The Role of Facilitation in Collaborative Groups

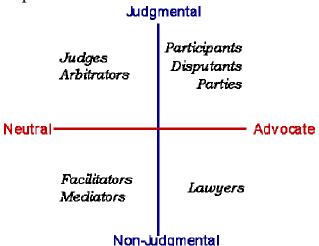
Sandor P. Schuman

An earlier version of this chapter appeared in Chris Huxham, ed., The Search for Collaborative Advantage. London: Sage.

Introduction

Many collaborative groups make use of facilitators as illustrated in Chapters 3, 7, 10, and 11. What exactly is the role of a facilitator and how is it different from the role of the participants? Why are facilitators so concerned about process versus content (as related in Chapter 9)? Under what circumstances should a group consider using a facilitator?

A facilitator helps a group to work collaboratively by focusing on the process of how the participants work together. Facilitators apply their expertise in leading the process, but they are not participants, have no authority to impose any action on the group, and have no vested interest in the outcome. To explore this further it will be helpful to compare the role of the facilitator to other roles that pertain to collaboration and conflict resolution as illustrated in Figure 1. The participants, for example, are familiar with the issues and have pertinent knowledge. They are advocates for their own interests, values, preferences and biases. They have opinions and make judgments about what is important and what action should be taken.



In situations where the participants cannot resolve a conflict on their own they sometimes bring the problem to a higher authority, typically a government agency or the court system. Here the participants present their differing views to an administrator or judge who ensures that the decision making process is fair, does not have a bias in favor of one party or another, but who does have the authority to make and impose a decision. In such settings (as well as in formal negotiations), the participants often engage lawyers or others to act as

advocates on their behalf. These individuals are skilled in the administrative or legal decision making process and use their knowledge on behalf of their clients. In so doing they do not make judgments about their clients or the outcomes they seek.

Instead of resorting to formal negotiations, administrative remedies or legal proceedings some groups try to work out their differences by better understanding each other and working collaboratively to develop consensus. The collaborative process is complex, and their need for process expertise is great. However, they do not want process experts who will impose their own views or make decisions for them -- the participants already have the necessary knowledge of the issues and want to make their own decisions. Nor do they

want advocates who can represent their points of view -- they can advocate on their own behalf. Instead they want assistance in constructing and implementing a process that is fair to all participants, that will ensure high quality communication throughout the group, and that will result, if possible, in creating a solution of their own making to which they agree of their own accord. Providing assistance in managing such a process is the role of the facilitator.

Process as a Moral Issue

Nearly everyone involved in the practice or theory of group problem solving and decision making seems to share some concern about distinguishing between different aspects of collaborative work. Distinctions are made between process and content (Eden 1990, Phillips and Phillips 1993), process and structure (Schein 1969), process and outcome (Rohrbaugh 1987), context, content and process (Broome and Keever 1989), and content, process and structure (Schein 1987, Smith 1988). Related distinctions are made between task and maintenance behaviors (Benne and Sheats 1948) and task and interpersonal issues (Schein 1987). A useful way to enlighten this discussion might be to examine why people find these to be important distinctions. One way to view their importance is because these are instrumental issues. With a better understanding and command of these issues, facilitators can design better, more successful collaborative activities. Another explanation is that these issues are just so fundamental -- they are the means by which problems get solved and decisions made. In democratic systems, the means are the ends. These are moral issues. The way in which collaboration is practiced, including the way that process and content are managed and integrated, is a moral issue, whether or not it is explicitly recognized as such by the participants.

Facilitators, and other process consultants who support collaborative activities, are largely concerned with process issues, and claim, perhaps, to intervene only in process, not in content. How exactly to say this is not a trivial turn of a phrase. Many "process" facilitators recognize that they interpret or influence the content, although they do not contribute to it based on their substantive expertise, but rather based on their analytical expertise. That is, they listen to the participants, ask questions, analyze and integrate the different pieces of information they receive, and feedback the results of their thinking to the participants, perhaps to receive more information or to generate further discussion. This has been described as "handing back in changed form" (Phillips and Phillips 1993). However, by using the singular term process, we give short shrift to the role of the facilitator, and must supplement our description of the facilitator's role by saying that the facilitator delves in some fashion into content. An attempt to address these language distinctions and integrate various terms is presented in Table 1.

Influence of the Facilitator Aspects of **Collaborating Structure Process** Content Linear, hierarchical, network, Summarizing; Feedback Cognitive Problem structure Procedures for analytical thinking Social Arrangement of seating and Rules of interpersonal communication technology **Political** Advice about who should Advice about communicating results to non-participants participate

Table 1: Facilitator influences in collaborative activities

Three Types of Process: Cognitive, Social, and Political.

