eppel 2015; Hughey et al. 2017; Jenkins 2018; Jenkins and Henley 2014; Kirk 2017; Kirk et al. 2017; Lomax et al. 2010; Painter and Memon 2008; Pirsoul and Armoudian 2019; Sinner and Berkett 2014). In addition, several studies highlight issues for Māori (indigenous people of New Zealand) participating in collaborative processes (e.g., Harmsworth et al. 2016; Hepi et al. 2007; Sinner and Harmsworth 2015; Stewart-Harawira 2020); and the study by Kirk et al. (2020), while having implications for collaborative process, focuses on barriers to policy implementation.

Our research finds much in common with Butcher et al. (2019), and we note their compilation of

characteristics of successful collaborations which resonates well with the salient variables we report here. However, what is distinctive in our own work is the attention we paid to the lived experience and expertise of those involved, discerning with them what contributes to successful collaborative practice, rather than bringing an external definition of collaboration or any normative way to assess success. Furthermore, by locating collaborative practice as an emergent social practice, and then developing a heuristic model of key variables in relation to a social practice framework, we have provided practical wisdom for decision-makers and practitioners.

This is an exploratory qualitative study and, as such, does not attempt a fully rounded and validated theory. In line with the aim of the study, the findings are offered as systematised learning to inform decision-makers. Rather than claiming to explain how collaborative practice works, or establishing causal links in relation to success or failure of collaboration, the study has generated usable insights to enhance practitioner expertise. The value of this research, then, will be found in its use to those who seek to act, and its capacity to be discussed and enhanced by those who use it.

Methodology

As an exploratory qualitative study, rather than a comparative one (Stake 2005), cases (informants) are selected for their potential to yield insights on our research question. Thus, our selection focused on range and depth of experience, and diversity of perspectives. Key perspectives included were governmental regulators, farmers, indigenous peoples, and environmental advocates. Our approach is grounded in practitioners' reflections on the lived experience of a practice that they recognise as collaborative. It is case-study research in which each lived experience is a case, and our quest was to discern meaningful patterns across the cases. It is co-creative research (Nicholas et al. 2019), in that it was shaped by engagement with participants, and discernment and interpretation of insights included practitioner informants. Thus, we have not assumed prior definition of collaboration as an object of enquiry. nor clarity on which qualities are considered relevant. That is, we have not researched effectiveness or efficiency of collaborative methods, nor have we assessed forms of collaboration in relation to particular theoretical or normative frameworks (such as political representation,

distribution of power, or stakeholder satisfaction). The fundamental methodological choice guiding the research was to investigate collaborative capacity through a collaborative enquiry with presumed expert practitioners (Dreyfus et al. 1986). The aim was to learn about collaborative practice through the eyes and experience of those involved in it.

In this study, we have included as 'practitioners' those who play a direct role in attempting to make collaboration happen. That means we have included as practitioners those participating in collaborative processes, those facilitating or leading such processes and those commissioning, overseeing, and resourcing the processes.

We deliberately chose to leave the definition of 'success' unspecified. Its meaning is left to the eye of the beholder. We are seeing success through the eyes of practitioners and deriving our understanding of success by inference.

Similarly, we have treated collaboration as emergent rather than as a method or technology capable of a priori definition. As Butcher et al. state:

a collaborative endeavor is not primarily an entity or an organizational structure – it is a set of organizational and interpersonal relationships shaped by the nature of the problems being addressed, the predispositions and capabilities of key actors, and the characteristics of the places in which the problems occur. (Butcher et al. 2019).

Thus, we have not treated collaborative practice as if it is a consistent activity that can be studied as if it were stable. This decision presented the challenge of drawing on diverse instances of what might be called collaborative practice and of then generalising useable insights from particular instances. This challenge is, of course, endemic to much social research (Flyvbjerg 2001). We discuss the philosophical implications and our handling of this challenge in a separate paper (Nicholas and Foote 2020). In summary, however, we use a form of hermeneutic phenomenology (Laverly 2003). Our focus was on interpretation rather than objectivity, interpretation replete with the complexities of personal, social and material context. Our primary question, then, was how each practitioner interprets their own experience; and, what sense they make of that experience. Thus, we treat informant-practitioners as experts in their field and invite them to join us as researchers in considering their practice.

Our second-tier task was to make sense of the mix of interpretations gathered. After reflecting on emergent insights with practitioner-informants, they are presented in this paper as a model of variables considered salient by practitioners in influencing the success of collaborative processes. This approach is distinct from approaches that seek data that is 'objective', independent of the interpretations or intentions of the actors.

Our conceptual framework for investigating and interpreting practice is the social practice theory of Shove et al. (2012). Shove et al. conceptualise practice as an 'emergent entity'. They focus on the way in which practice is not able to be separated from acting in time and space, and that each act can be studied for its particular configuration of the three elements of materiality, competence and meaning. As we have discussed elsewhere (Nicholas and Foote 2020), these three generic elements complemented and helped interpret our own initial framework.

Materiality covers some aspects we had included in capacity, and helpfully includes technologies and physical conditions; competence covers both a knowledge, skills and attitudes nexus, and the human dimensions of our 'capacity' (e.g., availability and endurance); meaning adds an important consideration to our study by surfacing questions such as the potential importance of how various actors in a practice make sense of the activity, their involvement and their experience (Nicholas and Foote 2020, 6).

Indeed, our decision to use the social practice theory framework was because of its fit with our research question. It provided a generic basis for our investigation in a way that would allow our method and findings to be interpreted by others researching practice. In order to better understand temporal and socio-political influences, we have used an augmented framework with a fourth category, history (features of the particular period of history, its politics, institutions and dynamics) (Nicholas et al. 2020; Nicholas and Foote 2020). This augmented social practice framework guided our interviews, analysis and development of a model of salient variables. As will be seen, the model provides a practical structure for presenting our findings. It follows a logic used by Ostrom (2009) in modelling attributes and variables of diverse social-ecological systems. Ostrom's approach uses a multilevel, nested framework to understand key variables in relation describing practices. Her purpose is close to ours, to developing a model to enable comparison between disparate cases. Our

model comprises categorised variables to consider when comparing cases of collaborative practice, and uses our augmented social practice framework as its top-level subsystems. As such, our findings are not presented as an explanatory or predictive model that would show how systems work, or identify causal relationships. We have attempted only to systematise practical wisdom derived from practitioners for practitioners.

In this paper 'stakeholder' will refer to identifiable groups or organisations that may be affected by processes and decisions, 'partner' will refer to those within a commitment to act together, 'communities' will refer groups with shared sense of identity.

Methods

The research followed five phases: *immersion, interviews, sense making, analysis* and *testing*.

Immersion

The early phase of the project involved the first author participating in four immersive residential events in which a selection of people experienced in collaborative practice met, reflected and discussed their lived experience of collaboration and made connections with personal qualities and history that seemed to them to contribute to their practice. The events were organised as part of parallel research, not primarily for the research reported here. Participants had been chosen from around New Zealand for their reputed experience of collaborative practice and had agreed to participate in the research. However, the design and facilitation of the events had its own rationale as a community of practice, encouraged development of such a community, and was not carried out by the authors. Along with his observations, recorded as field notes, the first author drew on his own history as a facilitator of collaborative processes. Insights from this phase informed subsequent phases.

Interviews

Two sets of interviews have contributed to this report. In both cases interviewees were chosen for their extensive experience of collaborative process associated with community involvement in public policy for land and water in New Zealand. Interviewees included community interest holders (farming, environmental, and indigenous peoples interests) and council officers. The first set comprised recorded interviews carried out in conjunction with

the immersive phase. These were carried out by co-researchers other than the authors, recorded and made available for subsequent consideration. These interviews invited participants to consider connections between their life experience and their collaborative practice. Six interviews were reviewed for our project. The second set comprised 35 semi-structured and exploratory interviews following a general interview guide based on the four categories of the augmented social practice framework referred to above. In addition, interviewees were asked to comment on how, in their view, the processes worked for local Māori (the indigenous people). Interviews were carried out across three regions in New Zealand, selected for their potential to yield insights; each region had Regional Councils, responsible for managing the effects of using freshwater, land, air and coastal waters, that were at various stages of carrying out multi-perspective collaboration on land and water resource management.

Sense-making

A 'sense-making' workshop was held with 12 participants invited because of their first-hand experience as practitioners in collaborative practice. Participants were mostly different than those interviewed; two were in both groups. The purpose of the workshop was to share provisional findings on conditions, capabilities and capacities required for successful collaborative processes, and to provide a further source of comment that could enable triangulation of findings.

The workshop design invited participants to draw on their own experiences of collaborative practice 'at its best', and then to identify 'attributes of the situation' that could relate to the four core subsystems of our provisional model: materiality, meaning, capability and history. The process was repeated for an experience of attempted collaborative practice that 'involved a contentious subject, and where it seemed that the collaborative process failed, or did not help'.

Researchers also presented summaries of findings from the interviews in the three regions and workshop participants discussed the findings in the light of their own experience and insights. Participants then developed advice as if for a governmental agency that has not had much experience of collaborative practice. Finally, participants were asked to name and prioritise things that would need to be true for a collaborative process to be most likely to add value.

Analysis

Interview transcripts, observational notes and other qualitative information sources were entered into Dedoose (an online platform for analysing qualitative and mixed methods data) and coded. In line with our hermeneutic phenomenological approach, we sought to learn from each informant before discerning patterns between and across informants. Coding was both deductive (driven by specific interest in the augmented themes for the social practice framework subsystems: materiality, competence, meaning and history) and inductive (driven by ideas and themes embedded in each information source). Coding and repeated reading of the information sources were used to identify sub-themes for each of the social practice categories, and these themes were developed into a visual model of variables salient to those who play a direct role in attempting to make collaboration happen. Sub-themes, to be included, demonstrated triangulation between sources.

Testing

The lead author worked with two New Zealand agencies (the Southland Regional Council, and the Southland Department of Conservation) to host a symposium for practitioners and decision-makers on collaborative capacity. This event was quite distinct from the earlier sense-making event. The symposium was used to share provisional insights from the research and test their utility with participants. Feedback from the day was gathered through dialogue on the day, email responses and an on-line survey.

Findings

Our findings are presented as 'salient variables'; variables derived from informant-practitioners that reflect what practitioners consider critical for success. As variables, these factors are not quantified; there is no exact measurement of each that will ensure constructive collaborative practice.