Group process has been a concern of social psychology for perhaps thirty years (for example Steiner 1972, McGrath 1984). Process is generally used as a singular term, but its meaning is sometimes confusing, or takes a great deal of effort to explain. Consequently it will be useful to differentiate three types of process: cognitive, social, and political.

Social Process

Social process is what is typically, though loosely meant when people talk about "process" issues. This is a concern with interpersonal interaction, group dynamics, communication, body language, etc.

The importance of social process is increasingly recognized as essential to solving complex problems, for example:

The push for participation by all kinds of people ... produce(s) the modern executive's most puzzling dilemma. ... How do you get everybody in on the act and still get some action?

Harlan Cleveland

The Knowledge Executive: Leadership in an Information Society

(New York: Dutton, 1985), p. 51.

Cognitive Process

To tease out the notion of cognitive process is perhaps most readily acceptable to those who use mathematical or structural models in their support of collaborative work (See for examples Eden and Radford 1990; Interfaces, 22, 6, November-December 1992,

Special issue: Decision and risk analysis). They clearly acknowledge that they do something to structure the information, values, beliefs, and ideas held by the various members of the group. These cognitive concerns are illustrated by the following:

... in the course of learning, something like a field map of the environment gets established in the ... brain.... The incoming impulses are usually worked over and elaborated in the central control room into a tentative, cognitive-like map of the environment. And it is this tentative map, indicating routes and paths and environmental relationships, which finally determines what responses, if any, will finally release.

Edward Tolman
"Cognitive Maps in Rats and Men,"
Psychological Review, Volume 55, 1948, p. 191.

... the things which go wrong may very well stem from the inadequacy of the structures we unconsciously impose on our available information rather than from any lack of information. No matter how much it seems to us that all of our decisions would be simpler if we only had more information, it may well be the case that we are already swamped with it, are using only a small portion of what is available, and may not be using the right portion of it in reasonable ways.

William Morris

Management for Action: Psychotechnical Decision Making

(Reston, VA: Reston Publishing, 1972), p. 85.

By aiding cognitive processes, facilitators help the participants develop and refine their own cognitive representations of the problem, understand the cognitive representations of others, understand the feedback presented by the facilitators, and integrate or reconcile the results.

Cognitive and Social Processes

The demands placed on collaborative groups are both cognitive and social. The extent of these demands varies with the particular task at hand. Table 2 illustrates how these two dimensions might be differentiated for two illustrative tasks.

Table 2: The distinction between cognitive and social processes is illustrated by a comparison between the idea generation and organization tasks.

Task	Cognitive Process	Social Process		
Idea Generation	Cognitively simple: relies on individual creativity; ideas are considered independently	Socially simple: little social interaction required; ideas are merely exchanged		
Idea Organiza- tion	Cognitively complex: ideas are considered in relation to each other; everyone must understand each idea in the same way	Socially complex: much social interaction required; requires collective understanding, evaluation, and agreement on the meaning of each idea and its relationship to other ideas		

Cropper (1990) suggests that cognitive process (analytical or intellectual process) can be distinguished from social process (process of assisting social interaction and commitment making) as two ideal types, but that any actual approach is a synthesis of the two. Langley (1991) argues that formal analysis and social interaction in decision processes are inextricably linked. Sociocognitive analysis (Ward and Reingen 1990) recognizes the importance of the relation between these two aspects of problem solving and decision making. Understanding these relationships, and developing methods to support both the cognitive and social aspects of collaborative work is indeed a "superlative task:"

One can hardly contemplate the passing scene of civilized society without a sense that the need of balanced minds is real and that a *superlative task* is how *socially* to make *mind* more effective. That the increasing complexity of society and the elaboration of technique and organization now necessary will more and more require capacity for rigorous reasoning seems evident; but it is a super-structure necessitating a better use of the non-logical mind to support it. "Brains" without "minds" seem a futile unbalance. The inconsistencies of method and purpose and the misunderstandings between large groups which increasing specialization engenders need the corrective of the feeling mind that senses the end result, the net balance, the interest of the all and of the spirit that perceiving the concrete parts encompasses also the intangibles of the whole. (my italics)

Chester Barnard

Cyrus Fogg Brackett Lecture, 1936, in *The Functions of the Executive*, Cambridge, MA: Harvard University Press, 1938 p. 322.

Political Process

Collaborative strategy formulation can be characterized as involving social, cognitive and political processes (Brower and Doz 1979). Bryson and Roering (1988) note that the

problem of divergence is not just conceptual, but also political. Political process might be viewed as a subset of social process in that it deals with social relationships. However, by singling it out we provide a keener focus on the larger political framework in which collaborative work takes place and the process by which the power to influence purpose and resources is shifted. The political process is responsible for the most basic issue in collaboration -- who can participate and who can exercise power. The political process is much more evident in inter-organizational collaborative groups than in intraorganizational teams. Facilitators who have worked only with corporate work groups, as has been increasing in popularity with the growth of Total Quality Management (Kayser 1990), will find another dimension of concern in working with inter-organizational groups.