We have structured the emergent variables as a visual model, using our augmented social practice framework as its top-level subsystems (Figure 1). We populated the model with insights derived from the practitioner-informants. As Figure 1 suggests, the model is dynamic and systemic: its elements form a whole and need to be interpreted in relation to the whole model, and parts of the model influence and interact with one another. The model does not represent neat compartments or categorisation of

elements. For example, the variables in the model may relate to more than one top-level subsystem, and the top level organisation of variables into materiality, meaning, history and competence is used only as a convenient and suggestive way to make sense of the emergent variables. The purpose of the model is to provide those involved in or considering collaborative practice with a structured list of factors to 'audit' for their contribution. It is intended as a practical model or heuristic to support thinking about collaboration.

Exploring the model: salient variables

In exploring the model of salient variables, we have distilled practitioner insights into headings and then elaborated our interpretation of the evidence with comments and illustrative quotes.

As the research was conducted in New Zealand and funded to be useful in New Zealand, we have included specific reference to the indigenous people of the country, Māori, and their knowledge systems. Readers from other settings may wish to consider how such insights might relate to indigenous and other cultures in their own situation. We have also used, with explanation, some terms from Māori language because of their relevance to our informants and power to communicate within New Zealand.



Figure 1: Enabling constructive collaborative practice. A model of salient variables found to support collaborative practice to guide contested land and water decisions in New Zealand. The model follows a framework augmented from Shove et al. (2012).

Materiality

Materiality refers to the financial, time and infrastructure resourcing for a collaborative process.

Seven aspects of materiality were identified as important variables (Figure 1): sufficient resources;

organisational receiving systems; design, strategy and administration; protection by governance and management; alternative structures of accountability and reporting; room for emergent practice; and participation from key parties.

Sufficient resources

- Availability of sufficient resources: for example, time, funding, technical support and facilitation.

Time required for collaborative practice includes both that contributed directly by participants and organisational staff time to service and support the practice. Informants spoke of the value of time for both formal processes and informal relationship building. Eating together and field-trips, for example, were valued, along with having time for exploring issues together. For organisations, time implies budgets and staff allocation. For collaboration participants, time may mean personal cost and prioritisation. One story about a person in governance makes the point that it is not always obvious how important time is:

“It took [him] that two and a half years, and then he started to see the value of people spending enough time in a room with each other... And once people start, once you get enough trust ... people feel that they can actually talk ... in a more authentic way about who they really are, what they’re really about, you know, what they really care about and why, things like that; it’s just a human thing.”

The requirement for technical support and facilitation implies the need for employment relationships for key roles, and organisational capacity to provide specialist personnel to support collaborative practice. Technical support requires both relevant expertise (e.g., scientific or planning personnel) as well as trusted data (which, in turn, may require additional capacity to generate).

Facilitation is seen by participants as a critical resource for success. It is a specialist role requiring recruitment or appointment of persons with appropriate skills and personal attributes. As one facilitator explained:

“Don’t underestimate the resources and time required . . . This is not a quick fix and it doesn’t happen spontaneously, and it requires - it really does require - investment and facilitation in some form or another. And I think there have been examples around the country, people being expected to facilitate the collaboration on top of their job and ... people see it as you’re just running a meeting . . . but don’t see the design and the thinking and the relationship stuff that all happens between.”

Organisational receiving systems

- Systems for receiving outputs need to be in place, known and accessible.

The credibility and motivation of collaborative practice requires that decisions and findings from the process will be received, respected and acted on by relevant decision-makers. Having ready access to channels and systems to receive and use outputs from the process is seen by informants as important for successful collaboration. One practitioner explained:

“Because people [in the collaborative process] could see that if they did the hard yards and really sorted stuff through it was honoured, it was worth investing themselves and making the effort and coming to the conclusion. So, that got the buy-in from all sorts of people who wouldn’t have participated in traditional political processes because they just weren’t interested in spending their life in the advocacy sort of situation. So, it required the governance, the power people, to actually honour the process for the process to be able to be sustainable and for people to carry on committing themselves. And that has happened up until now, but it does require governance to make that commitment, to truly share power, and not everyone in governance is prepared to do that in every situation.”

Design, strategy and administration

There are several aspects of design, strategy and administration indicated by our informants for constructive collaborative practice. This variable comprises key contributors to support participants in a collaboration to trust the legitimacy of the process. These are included here under Materiality because we see them as forms of soft infrastructure, each representing investment. Design, strategy and administration need, at least, to take account of the following:

- Ongoing institutional commitment by participants to Māori rangatiratanga (Māori: the right to sovereignty and self determination, chieftainship guaranteed by the Treaty of Waitangi), processes and values [The Treaty of Waitangi is a founding document for New Zealand that established a partnership between the British Crown and indigenous tribes (see also, Stewart-Harawira 2020, Box 2).]
- Design and implementation processes considered by key partners and stakeholders as being credible

and legitimate (probably through the involvement of key partners)

- Defined scope of the proposed collaboration: its long-term desired outcome (horizon it is working toward); its relationship with elected leadership at various levels of governance; and its interim goals, targets and outcomes
- Processes of deliberation and decision-making that are understood and agreeable to the diverse participants (e.g., some Māori participants expressed tension between consensus models used within a collaborative practice, commitment to their own people and their rangatiratanga rights under the Treaty of Waitangi, explained above).
- Allowance for time and processes required to build relationships and mutual appreciation of motivation within the collaboration
- Commitment to nurture, review and renew the various aspects of enabling soft-infrastructure throughout the time of collaborative practice.

'Protection' by governance and management

- Structures of governance and management in host organisations that understand the nature and requirements of collaborative processes and can protect the opportunity to grow and practice collaboration.

While 'protection' may seem a rather extreme word to use, our evidence suggests it is apt. Collaborative practice is often about time, good process and relationships. If any of these are undermined, consciously or unconsciously, the work of collaborative practice could be damaged. Without protection, other agendas and assumptions can prevail, such as focusing on time efficiency, transactional ways of dealing with stakeholders, and consultation rather than collaborative approaches.

As one practitioner put it:

"I think it's fragile, there's never any guarantee. It would be very easy for people to end up at the governance level and say, 'I don't really like what they're doing and I've been elected by people who want me to do this, so override that'."

Alternative structures of accountability in organisations

- How participating organisations establish accountability and reporting.

Collaboration requires scope to be responsive to the relationships and the issues as they develop. Some organisations may find that their accountability and reporting structures lack capacity for what is needed.

One senior council officer commented about the collaboration facilitators the council had employed:

"We'd never had people like that in the Council before, and at times they were a collective pain in the ass telling us, you know, how to do our job better; and at other times they were our saviours. But recognising that independence, I think, was huge and actually we kept making them more independent."

See also, further comment on accountability under 'Organisational competence' discussed later.

Room for emergent practice

- Ability to avoid rigidity or standardisation of what is involved in collaborative practice.

While attention does need to be paid to design and strategy, as outlined above, collaborative practice is also emergent from the participants and the issues they are working on. One practitioner commented:

"Collaborative processes are kind of tricky because until you've been involved in one, like you don't really know what you're signing up for so having something at the outset would be quite useful so people kind of go in with the right frame but I think that frame also needs to be adapted to the situation."

Participation from key parties

- Degree to which all the relevant parties to a problem are seen to be involved.

If parties to a problem situation are not participating in the collaborative practice, its opportunity for constructive outcomes and its legitimacy as a process is likely to be diminished.

Meaning

Meaning, in this model, refers to the influence of how key parties make sense of their situation, role and opportunity. The research revealed six aspects of meaning as important variables for collaborative practice (Figure 1): conceptual underpinnings; participant identification with the principles and ideas underpinning the activity; the group sense of ownership and sense of agency in relation to the process and outcomes; the sense of legitimacy;

participant sense of identity, responsibility and mandate; and the focal issue being seen as complex or 'thorny'.

Conceptual underpinnings

- The conceptual underpinnings that organisers and participants bring to the practice.

The shape and quality of collaborative practice is likely to be influenced by the various conceptual underpinnings that organisers and participants bring to the practice. Some conceptual underpinnings may be unarticulated or assumed, and some are likely to be at odds with others. Examples of conceptual underpinnings identified through our research include:

- Mutual accountability for common-pool resources (Ostrom 2009, 2010; Ostrom et al. 1999). This concept is a particular framing for considering resource management; it is distinct from market-based and regulatory-based approaches.
- Treaty of Waitangi partnership (a treaty relationship between the Crown and Māori tribes). This understanding of New Zealand history, involving an enduring relative responsibilities of government and Māori tribes, if adopted, shapes deliberation processes and parameters.
- A concept of "gifting and gaining", as distinct from the conceptual framings of trade-offs or compromise.
- Consensus decision-making. As a variable, this highlights the extent to which a collaboration seeks consensus across all participants, as distinct from majority-based or technocratic decisions.
- Community engagement for advice to policy and regulatory decision-makers. The relationship between affected communities and decision-making cannot be taken for granted. This aspect of the variable highlights the extent to which there is an underpinning of community engagement for advice.
- Community development: as an underpinning this refers to the establishing or enhancing of community being at least part of the rationale for an initiative. Community development can be seen as promotion of solidarity (community) and agency (Bhattacharyya 2004).

Participant identification with the principles and ideas underpinning the work

- Participants have sufficient 'stake' in and commitment to the kaupapa guiding the work.

A kaupapa is a Māori term for "a set of values, principles and plans which people have agreed on as a foundation for their actions" (Te Ahukaramū Charles Royal 2007).

Constructive collaborative practice depends, in part, on having participants that have sufficient 'stake' in and commitment to an agreed kaupapa guiding the work. What appears to be important is sufficient alignment of participants' values, principles and other commitments with the process and potential outcomes of the collaborative practice. To what extent do participants see themselves in the outcomes? The kaupapa of the collaborative practice may differ from the particular agenda of policy and regulator sponsors. One challenge for collaboration is that different parties may have quite disparate stakes in the potential outcomes. A practitioner gave the example of urban participants in a process to manage a water catchment:

"In the urban space, nobody has any direct skin in the game, so the closest to the skin in the game that they have is they pay rates [local taxes], and so they're sort of removed from the action."

One powerful factor that can act to integrate motivation around a shared kaupapa is participants' commitment to a particular place, such as a waterway.

Group sense of ownership and sense of agency in relation to the process and outcomes

- Confidence or belief that the process can result in decisions and action.

Alternatives to a sense of agency include, a sense of impotence, being an instrument for someone else, or feeling 'hamstrung'. A key question for those in a collaborative process is, can we make a difference or are we here to do someone else's bidding?