The processes that go on between a participant and the organization or constituency that they represent, and the relationships between the organizations and institutions apart from the collaborative activity, are at least as important as those between the participants within a collaborative group (see Figure 2). Explicitly including political process keeps us mindful of the influence that one person has on another by virtue of their position, affiliation, and power. Power might be based on participants personal attributes, or on the attributes of the organization or constituency that they represent. Over the course of a collaborative process changes in the relationships among participants are the result not only of the interactions between themselves,

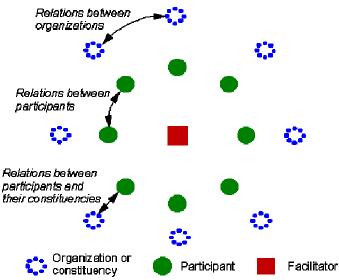


Figure 1. The political process takes into account the relationships between the participants, the participants and their organizations, and between the organizations.

but between the organizations and constituents they represent which might occur outside of the formal collaborative process.

In inter-organizational settings the facilitator cannot be concerned only with the dynamics that play out at meetings between the participants, but also the dynamics between participants and their constituency organizations as well as the dynamics between the organizations.

Process versus Content: Why Differentiate Roles?

Some authors express the concern that the process be "owned" or directed (if not at first, then eventually) by the participants (Webler 1994). This is a highly democratic view, where decisions about the process, and not only the substance, are made by the participants. This view holds that even if roles are to be differentiated, they should still be played by members of the group. The role of an external facilitator, if any, is that of temporary guide, until the group can find its way on its own.

However, when a participant serves in the dual role as process facilitator, he or she must be able to switch hats effectively to preserve the integrity of the process (Kayser 1990). Others contend that if the task is sufficiently complex the process decisions should be handed over to external process experts who are fair, neutral (having no vested interest in the results), and have no role in contributing content expertise (Broome and Keever 1989). "Trust us with the process, with which we are expert," says the facilitator to the participants, "while you rely on yourselves for the content." When should a collaborative differentiate process and content roles? On what basis is hiring an outside facilitator to be justified? This judgment can be aided by assessing the group's condition along eight dimensions (See Figure 3.)

1. Distrust or bias

In situations where distrust or bias is apparent or suspected, groups should make use of an un-biased outsider to facilitate (and perhaps convene) the group.

The individual whose job is to manage the process -- typically the chairperson or team leader -- has an enormous influence on the process and, consequently, the outcome. This person's choice of participants, analytical methods, and methods of social interaction influences the group effort at a fundamental level. Because of this, group members might view this leader as biased -- steering the process in some way to promote his or her own agenda. True or not, this perception can greatly hinder the process.

2. Intimidation

The presence of an outside facilitator can encourage the participation of individuals who might otherwise feel intimidated.

Where participants are of disparate educational, social or economic status; are at different hierarchical levels; or are in other types of control relationships (such as purchaser-supplier or client-provider) some group members might feel intimidated and not participate. The presence of a facilitator can give participants someone of neutral status to whom they can direct their comments without fear. The facilitator is in a legitimate position to elicit information from the group as a whole, as well as from specific individuals who are not forthcoming. In particularly tense circumstances, the facilitator might choose to elicit information anonymously.

3. Rivalry

Rivalries between individuals and organizations can be mitigated by the presence of an outside facilitator.

Participants are typically reluctant to reveal personal rivalries or attack one another in the presence of an outsider. (Perhaps they realize that their claims might not appear valid to an outsider, and so do not even raise them. Participants are often surprised at how polite they are to each other.) But, if rivalries do surface, a facilitator can determine if they are relevant to the task at hand. If they are not, the facilitator will refocus the group on its stated purpose. If they are relevant, the facilitator will ask the group to understand them as part of the the issues to be addressed.

4. Problem definition

If the problem is poorly defined, or defined differently by multiple parties, an unbiased listener and analyst can help to construct an integrated, shared understanding of the problem.

When a group represents disparate views, members are often more concerned with having their point of view understood by others, than understanding others' views. An unbiased party, one who does not advocate any particular position and whose role is to listen to, analyze, and integrate everyone's views, is a valuable asset to such a group.

5. Human limits

Bringing in a facilitator to lead the group process lets members focus on the problem at hand, which can lead to better results.