One practitioner, reflecting on a previous situation where elected officials undermining collaboration, explained:

"Councillors . . . [were] re-litigating and altering things that [the collaboration process had] done, such that you lost the ownership by the collaborative group. They got pissed off when they saw arbitrary councillors just decide to change things."

Ownership of outcomes from collaboration is seen as important, but may take time:

"It's not just about talking about issues and everything else. It's actually getting the confidence to be able to articulate and also be able to own the decisions, and that confidence, you know, doesn't come immediately."

Sense of legitimacy

- Perception of appropriate involvement and processes in establishing the collaboration.

To what extent do participants and the institutions involved in a collaborative practice believe that the conception, development and implementation of the practice has been just and fair? In other words, have the 'right' parties been involved, and have they followed processes that are considered acceptable? This is likely to be more than a technical question; key actors will have their own perception of legitimacy. Furthermore, perceptions of legitimacy by stakeholders outside the collaborative process may be consequential. For example, a practitioner commented on a decision to appoint citizens to a collaborative group rather than have stakeholder representation:

"The stakeholders circle like sharks . . . Some stakeholders are more prepared to play in that space than others . . . [Some] would have liked a seat at the table but they understand they don't have one, but still want to engage in the dialogue. There are other stakeholders who almost demand a seat at the table and didn't get one and are seriously pissed, and don't really want to play in the sandpit, and just lob rocks from the outside."

Participant sense of identity, responsibility and mandate

- The extent to which participants see themselves as participating as individuals or as representatives.
- The extent to which participants identify with the good of a community, beyond personal or more limited advantage.

Participants may vary in their sense of their own identity and mandate in the practice. For example, some may believe they are free to make commitments within the process, others may see themselves operating on behalf of others who need to be consulted. Misunderstanding between participants in relation to their sense of identity and mandate may confound collaborative practice.

Focal issue is seen as complex or 'thorny'

- Shared perception that the focus of a collaborative practice has sufficient complexity that it needs a new approach.

At the heart of collaborative practice is an assumption that an issue is complex, and therefore needs an approach other than a simple implementation of known solutions. The complexity can be technical and scientific, social, or a combination of these. In other words, complexity that might drive collaborative practice may be that a wider range of expertise is needed to understand a problem, and therefore a collaboration of diverse viewpoints is called for; and/or that the problem itself is seen differently by key parties, and so solutions to any one articulation of the problem will not satisfy all parties. Without a shared perception that the focus of a collaborative practice has some elements of such complexity, participants and sponsors may not be convinced that collaboration is needed, and some may become frustrated, believing that the added effort of collaboration is not justified.

History

This part of the model identifies factors likely to be critical to constructive collaborative practice but are either extrinsic to it or are precursors. History, then, is seen as a category for influences that are functions of being at a particular point in time and space. Examples could include a moment in a stream of development, or a moment in local political or social dynamics.

We have identified nine aspects of history as important variables (Figure 1): development and implementation of the scope, horizon and composition; credible and legitimate partners providing mandate and sponsorship; perceived system failure or systemic frustration; decision and commitment to share power; commitment to the Treaty of Waitangi and relationship with local Māori; history between parties; political mandate and opportunity for key parties; positive experiences of engaging community-based expertise; and a bounded opportunity or temporal imperative.

Development and implementation of scope, horizon and composition

- How the scope and horizon of a collaborative practice have been developed.

Decisions about the intended scope and horizon of a collaboration have the potential to motivate

or constrain commitment to the processes. For example: is the scope simply to be advisory, to inform administrative or regulatory processes, or does it include the possibility of developing strategies and solutions to directly affect practices and outcomes? Is the horizon limited to achieving a stated milestone (such as a particular regulatory change), or is it an ongoing focus on improvement and outcomes?

Decisions about the composition are important in terms of both credibility and perceived legitimacy. Will participants be appointed, based on personal capabilities and presumed perspectives; will participants be elected by 'contributing' partners and organisations; or will participants be chosen in some other way? This question is related to how participants may see their role and participate. Are the individuals that participate doing so as individuals or as representatives? What is their mandate to be involved?

Both the outcome of decisions and the process of decision-making on scope, horizon and composition matter for collaborative processes.

However participants are chosen, a salient variable is the extent to which they are willing to collaborate, their community leadership qualities, and their openness, commitment and strength/confidence (described under Competence, below).

Credible and legitimate partners providing mandate and sponsorship

- Without credible and legitimate sponsors mandating collaborative process, other parties may not take it seriously or commit to the process.

Participants in collaborative practice bring with them their history and identity, and with that any established credibility and legitimacy as partners in the process. A precursor of constructive collaboration is the degree to which key partners considered by other stakeholders as credible and legitimate provide a mandate and sponsorship for the process.

An example from our study is the active role of regional and local councils alongside that of local Māori tribal authorities. In Canterbury, collaboration for the regional water strategy was sponsored by the forum of mayors from the region's territorial authorities.

Perceived system failure or systemic frustration

- Perception by partners and stakeholders that it

is worth trying something new, because other approaches have failed.

For those who believe that a perceived problem is simple and can be solved by a simple intervention, collaborative practice is unlikely to be an option.

As one practitioner stated:

"It eats money up front . . . When the problem isn't as wicked or complex you can look at that cost up front and go, 'No!'"

A precursor of constructive collaborative practice is that a system appears to be broken beyond easy or obvious repair, and/or there has been a history of frustration within a system because there appear to be intractable problems.

"Collaboration is a means by which, when faced with wicked complex, almost intergenerational problems, you arrive at enduring settlements."

Decision and commitment to share power

- Before embarking on a collaborative process, potential participants who hold power decide to share power.

While the full depth of power sharing may not be obvious to parties at the beginning, some willingness and commitment to share power appears to be foundational to collaborative practice.

One practitioner reflected on frustration at stakeholders not ready to share power:

"In the particular situation that I'm thinking of . . . people in the stakeholders' [groups] actually have power over the people who are in the collaboration and they can undermine it . . . so if you can imagine four lead organisations and a collaboration that's been given a particular task that is important to all four, any person in the stakeholding organisations can undermine the collaboration that is operating on their behalf."

Another was frustrated by a council:

"They feel more open to collaboration, and just in general, there are more people acknowledging that the ultimate goal is behaviour change and not setting rules in a plan; but there is still a reluctance to let go of control."

Commitment to Te Tiriti o Waitangi (Treaty of Waitangi) and relationship with mana whenua

- Degree to which the role and priority of *mana whenua* as expressed in the Treaty is honoured.

The history of colonisation and power in New Zealand means that constructive collaborative practice in that country, particularly about anything that affects the natural environment and/or human wellbeing, needs to honour the role and priority of *mana whenua* as expressed in the Treaty (see, Stewart-Harawira 2020). *Mana whenua* means tribal authority over, and control of, lands (Meredith 2008). By extension, the term recognises those who hold that authority.

The role of *mana whenua* and how *mana whenua* see their role in collaborative processes is not uncomplicated. The Treaty represents a relationship between Māori tribes and the Crown (government). However, particular collaborations are not directly with the Crown, they involve other parties. This has presented a choice for *mana whenua*: to reserve their participation to dealing with the crown and its agencies, or to also participate in processes with other parties. Collaborations established by any arm of government in New Zealand are required to ensure opportunity for *mana whenua* to participate. How the role and priority of *mana whenua* is then honoured in the process is a salient variable in contributing to successful collaboration.

History between parties

- The importance of how parties to a collaborative practice have related to one another in the past.

Relationship history influences enablers of collaborative practice such as trust, meanings attributed to others, patterns of communication and understanding of the constraints and accountabilities of others. One example of this was the history of relationship between one of the regional councils and its local Māori tribes. That relationship was described as “pretty mature”. They had been in co-governance arrangements with council committees for about 14 years. This history was credited with the ability to have robust and challenging conversation about how collaborations were being established.

Political mandate and opportunity for key parties

- Degree to which participants have authority to make commitments and take actions.

Parties to collaborative practice come with variable forms of political mandate (authority to make commitments or take actions). In addition, a collaborative process itself will have some measure of authority and opportunity to develop commitments and actions. The source of mandate in each case can

vary, as can the degree of alignment between various mandates participating in a collaborative practice, and the extent to which parties understand and respect the mandates of other parties.

Positive experiences of engaging community-based expertise

- Participants' experiences of engaging with other forms of expertise.

Just as history or relationship between parties matters for collaborative practice (noted above), so does the extent to which parties bring with them positive experiences of engaging with others. In particular, those who see themselves as specially qualified because of formal mandate and/or specialist knowledge (e.g., statutory bodies, scientists, elected representatives) may find it hard to trust collaborative practice if they either lack positive experience of engaging with ‘community-based’ expertise, or have had negative experiences of such engagement.

Bounded opportunity or temporal imperative

- The extent to which this moment in history has some urgency and/or distinctive opportunity that could constrain or drive collaboration.

Collaborative practice happens in time and, typically, is responsive to particular opportunities and drivers. In Canterbury, for example, the opportunity and imperative came from the convergence of several factors: frustration at a deterioration of water quality, intensification of land-use, an initiative by regional mayors to call for action, conceptual leadership from the chief executive of the regional council and the appointment of commissioners by central government, with a strong mandate and limited timeframe to improve water management.

Competence

Competence refers to the constellation of skills, attitudes and knowledge that parties bring to a collaborative process.

Three forms of competence are seen as important (Figure 1): competence of participants in collaborative processes, competence of groups attempting collaboration, and competence of organisations hosting, resourcing or facilitating collaboration.

Participant competence

Salient variables to enable constructive collaborative practice include participants' competencies of

openness, commitment and strength and confidence.

Openness

- Openness to change; to the other; and to other worldviews and knowledge systems.

A practitioner noted some qualities found in others that work well in collaborative processes:

“Humbleness, not taking yourself seriously, . . . the ability just to actually have a thirst . . . to really embed yourself in wanting to learn something . . . The ability to admit when you are wrong is really important . . . You've got to be open to change.”

Another practitioner noted the importance of participants who *take into consideration other people's concerns . . . They care for those around them.*

Speaking of qualities that are important in a facilitator, one practitioner said:

“One of the things I think about the people who facilitate is that they don't have an ego that needs to be seen.”

Commitment

- Commitment to the *kaupapa* (Māori term: agreed foundation for action), to the common good and long-term outcomes, and to respectful relationships.

Our informants pointed out that attitude mattered for constructive collaboration. Orientation to the shared foundation for action, a will to achieve outcomes that serve the long-term common good, and maintaining mutual respect can vary and require commitment. An important example of this commitment is the ability and the will to hold the ‘big picture’. As one facilitator put it: part of the job is to “help them see that bigger thing, so they can land somewhere, hopefully; because the reality is, most of the time nobody gets everything that they want.”

A practitioner said:

“The big biggie is just, that you're willing and able to work with a whole diverse range of people and interests, . . . and be open to new ideas and new ways of doing things, not being too fixed. If you are too black and white or too rigid it's not the place to be.”

Another commented of participants in collaborative processes:

“They need to be quite thick skinned. They definitely need to have a ‘what's best for the community’ mind-set . . . They need a lot of time too. I mean, we've asked a hell of a lot of some people.”

Strength and confidence

- Strength and confidence to cope with critique; to contribute knowledge and perspectives; and to represent the collaborative process and outcomes to stakeholders beyond the collaboration.

In many instances, outcomes from collaboration directly affect others in a community. Participants in the process may become targets of discontent, or worse, from others in their community.

“They end up walking down the street and being harangued . . . by their neighbours. And that was initially quite a surprise to them . . . [But, given time] we've got to a situation where those members are now much more comfortable with the decisions they're making, and much more comfortable about delivering it, and much more comfortable with rocking up to a meeting in a draughty country hall and saying, “This is the story, guys”. And we've been really fortunate in that that committee is actually doing the front-footing with the community and articulating it really well.”

Group competence

Ability to reflect on questions and the ‘frame’

- The ability to not take the obvious or presenting question for granted.

Are the questions or issues being addressed the right questions or issues? Is the way in which the situation is being thought about the only or preferred way of thinking? The ability to reflect on questions and how things have been framed cannot be assumed. A group may need to have this capability introduced and nurtured.

Social capital between participants

- Collaborative practice both depends on and contributes to social capital between participants.

Social capital here refers to anything that facilitates individual or collective action, generated by networks of relationships, reciprocity, trust, and social norms (Coleman 1988; Portes 1998). Our research suggests that collaborative practice both depends on and contributes to social capital between participants. The

importance of this group competence suggests that time and planning directed to building social capital between participants is likely to be a worthwhile investment.

Facilitation

Facilitation was seen as a core group asset. It is included here as a group competence because the key is that the competence be present and active within the group. A designated facilitator may demonstrate all or most of the competencies, but this finding simply notes the importance of the competence for the group, wherever it is held.

Desirable facilitation competence includes:

- Ability to help the group focus on solutions and move to decisions
- Ability to communicate well and inclusively
- A focus on relationships
- Group-work skills
- Conceptual underpinnings
- Ability and willingness to put own ego to one side
- Personal resilience and being self-referenced
- Ability to own authority, not waiting for permission.

While facilitation competence is not only found in designated facilitators, facilitation is critical, and needs to be resourced and intentional. However, as one practitioner put it:

“People only see the work of facilitation when it doesn’t happen or when it happens badly. When it happens well, people don’t see the stroking of the egos, the building of relationships, the thinking analysis about what needs to come to this group next and how you can best position that, and the coaching of the technical people to present it in a way that actually addresses the questions of the people . . . And so I think facilitators need to have pretty resilient egos and be pretty self-referenced.”

Technical expertise

Again, the key insight is that appropriate technical expertise is seen as a group asset, whether it is internal to group or an occasional input. Desirable expertise-related competence includes:

- Ability to help participants consider the likely consequences of possible courses of action in a particular situation

- Ability to source and present credible data
- Responsiveness to community and ‘lay’ questions and data.

For many of our informants, this aspect can be seen as an important role for a designated facilitator:

“[Facilitators are] also providing technical support and technical advice, you know, a lot of the time and helping people making sense of maybe some of the signs and things they don’t understand.”

However, technical expertise does not rely totally on a designated facilitator. In our study it was common to draw on expertise from scientists and council planners, and participants themselves brought technical competence. The competence to source and use appropriate expertise is an important property of the group, even when expertise is sought from outside its membership.

Patience to take time

Groups need the will and capacity to take their time.

- Time needed for building and sustaining relationships and trust
- Time required to take in and consider the inherent complexity of issues and the social complexity of diverse perspectives.

As one practitioner noted:

“Expect it not to happen in a very short time span as well. I learnt very early on . . . you actually have to go with the flow a bit more . . . Collaboration is a long-term thing because that’s your relationship-building thing to achieve something that will happen, hopefully, in a stronger way. It’s not one of those things that you can do in one or two years.”

Ability to respect and discover differing worlds and knowledge

This competence needs to include, but is not limited to, considering both western science, knowledge systems of indigenous people and practice-based knowledge (e.g., held by farmers, fishers and others).

Organisational competence

Governance and management trust the process

- Capacity for political risk, alternative forms of accountability and some measure of power sharing.

Governance and management trust in the process

may involve some political risk-taking: it will involve supporting and funding a process that is not fully controlled by the organisation; it is likely to require a sustained commitment beyond an electoral cycle; and it implies patience to allow time for the process, openness to alternative forms of accountability for resources and outcomes, and a willingness to take seriously community input into decision-making.

In terms of accountability, staff in the organisation may need to balance working for their employer (e.g., a regional council) with responding to the work programme and needs of a collaborative group supported or initiated by the employer.

Hosting or supporting collaborative practice with other parties can be seen as a form of power sharing.

Openness to change and re-framing

- Competence to reconsider assumptions about how the world and the organisational role are framed.

The concept of framing refers to the set of assumptions or perspectives brought to a question or situation.

As Bolman and Deal describe the term,

'Frames are both windows on the world and lenses that bring the world into focus. Frames filter out some things while allowing others to pass through easily. Frames help us order experience and decide what to do' (Bolman and Deal 1997).

Organisations, as do individuals, adopt preferred ways of framing the world and their own role. This may be conscious or unconscious. Competence in an organisation may become selected and configured to perpetuate established framing. Collaborative capacity for organisations includes the competence to reconsider assumptions about how the world and the organisational role are being framed.

Distinction between collaboration and consulting

- Drawing a distinction between working together (collaboration) and asking for input (consulting).

Public sector organisations may have a stronger culture of consulting than of collaborating. Consulting takes different commitment and abilities in organisations than does collaborating. Organisations, if they are to participate meaningfully in collaboration, need ability to distinguish between these forms of engagement, and choose and resource appropriately the form for the situation.

Available and fit-for-purpose technical expertise

Many of our informants referred to the importance of technical expertise to inform collaboration. Expertise also needs to be presented in ways that are accessible to all participants, and responsive to the enquiries and needs of collaborators.

A science manager commented:

"We've come up with a solution that looks very different than what it might have done had just the science department taken it and run with it, so I think we have got a much better understanding of what the issue and the problem was in the first place by just listening to other people and that's allowed us to come up with a much better idea of how to co-design the solution because we have a broader understanding of the system as a whole."

Another practitioner said:

"I think it would be fair to say that some of the science people, you know, it's new territory for them as well. So they've . . . certainly tried, and done really well. Like, I wouldn't say they've done well, but it's not – it's not an easy thing. You know, it's pretty hard to – when you work in a technical space, to suddenly disseminate that for non-technical people, and I think if you're doing a collaborative process with non-technical people, that's really important."

Discussion

Collaboration promises a way to distribute the burden and ownership of wicked problems while harnessing a broader range of expertise and perspectives through which to understand the problems and make them more tractable. In some situations, the hope has been that a collaborative process will make contentious decisions more socially robust, resilient to stakeholder challenge and, therefore, enduring. However, the option for collaborative process will require commitment and resourcing. A basic question, then, is what will it take to make investment in collaborative processes more likely to be worthwhile. Our overall purpose in this paper is to respond to that question. Our aim is to provide evidence-based support for those considering or attempting collaborative processes by highlighting key variables seen as important to success by those working in the field. That purpose and aim shaped our research methodology and how we have reported the findings. As distinct from studies that have assessed collaboration against theoretical or normative frameworks such as, for example, Hughey et al. (2017) and Ansell and Gash (2008) in relation to governance and management elements, Pirsoul and Armoudian (2019) in relation to deliberative democracy, or those who have focused on implications for Māori (e.g., Harmsworth et al., 2016; Sinner and Harmsworth, 2015; Stewart-Harawira, 2020). Our focus was simply on collaborative process rather than any of the purposes that it might be put to (such as advice, governance, management).

To support our purpose methodologically, we chose to learn from those 'inside' the experience of collaborative processes what they perceived to be important for successful collaboration. The stance we adopted was that practice is inextricable from its performance, and that performance is embedded in social relations, material infrastructures and context (Hargreaves, 2011). Thus, our approach was to learn through the experience and interpretations of people participating in processes they deemed to be collaborative. Our enquiry and dialogue with informants was loosely structured around an augmented version (Nicholas et al., 2020) of the social practice framework developed by Shove et al. (2012). By opting for a practice theory orientation, we were treating practice as our unit of analysis, recognising that practice can be approached through its performance before it can be treated as an entity. With Reckwitz (2002), we regarded a practice as:

a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge.

The framework derived from Shove et al. (2012) proved an effective way of gathering and communicating insights. While Shove et al. mainly use their framework to discuss how practices persist, change and move, our focus has been on how to characterise a particular family of practice (collaboration) as having sufficient family likeness that it can be treated as an entity with common variables. Our decision to use social practice theory was pragmatic. While other frameworks may have served, all we needed was a credible and generic way of describing the particulars identified by informants. Our aim, to allow collaboration practitioners to consider our findings in terms of recognisable and discussable patterns, is the equivalent of describing an assemblage such as a table in terms of component configurations: for example, legs, apron, top. Other descriptions are possible, but a credible and generic approach enables comparison between tables, and design detailing. The idea of identifying variables rather than measurements was to suggest sites for possible comparison, innovation and mutation between instances of practice, thus supporting development and evolution of practice.

The result was a model of salient variables (salient to practitioners of collaborative process) to be considered in constructing, assessing or improving collaborative practice. The purpose of the research, and of the resulting model, was to produce practical wisdom for decision-makers. Thus, the model is not an attempt at general theory, nor is it a recipe for predictable outcomes. The model is offered as an example of what Flyvbjerg (2001) has called for: a *phronetic* approach to social research. That is, the research is the gathering and making sense of multiple case-based observations in an attempt to equip decision-makers with practical wisdom (Aristotle's *phronesis*) to improve their ongoing interpretive performance as practitioners. Each performance is set in a complex political, ethical, material and social context.

In identifying and explicating salient variables within a framework of four subsystems (competence, materiality, meaning and history), we do not want to lose sight of the performance and the performers (practitioners) who integrate the subsystems and interpret the variables in each instance to constitute a practice. Because the subsystems and variables only have coherence as collaborative practice in the act of practice, those who facilitate collaboration through their various roles can be seen as active interpreters rather than as technicians merely applying method. Shove et al. see the balance between the sense of a standardised entity (in our case, collaborative processes) and local interpretations by seeing the local as 'homegrown', "in the sense that each instance of doing is informed by previous, related and associated practices. At the same time, each instance is to a large extent defined by the elements of which it is composed" (Shove et al. 2012).

We extend Shove et al., not only in a particular application of an augmented version of their model, with a fourth element, history (Nicholas et al., 2020); but in taking a more radical hermeneutical stance, interpretation all the way down (Caputo 2018). Where Shove et al. (2012) think of practitioners 'coding and decoding' abstracted packages of knowledge to enact practice locally, we see practitioners as active interpreters, re-purposing not just knowledge, but the materiality, competence and meanings that they have to hand, to produce (not reproduce) their instance of practice as a particular performance in the (historical) moment.

The resultant model of salient variables, as a way of presenting our findings, is offered as a systematic set of lenses through which to view, interrogate and interpret collaborative practice. Our findings complement those of others. For example, our model has some common features to previous lists of key ingredients or requirements for productive collaboration (e.g., Ansell and Gash 2008; Butcher et al. 2019; Innes and Booher 2015; Sinner and Berkett 2014), and our findings fully support the six conclusions from Butcher et al. (2019) (Table 1). However, it should be noted that this study makes no claim to comprehensiveness. It represents a systematic enquiry of practitioners (broadly defined) and collates their interpretations of what, from their perspectives, is important for successful collaborative practice. Different kinds of study would be required to attempt any quantified attribution of relative importance, claim comprehensiveness in terms of

factors, or attempt to objectively define or evaluate success of collaborative activities. What is distinctive about our approach and findings is our practitioner-eye view and our schematic representation of collaboration as an emergence from configurations of variables considered salient by insiders.

Table 1: Themes emergent from interviews by Butcher et al. (2019), used with permission.

| |
|---|
| "First, collaboration as a response to wicked problems needs time and dedicated resourcing. |
| Second, the trajectory for collaboration can be unpredictable and requires a capacity to tolerate a lack of certainty. |
| Third, one cannot underestimate the time, effort and emotional energy required to manage internal and external relationships; maintain the internal integrity of the process; and ensure the external legitimacy of the collaboration. |
| Fourth, personal dedication and commitment to the issues at hand is critical for maintaining focus and effective collegial relationships. It is also what sustains participants in the process when the going gets tough. |
| Fifth, partners not only need to instill, and sustain, confidence and goodwill, they need to provide appropriate assurance to their executive and board (and upwardly support the executive and board who might themselves be called upon to provide assurances). Collaboration also needs to be outward-looking and able to offer assurance to a range of external stakeholders – some of whom might have perspectives that are not fully aligned with the organizing themes of the collaboration. |
| And sixth, collaboration has an organic quality; goalposts will change, thus requiring a capacity for nimbleness and adaptability. For this reason, formal terms of reference are useful as starting points, but might unduly fetter collaboration practice." |

(Butcher et al. 2019, 85f.)

Furthermore, our findings benefited from insights from both Māori and non-Māori participants on involvement in collaborations by indigenous peoples, and add support to insights on implications for indigenous peoples by others (Harmsworth et al. 2016; Hepi et al. 2007; Stewart-Harawira 2020) (Harmsworth et al. 2016; Hepi et al. 2007; Stewart-Harawira 2020). For example, our evidence supports Harmsworth et al. (2016) in their conclusion that

“key to the success of collaborative processes are enduring relationships between local government and tangata whenua [Māori: people of the land] along with adequate resourcing for all partners.”

While finding common ground and complementarity with others, our model of salient variables (Figure 1, above) is, as we have shown, distinctive both in how it was derived and in some of its features.

Conclusion

Our research has informed a model of factors influencing successful collaboration. The model enables and resources meaningful discourse among those who seek to construct, support or critique a collaborative project. It enables practitioners and those they engage with to indicate a family of practice rather than a method or set of ingredients. Collaborative practice is portrayed as neither a technique that can simply be adopted, nor an amorphous aspiration too ill-defined to be worth consideration, or, paradoxically, requiring little expertise and resourcing. Collaborative practice is portrayed as an artful and expert working with a range of describable precursor variables. Participants/practitioners within a collaborative process are always juggling these multiple contributions to the practice. Equipped with the awareness systematised by our model, those who have some influence over the commissioning, design and functioning of collaborative processes can work to create and sustain conditions that will support productive (however defined) outcomes. Our model does not answer the question of how? But it does highlight what practitioners identify as key factors that impact on successful or constructive collaborative processes.

Future research could investigate how collaborative practice learns, develops and evolves, for example, through effective feedback loops in relation to salient variables, and between instances or practice.

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CHAPTER 3:

Critical systems tools to support collaborative practice¹

Graeme Nicholas

Abstract

Collaboration between practitioners who come from differing starting points presents more than procedural challenges. Differences of worldview and/or of power can threaten collaborative processes at their core, potentially leading to despair, unsatisfactory trade-offs, or inequitable processes and outcomes. Differing starting points in collaborations may manifest as divergent assumptions about what is important, what is possible, and how to proceed; different accepted terminology, methods and priorities; diverse personal or professional capacities or capabilities; nonaligned standards and structures of accountability; and differing real or perceived levels of power.

The challenges of facilitating productive collaboration with people from diverse professions, backgrounds, capabilities and accountabilities are not difficult to imagine or list. The process of harnessing multiple perspectives and sets of expertise in order to work together on a common issue is highly complex. This paper offers two practical tools for supporting such collaborative processes. Each of the tools has been derived from systemic frameworks already in the literature, but which here have been turned into tools readily usable by practitioners. The development of the tools comes from reflective fieldwork by the author, as a facilitator of collaborative process, and from his search to make sense of researched experiences of practitioners of collaborative processes. The first of the tools draws on the four windows of systemic appreciation developed by Flood. Each of the four windows (systems of process, systems of structure, systems of knowledge-power, systems of meaning) are used to derive practical questions on matters all participants in a collaborative process will need to be satisfied for productive collaboration to happen. The second of the tools draws on two otherwise unrelated frameworks: a framework (Cash, Clark, Alcock, et al.) to understand what it takes for information to be utilised in group situations, and a framework (Ulrich) for critically reflecting on boundaries in a social system. Each of the contributing frameworks

can be presented as triangles, and the innovation presented here superimposes the two triangles as mutually complementary in a way that can generate six dialogical questions for critical collaborative practice. While Cash et al. identify three qualities needed for information or expertise to be utilised: salience, credibility and legitimacy; Ulrich (Critical Systems Heuristics) offers a schema to make power, marginalisation and inclusion discussable by examining any 'truth claim' as embodying judgements about what is relevant, values and boundaries. The paper briefly describes two pieces of research/practice that serve to highlight challenges of productive collaboration. It then introduces each of the two tools, showing how they draw on existing frameworks and how they help address the challenges identified. Finally, the paper discusses the potential for the tools and their importance as practical expressions of aspirations of critical systems thinking for engaging diverse parties in common action.

Introduction

This paper offers two practical tools for supporting challenging collaborative processes. Each of the tools has been derived from systemic frameworks already in the literature, but which here are turned into tools readily usable by practitioners.

Collaboration between practitioners coming from differing starting points presents more than procedural challenges (Butcher et al., 2019). Differences of worldview and/or of relative power can threaten collaborative processes at their core, potentially leading to despair, unsatisfactory tradeoffs, or inequitable processes and outcomes (Midgley, 2000). Differing starting points in collaborations may manifest, variously, as divergent assumptions about what is important, what is possible, and how to proceed; different accepted terminology, methods and priorities; diverse personal or professional capacities or capabilities; non-aligned standards and structures of accountability; and differing real or perceived levels of power.

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Challenges for facilitating productive collaboration with people from diverse professions, backgrounds, capabilities and accountabilities are not difficult to imagine or list (e.g.: Brower, 2016; Kirk et al., 2017; Pirsoul and Armoudian, 2019). The process of harnessing multiple perspectives and sets of expertise in order to work together on a common issue is highly complex (Ansell and Gash, 2008, 2012; Butcher et al., 2019; Innes and Booher, 2015).

The development of the tools presented here comes from the author's reflective fieldwork as a facilitator of collaborative process and from his search to make sense of his research into experiences of practitioners of collaborative processes. In particular, the author worked with public health officers in New Zealand seeking to establish collaboration with 'non-health' experts when addressing public policy (Nicholas et al., 2021); and with practitioners seeking collaborative decisions on water use in New Zealand (Nicholas, Foote, Hepi, et al., 2019; Nicholas and Foote, 2020; Robson et al., 2017).

The first of the two tools presented here draws on the four windows of systemic appreciation developed by Flood (1999). In our application, each of the four windows (systems of process, systems of structure, systems of knowledge-power, systems of meaning) are used to derive practical questions on which all participants in a collaborative process will need to be satisfied for productive collaboration to happen. The second of the tools draws on two otherwise unrelated frameworks: one (Cash et al., 2002) to understand what it takes for expert information to be utilised in decision making, the other (Ulrich, 1983, 2003, 2005) for critically reflecting on boundaries in a social system. Each of these contributing frameworks can be presented as triangles, and the innovation presented here layers the two triangles as mutually complementary, then generates six dialogical questions for critical collaborative practice. Cash et al. identify three qualities needed for information or expertise to be utilised (salience, credibility and legitimacy); Ulrich offers a schema to make power, marginalisation and inclusion discussable by examining any 'truth claim' as embodying judgements about what is relevant, values and boundaries.

The paper briefly describes two pieces of research/practice that serve to highlight challenges of productive collaboration. It then introduces each of the two tools, showing how they draw on existing frameworks and how they help address the challenges identified. In doing so, we highlight

some important intellectual antecedents for our development of the tools. Finally, the paper discusses the potential for the tools and their importance as practical expressions of aspirations of critical systems thinking for engaging diverse parties in common action. As will be seen, the concept of dialogue is used a number of times in the paper. Two clarifications may be useful: we explicitly recognise that power imbalances and coercive settings are corrosive to dialogue, so a naive view of dialogue will not do; we take our understanding of dialogue from Bohm (1996) and others (e.g. Isaacs, 1999) who have clarified that it refers to a collaborative effort, not (as some assume) the direction of communication (two way rather than one way).

This paper brings a practitioner's eye to three generic models suitable for investigating complex social dynamics and produces practical wisdom for those attempting to design, critique, support or participate in collaborative process. The tools presented here, then, are not an attempt at general theory, nor recipes for predictable outcomes; our aim is simply to re-present generic frameworks as practical tools for practitioners in the field. Our contribution may be seen as bringing together a deep appreciation of the foundations of critical systems thinking, including Ulrich's 'discursive' perspective (Ulrich, 2003), in its attempts to handle issues of diversity and power dynamics with the increasingly common requirements of governance and operational decision makers to engage constructively the experience and expertise of diverse multiple parties.

Two settings for collaborative tools

The development of the tools to be presented here draws on two settings from the author's research that serve to highlight the demands of collaborative practice and the potential for some practical wisdom to support those involved. Our examples are: public health officials engaging with officials from other disciplines and authorities to improve local outcomes, and collaboration between diverse parties with interests in waterways and their use in relation to cultural, environmental, recreational and economic outcomes. Each of the settings involved structured engagement between actors bringing diverse expertise in an intentional pursuit of a shared task to change outcomes.

The public health setting involved officials participating in various inter-agency collaborations and statutory processes in attempts to ensure public

health concerns would be part of public policy. Our research investigated public health officers' role in three projects: participation in developing a city plan to ensure it took account of wastewater disposal issues; submissions to formal hearings to approve a residential development which needed to consider environmental and health outcomes, including quality of drinking water, wastewater disposal and toxicity in soil; and an inter-agency approach to improving housing quality in a region. A key finding from these studies was the need for public health experts "to establish a 'place to stand' or to create space for public health expertise to be received by non-health actors" (Nicholas et al., 2021: 4). Such a space was not guaranteed, and required establishing with those coming from other disciplines and agencies sufficient legitimacy, credibility and salience (Cash et al., 2002). The situations also demonstrated that the relative power or authority of discourses in such collaborations can not be taken for granted or disregarded. Hence, we found it important to consider Ulrich's discursive systems approach (Ulrich, 1995, 2002a, 2002b, 2003) for its usefulness in making embedded assumptions discussable. This thinking resulted in a prototype (Nicholas et al., 2021) of the Critical Collaboration Model to be presented later. We also needed to offer advice to our client, public health officers, to support collaborative process in the practice of meetings. For that we drew on Flood's four windows of systemic appreciation, not as a sense-making model to 'simply' appreciate the system, but as a way to generate practical questions that could be seen as concerns (implicit or explicit) for all participants. Our application of the four windows is the first of the two practical tools outlined below.

Our second setting was the experience across three areas of New Zealand attempting to engage multiple perspectives and interests around the use and quality of waterways. Our findings in that case resulted in a model of critical variables covering the conditions, capabilities and capacities influencing success of collaborative processes (Nicholas et al., in preparation; Nicholas, Foote, Hepi, et al., 2019; Nicholas and Foote, 2020). Within the overall findings of critical variables, one area that emerged as particularly important for constructive collaboration was help for a group to negotiate and embrace difference while managing power differentials within the group and in society. This finding led us to refining the prototype Critical Collaboration Model (CCM) (referred to above). The CCM is the second of the two practical tools outlined below.

TWO PRACTICAL TOOLS TO SUPPORT COLLABORATIVE PROCESSES

Four windows of systemic appreciation

The first of the tools draws on the four windows of systemic appreciation developed by Flood (1999). Flood's stated aim in describing the four windows is to "deepen systemic appreciation". "The aim is to become better informed about issues and dilemmas [of the action area] leading to more relevant choices for improvement" (Flood, 1999: 94).

Flood describes the four windows as a form of categorisation, to be seen as an 'ideal type', for the purpose of stimulating debate, generating insights and enhancing learning. He goes on to state:

"Organisational life might be made sense of in terms of the following four categories – systems of process, of structure, of meaning, and of knowledge-power . . . The four categories help to locate types of issue and dilemma encountered in organisational life" (Flood, 1999: 94)

Systems of processes concern matters of efficiency and reliability of flows of events; systems of structure concern matters of effectiveness; systems of meaning concern matters of view-points held by people on what is meaningful to them; and systems of knowledge-power concerns matters of fairness in terms of who determines what is deemed valid knowledge and proper action (Flood, 1999).

We have taken Flood's four windows and used them to categorise generic challenges to collaborative activity, and to propose practical approaches to overcome the challenges. Our framework was first described to assist practitioners designing or participating in interdisciplinary meetings (in particular, meetings in which public health experts sought to collaborate with nonhealth experts in response to public issues). It serves to alert organisers and participants to categories of potential misunderstanding or resistance in collaboration. It also is suggestive of pathways to work through such misunderstandings and resistance.

Our use of Flood's categorisation to support collaboration reflects our experience of finding it useful to monitor unconscious processes in groups, and of making such processes explicit enough to be addressed. The work of Bion (1961) and of Argyris and Schön (Argyris and Schön, 1996; Schön, 1987) provide support and background to this approach. A pioneer

in the field of unconscious processes in groups, Bion (1961) drew a distinction between the intended work of a group and 'basic assumption' behaviour that can distort or disrupt that work. He attributed the source of such disruptions to unconscious anxieties and frustrations held by members of a group about the group itself.

"In any group there may be discerned trends of mental activity. Every group, however casual, meets to 'do' something; in this activity, according to the capacities of the individuals, they co-operate . . . Since this activity is geared to a task, it is related to reality, its methods are rational. . . . This facet of mental activity in a group I have called the Work Group. The term embraces only mental activity of a particular kind, not the people who indulge in it.

[However] Work-group activity is obstructed, diverted, and on occasion assisted, by certain other mental activities that have in common the attribute of powerful emotional drives" (Bion, 1961: 142–143, 145).

While Bion went on to describe particular basic assumption behaviour in terms of psychoanalytic theory, here we are simply recognising that certain frustrations and anxieties are likely to exist in groups and can be disruptive if not surfaced constructively. Our use of Flood's four windows is one approach to surfacing disruptive basic assumptions through calling attention to particular generic loci of frustration or anxiety. Argyris and Schön, in turn, proposed the concept of 'theories-in-use' behaviour to describe usually tacit interpersonal behaviours that often operate in situations of difficulty or stress (Schön, 1987). They called the values, strategies, and assumptions implicit in the common (unreflective) expression of theories-in-use, Model I behaviour.

"Model I theories-in-use contribute to the creation of behavioral worlds that are win/lose, closed, and defensive. It is difficult in Model I worlds to reveal one's private dilemmas or make a public test of one's most important assumptions" (Schön, 1987: 256)

Argyris and Schön advocate a different set of values, strategies and assumptions that they called Model II.

"Its governing variables are valid information, internal commitment, and free and informed choice. Model II aims at creating a behavioral world in which people can exchange valid information, even about difficult and sensitive

matters, subject private dilemmas to shared inquiry, and make public tests of negative attributions that Model I keeps private and undiscussable" (Schön, 1987: 259).

Thus, the framework of Flood's four windows provides us with Fgeneric categories for possible tacit assumptions that, in groups attempting collaboration, can be disruptive and counter-productive. The models of Bion, and Argyris and Schön provides us with theoretical underpinning for understanding the shape and power of unconscious processes in groups, and can suggest practical strategies to improve collaborative action.

Applying the Four Windows

One way to manage the generic challenges of multiple worldviews and power differentials in meetings and other collaborative settings is to consider four underpinning sets of questions that need to be answered satisfactorily for each of the participants:

- Questions of efficiency and reliability (process)
- Questions of effectiveness of functions (structure)
- Questions of meaningfulness (meaning)
- Questions of fairness and recognition of different knowledge (knowledge-power).

In outlining this application of the four windows it will become clear that, useful as it is, a simple application of the questions will not address power differentials and implicit boundary judgements; these are more appropriately addressed by our second tool, to be discussed later.

Questions of efficiency and reliability

Participants from diverse perspectives need confidence that the way meetings are held, and that work is managed and carried out, are an efficient use of time and resources, and are dependable. The question that needs to be answered is: is there a better way of carrying out this work?

When working with people from diverse backgrounds and perspectives, it cannot be taken for granted that any one profession or expertise has a monopoly on the most efficient and reliable way to approach a problem. Nor can it be taken for granted that participants will already know and trust the efficiency and reliability of an approach to the problem if it is brought from some different perspective.

By explicitly focusing on differing assessments

of what will make for efficiency or reliability, collaboration can be enhanced. The immediate focus for collaborative dialogue becomes this as a source of anxiety or suspicion among collaborators. Instead of diffuse or generalised resistance or obstructive behaviour, dialogue about differing assumptions about fit-for-purpose process can become a stepping stone to refocusing on the formal purpose of the collaboration.

Questions of effectiveness of functions

Participants will also need confidence that the rules and procedures being employed or assumed as part of a current collaboration are likely to be effective in achieving what it is they are intended to achieve. Such rules and procedures typically deal with issues of co-ordination, communication and control. They are often taken for granted within a particular organisational context, but can be a mystery and/or a stumbling block to participants from other contexts. For example, structures taken for granted within central government are not the same as those that operate in local and regional government, among indigenous peoples or for NGOs; and central or local government structures may seem quite alien to those from a business or a community background.

Doubts about effectiveness may spring from earlier negative experience of a particular approach, or may be simply based on lack of experience of the proposed approach compared with a familiar one. Either way, it can be useful to invite and make discussable evidence of effectiveness, thus surfacing tacit bases for resistance or enthusiasm. Such an invitation is designed to draw participants into what Argyris and Schön (Argyris, 1977; Schön, 1987) called 'double loop learning': "learning about the values and assumptions that drive one's own or the other person's behavior" (Schön, 1987: 256). Again, taking time to focus together on possible grounds for a choice is likely to be more productive than direct advocacy for particular paths as if their effectiveness is self-evident or there is no sensible alternative.

Questions of meaningfulness

Participants in collaborative processes need confidence that their own ways of making sense of the world are able to co-exist with and inter-act with those of others in the collaboration. The way people make sense of the world can be thought of as a product of "values, norms, ideologies, thought and emotion, coherence and contradiction" (Flood, 1999: 110).

While it is likely that any collaboration will involve a diversity of how to make meaning, there are three ways in which people may decide to work together: consensus (very strong alignment on what needs to be done and how to do it), accommodation (finding some common ground while preserving difference), or tolerance (acceptance of tension between differences) (Flood, 1999). Flood sees the notion of consensus as "increasingly recognised as undesirable and unlikely" (Flood, 1999: 111), noting that consensus epitomises assimilation, reduces diversity of thought, and may represent oppression; and that, in any case, diversity of experience, values, norms and ideologies makes the likelihood of consensus incredible. Flood is cautious about tolerance as the mode for working together, simply because of how difficult it can be to achieve and maintain a system of recognising the "positive worth of what emerges from an existence where tension is accepted as a norm" (Flood, 1999: 111). Accommodation, then, is the most realistic mode for collaborative processes when it comes to diverse ways of making sense of the world. This is a matter of discovering what can be held in common, while accepting differences. Accommodation speaks of making room for one another. We have found it useful to deliberately invite reflection of what matters to participants. Various applications of Critical Systems Heuristics (CSH) (Ulrich, 1995, 2003; Ulrich and Reynolds, 2010), including our model (CCM) shared later in this paper, are useful in stimulating dialogue on values and assumptions, and for making apparent the diversity among participants. Examples of such applications, to collaboration in research settings, are described in Nicholas et al. (2020; 2019).

Questions of fairness and recognition of different knowledge

Participants in collaborative processes need confidence that what is to be considered valid knowledge (and, therefore, valid action) will be decided fairly rather than being simply an expression of those in the setting that have the most power.

Taking power relationships seriously is a core concept in critical systems thinking (Midgley, 2000; Reynolds and Holwell, 2010). Again, various applications of CSH and other critical systems tools can be useful in making power dynamics and assumptions discussable. The choice of tool or method is not as important as ensuring dialogue enabled by a structured heuristic (Nicholas, Foote, Kainz, et al., 2019: 367). 'Dialogue' is our preferred term here,

in contrast to 'dialectic'. With Friedman (quoted in Czubaroff, 2000), commenting on Martin Buber's approach to dialogue, we understand "dialectic as the interaction of ideas abstracted from their human advocates, while dialogue is the interaction of concrete particular persons" (Czubaroff, 2000: 170). Collaboration is between particular persons; it is by its nature an intention by those persons to work together. While decisions on validity of knowledge will be important, abstracted 'truths' or agreements would miss the point; what matters for collaborative effort is mutual confidence that differences of what counts as valid are admissible and respected while validity is decided. We find the 'eternal triangle' articulated by Ulrich (2003) helpful in this regard (Figure 1). Ulrich holds together in the triangle boundary judgements (understanding of the system), observations (relevant facts) and evaluations (value judgements). This triangle constitutes a core part of the second tool we present and is discussed further below.

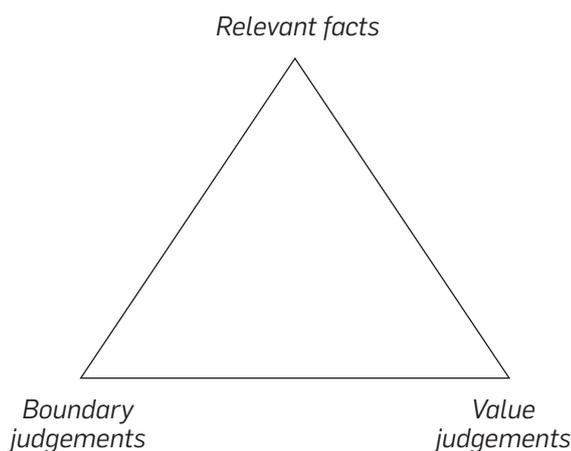


Figure 1: Ulrich's 'Eternal Triangle'

Using the tool

Our application of the four windows framework is likely to be most useful in designing adequate process, and in diagnosing (formally or informally) tensions, resistance and dysfunction in a collaborative project. The questions proposed for each of the windows are useful in identifying aspects of working together that may need intervention, but they are not in themselves methods for correcting resistance or dysfunction.

The second tool, now presented in the paper, complements the four windows framework. It can be used to promote collaborative dialogue within a collaboration and make explicit issues of power, inclusion and validity of knowledge.

Critical Collaboration Model (CCM)

The second of our tools draws on two otherwise unrelated frameworks: a framework (Cash et al., 2002) to understand what it takes for information to be utilised in group situations, and a framework (Ulrich, 2000, 2003) for critically reflecting on boundaries in a social system.

Our CCM is offered as a tool for reflective practice (Schön, 1983, 1987) for use by those participating in, designing or facilitating collaborations. Notably, however, our model takes as axiomatic that all practice takes place in contexts of "structural asymmetries" of discourse situations" (Ulrich, 2003: 330).

Collaboration here is conceived as a process of mutual uptake of one another's diverse expertise as participants in an intentional pursuit of a shared task. This requires some explanation. Reserving the term collaboration for situations intending mutual uptake of expertise (while idealised) puts front and centre where expertise is seen to reside: in each participant. As will be seen, this conception of collaboration also opens the way for us to use a framework otherwise designed to describe the relationship between specialist knowledge holders and decision makers (Cash et al., 2002, 2006; Mitchell et al., 2004).

Also, in our conceptualising of collaboration, we distinguish 'shared task' as the function of collaboration from commonly assumed alternatives, shared purpose or goal. Purpose is a matter of motivation and worldview, and so can remain quite diverse among participants while focusing on a task; and goal (achieved purpose), as a desirable destination for participants, is unlikely to be fully satisfied within the collaborative process itself. Achieving purpose will involve a co-creation of value (Vargo and Lusch, 2015) in which each participant in the collaboration becomes an active integrator of resource from the collaboration into their own 'world' and produces value according to their own evaluation.

Salience, credibility and legitimacy

The salience, credibility and legitimacy schema was developed by Cash et al. (2002) to explore the boundary between scientific and technical advice and decision making (particularly policy). They conceptualise what is involved in

moving across that boundary. Their finding is that “information requires three (not mutually exclusive) attributes – salience, credibility and legitimacy – and that what makes boundary crossing difficult is that actors on different sides ... perceive and value [each of the attributes] differently” (Cash et al., 2002: 1). They point to strategies and structures that can assist with boundary crossing and thus collaboration and uptake of expertise. We have chosen to incorporate their triangle of attributes (Figure 2) in our CCM because we conceptualise collaborative process as analogous to overcoming the boundary between expertise and decision making; in the context of mutual collaboration each party faces the thresholds of salience, credibility and legitimacy in order to integrate expertise/experience from other parties, and in order to commend their own expertise/experience to others.

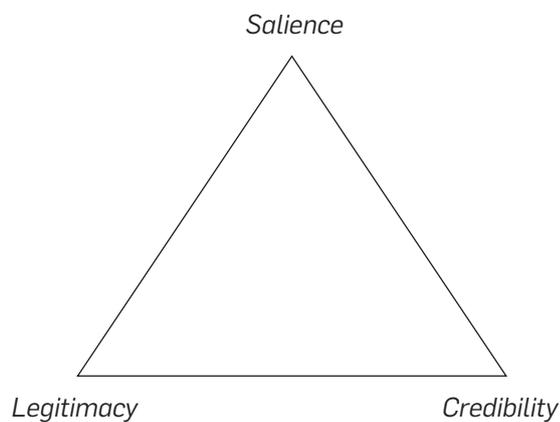


Figure 2

Ulrich's eternal triangle

Ulrich (2003) offers a schema to make power, marginalisation and inclusion discussable by regarding any 'truth claim' as embodying judgements about what is relevant, values and boundaries.

Ulrich has described the background to the schema, stating,

“The idea is that both the meaning and the validity of practical propositions (eg solution proposals or evaluations) depend on assumptions about what ‘facts’ (observations) and ‘norms’ (valuations) are to be considered relevant and what others are to be ignored or considered less important” (Ulrich, 2003: 333).

Such 'boundary judgements' “define the boundaries of the *reference system* to which a proposition refers and for which it is valid” (Ulrich, 2003: 333). The

eternal triangle (Figure 1, on previous page), then, is a systemic triangulation that links 'facts', value judgements and boundary judgements such that, “each of the corners [are to be considered] in the light of the other two”.

“Different value judgements can make us change boundary judgements, which in turn makes facts look different. Knowledge of new facts can equally make us change boundary judgements, which in turn makes previous evaluations look different, etc. (Ulrich, 2003: 334).

Ulrich's purpose for the schema and the associated Critical Systems Heuristics seems to be that claims to the way the world is to be seen (validity claims) need to be open to critique, and that such critique should not “depend on any special expertise regarding the claim at issue and thus can give a new critical competence to ordinary people” (Ulrich, 2003: 334). The approach is explicitly intended to be emancipatory, and the emancipatory task is to be seen as more than a commitment by those with power, it is a 'methodological requirement'. Emancipation is to be attempted by making citizens competent to question selectivity embedded in and distorting any discourse.

Constructing the model

The CCM is a pragmatic amalgam of the two schema by representing them each as a triangle, layering them together and then allowing a 'dialogue' between adjacent points to generate generic enquiry (Figure 3). That much was present in the prototype derived

from the public health work referred to (Nicholas et al., 2021). The purpose of the six enquiries is to enable on-going explicit discourse to critique assumptions that may be embedded in a system or authority claim.

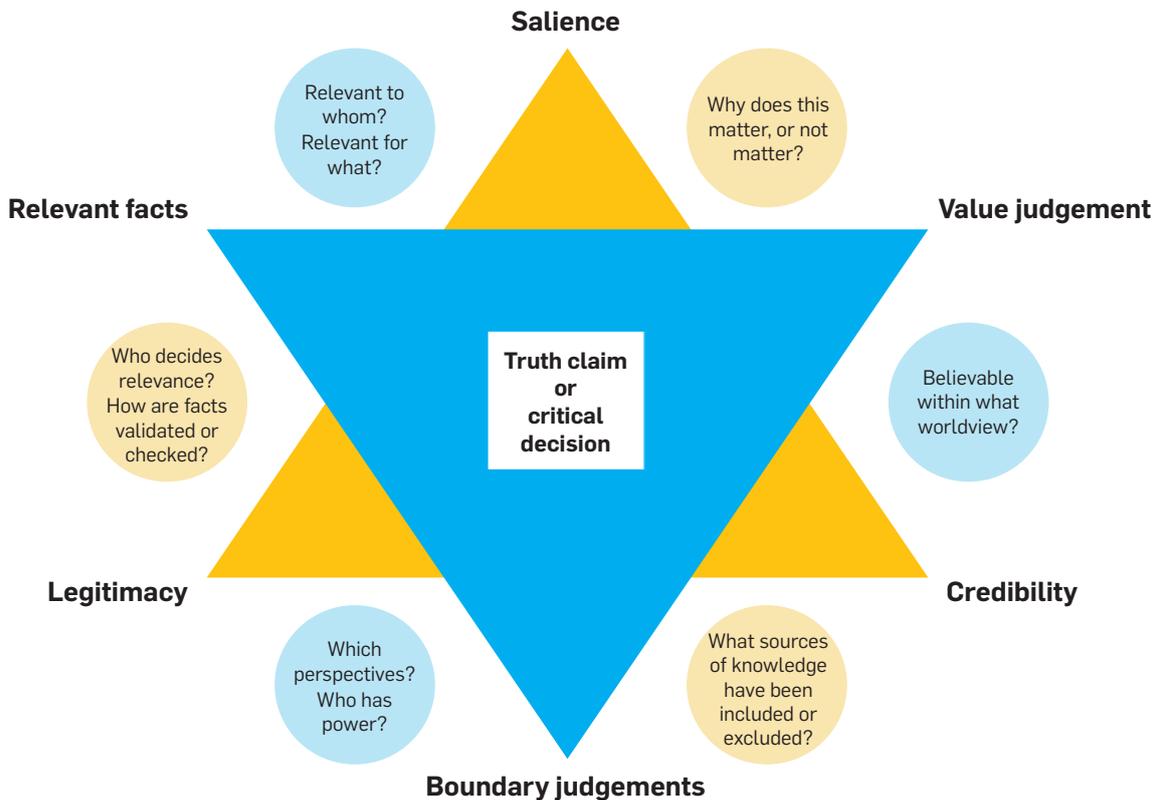


Figure 3: Prototype Critical Collaboration Model. Source: Nicholas et al., 2021

The CCM as presented right is a refined version, removing the visibility of the underlying triangles, and focusing on edited practical questions for collaboration participants and practitioners (Figure 4).

As will be seen, the questions are basically the same between Figure 3 and Figure 4, although have been edited for clarity and wider application.

One aspect of layering the triangles is the decision about how one triangle would be related to the other. It would be possible to rotate one triangle in relation to the other and thereby have quite different points adjacent, and therefore quite different enquiry generated between them. Our choice of orientation is entirely pragmatic in relation to our purpose (to offer practical wisdom to support collaborative practice). The question was, which orientation produced generic enquiry likely to prove useful in practice. So, the

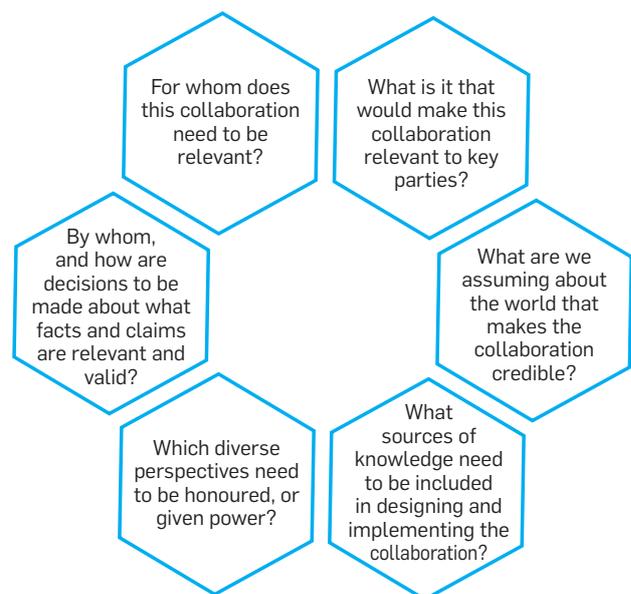


Figure 4: Critical Collaboration Model

generative dialogues were between *salience* and *value judgement*; *value judgement* and *credibility*; *credibility* and *boundary judgements*; *boundary judgements* and *legitimacy*; *legitimacy* and *relevant facts*; *relevant facts* and *salience*.

Using the model

The CCM functions as a dialogue device for participants, inviting perspectives and assumptions to be shared and enabling them to be discussable. It can be like a boundary object (Hoppe, 2010; Star, 2010): "objects that are plastic enough to be adaptable across multiple viewpoints, yet maintain continuity of identity" (Star, 1989). In this case, the model is an object that can accommodate multiple perspectives on the chosen focus for its questions. The aim is not agreement or reaching 'an answer'. The aim is to support the main task of a collaboration by paying attention from time to time to the practice of collaboration; thus, collaborative reflective practice. Furthermore, the dialogical function of the CCM is enhanced by it becoming a shared language among collaborators that enables reflexivity throughout the work together, be that through formal application of the model at periods or informal mutual critique.

Enquiry stimulated by the CCM can be useful at several levels of collaboration. For example, the focus may be the collaboration itself, or (looking up a level) the collaboration as an activity in society, or (looking down a level) particular projects or focuses within a collaboration, or (more particular again) individual claims or assumptions by participants to a collaboration. Our experience in using the CCM is that it is helpful to clarify which level of focus is being discussed.

As will be discussed below, CCM is intended as a basis for contesting unquestioned assumptions within and around a collaborative effort. As such it is not intended as a method to be followed to achieve an outcome. Rather, it is intended to signal and enable a way of being together that encourages equitable dialogue by making the framing of dialogue dialogical.

Finally, our experience is that the diagrammatic presentation of the model unhelpfully invites a linear application, systematically working from a supposed starting point clockwise around the circle. We have found it important to emphasize that no sequence is implied by the layout; that each enquiry in the model is systemically linked to the others. Indeed, an earlier visual of the CCM had an apex of the model at the top; we modified the orientation to de-emphasise any starting position.

DISCUSSION

Our aim in this paper has been to present systemic frameworks as practical tools for practitioners undertaking complex collaborations. The two tools presented here can be seen as complementary to one another. While both can be used to promote internal and external dialogue about the collaboration itself, one (the four windows) remains naive about potential power imbalances and unquestioned judgements within and around such dialogue. The other tool (the CCM) offers an accessible way for power and judgements to be questioned and considered. Thus, we have drawn one tool from each of the two stands of Critical Systems Thinking, as outlined by Ulrich (2003): Flood's framework from the 'total systems intervention' (Flood and Jackson, 1991) strand, and Ulrich's from the Critical Systems Heuristics strand. Neither of the tools is intended as general theory to explain or predict behaviour or outcomes in collaborations. They are simply credible tools to equip practitioners with approaches to support constructive collaboration. As such, the main limitation of what is offered here is limited robust assessment of usefulness to practitioners in a variety of settings. We look forward to further trials by ourselves and others.

The innovative application of Flood's four windows of systemic appreciation offers a framework for considering potential resistance to collaboration, and can be useful in designing processes or diagnosing dysfunction. Our approach draws on psychological concepts of resistance, anxiety and unconscious processes. Although such concepts are core to thinkers such as Bion (1961), Argyris and Schön (Argyris, 1990; Argyris and Schön, 1996; Schön, 1983, 1987), we believe our integration of them into the easily understood four windows provides a practical tool for practitioners. By focusing on four areas on which participants need to feel confidence (questions of efficiency and reliability, effectiveness of functions, meaningfulness, and fairness and recognition of different knowledge) the framework opens possibilities for choosing preventative or corrective strategies. Our application of each of the four windows includes the possibility of taking time within a collaboration for participants to attend to underlying and possibly unrecognised anxieties and sources of reluctance or resistance. As such the tool can be useful in promoting dialogue on

structures and process within a collaboration.

The CCM is a tool to recognise diversity of worldview, including values and perspective. Its purpose is not to eliminate difference but to make difference explicit and hold each position vulnerable to other positions. It is offered as an emancipatory tool; providing language and logic for otherwise marginalised voices to question assumptions. We see this use of the CCM within the discursive approach advocated by Ulrich (1995, 2000, 2003). Consequently, the CCM is offered, not as a method to be followed, but a tool to be accessed *im passim* throughout the course of collaboration to enable collaborative reflexivity or particular critique, making the collaborative enterprise itself a matter equitable dialogue.

Robust dialogue requires commitment by participants. As one author puts it:

Dialogue is a conversation in which people think together in relationship. Thinking together implies that you no longer take your own position as final. You relax your grip on certainty and listen to the possibilities that result simply from being in a relationship with others – possibilities that might not otherwise have occurred (Isaacs, 1999).

The CCM is a tool to enable that process. The CCM can also be seen as a Foucauldian tool, in the sense explained by Flyvbjerg in contrasting Foucault with Habermas in their emancipatory thinking:

“Whereas Habermas approaches regulation from a universalistic theory of discourse, Foucault seeks out a genealogical understanding of actual power relations in specific contexts . . . For Foucault . . . freedom is a practice, and its ideal is not a utopian absence of power” (Flyvbjerg, 2001: 102).

Our hope in making the CCM available to participants and practitioners in collaborations is that it enables freedom as a practice and so helps collaborations achieve the richness of their ideal, the process of harnessing multiple perspectives and sets of expertise in order to work together on a common issue.

CONCLUSION

Collaboration between diverse interest holders and experts has become a widely adopted approach to inform public policy and for problem solving in situations of complexity. However, the experience of designing, facilitating and participating in collaborative processes has shown that to achieve constructive outcomes requires attention to conditions and the design and implementation of process (Butcher et al., 2019). In particular, on the basis of our own investigations (Nicholas et al., in preparation), we suggest that the importance of recognising diverse starting points (experience, structures and assumptions) can help collaborations to address resistance to working together on a shared task. Furthermore, we found that processes need to manage differentials of power, access to problem framing and other “structural asymmetries’ of discourse situations” (Ulrich, 2003, p. 330). This paper offers an application of three systemic frameworks drawn from literature, that, in combination, are tools for supporting collaborations. Our application of Flood’s (1999) four windows of systemic appreciation is used to categorise generic challenges to collaborative activity, and to propose practical approaches to overcome the challenges. Our amalgam of work by Cash et al. (2002) with work by Ulrich (2003) to construct the Critical Collaboration Model produced a tool for collaborative reflective practice (Schön, 1983, 1987) for use by those participating in, designing or facilitating collaborations. It is explicitly designed to help collaborations deal with structural asymmetries’ of discourse situations such as those mentioned above. The two tools described here are offered as ‘practical wisdom’ (Flyvbjerg, 2001), credible tools to try, rather than as general theory.

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