In difficult situations, working with the breadth of issues and volumes of important information is demanding enough; it is too much to expect anyone to also manage the processes that come into play in a meeting. Human cognitive capabilities are not great enough. Running a meeting, and participating in a meeting, are each sufficiently demanding to warrant having the facilitator focus on the former, and the group on the latter.

6. Complexity or novelty

In a complex or novel situation, a process expert can help the group do a better job of working together intellectually to solve the problem.

Process expertise requires judgment, practical skills, and in-depth knowledge of problem solving and decision making. Most groups have developed their own expertise for addressing ordinary problems or making repeat decisions. When approaching an unusual situation, however, a group can benefit from an expert for whom this particular problem-solving situation is familiar.

7. Timeliness

If a timely decision is required, as in a crisis situation, the use of a facilitator can speed the group's work.

If participants have to make process decisions as a group, they take valuable time away from addressing substantive issues. Unlike parliamentary procedure, for which there are prescribed rules which address nearly every procedural issue that a decision-making group can encounter, there is no rule book for collaboration. Instead of making up the rules as they go along, groups can adopt the rules of a process expert. The expert acts as a group process parliamentarian -- choosing which rules to apply, explaining them as needed, and steering the group through the process.

8. Cost

A facilitator can help the group reduce the cost of meeting -- a significant barrier to collaboration.

Participants might be reluctant to attend meetings because of competing demands on their time, doubts about the amount of progress they will be able to make, or travel costs. By making each meeting more efficient and productive, a facilitator can reduce the overall cost in terms of participants' time. Because more is accomplished at each meeting, the total number of meetings might be reduced.

When to Use an Outside Facilitator											
1	2	3	4	5	6	7	8	9	10		
interpersonal trust Distrust or suspicion											
Bias Suspici									aspicion		
1	2	3	4	5	6	7	8	9	10		
low status differential				Intimidation			high status differential				
1	2	3	4	5	6	7	8	9	10		
low competition				Rivalry			high competition				
1	2	3	4	5	6	7	8	9	10		
well defined, held in common			Problem Definition		poorly or differently defined						
1	2	3	4	5	6	7	8	9	10		
low demands				Human Limits			high demands				
1	2	3	4	5	6	7	8	9	10		
simple or familiar situation			Complexity or Novelty			complex or unfamiliar situation					
1	2	3	4	5	6	7	8	9	10		
no rush			Timeliness		pressure to solve quickly						
1	2	3	4	5	6	7	8	9	10		
easy to get together			Cost			difficult to get together					

A higher score suggests that the role of facilitator should be clearly differentiated from that of participant and that an outside, neutral facilitator should be used.

Figure 2. A tool for assessing when a collaborative should differentiate process and content roles.

While the above conditions are stated discretely, in practice they all must be addressed by the facilitator. The degree to which each is addressed at any point in time is a critical judgment which the facilitator makes, and one facilitator will likely make a judgment different than another. These conditions compete for attention, and can be understood from four "competing values" perspectives on decision making effectiveness (Rohrbaugh and Eden 1990). In brief, the conditions of distrust or bias and intimidation pertain to the consensual perspective which values participation, morale and the supportability of the decision; the conditions regarding rivalry and problem definition pertain to the political perspective which values adaptability, brokering and legitimacy; the conditions of human limits and complexity or novelty relate to the empirical perspective which

values data, integration, consistency and accountability; and the conditions of timeliness and cost relate to the rational perspective which values goal orientation, directiveness and efficiency.

Moral Implications of Facilitation

To the extent that these conditions persist, the facilitator, or process expert, will continue to be necessary. The notion that collaboratives should or can become self-facilitating is not necessarily true or even a useful goal. So long as there are power differentials in the political process, distrust, novelty ... the group cannot perform this role for itself, even if it developed substantial process expertise. It would spend a lot of time arguing over process questions or rely on a "collaborative parliamentarian" to implement those rules in an unbiased way. Institutionalizing the role of the independent, neutral process expert as facilitator could go a long way to overcoming gridlock and achieving collaborative advantage. How can we trust the role of facilitation and how can we select individuals to perform this role? If the need of a facilitator is indicated, how can the participants in the collaborative select a person on whom they can rely for a fair and competent process (Webler 1994)?

One of the practical issues that a process facilitator must often address is that various individuals have processes in mind that they would like to see used. These process ideas might or might not be biased in some way, but the facilitator probably does not know whether or not it is. On one hand the facilitator has to be open to the group's ideas, but on the other hand must maintain his or her role as process expert, and not be seen to favor some participants over others in adopting their process suggestions. Some participants will become proactive or aggressive in pushing their process ideas, or perhaps in rejecting the process put forth by the facilitator. How can facilitators respect participants, maintain their role as process experts, and be relied on for fairness and competency?

The stakes are now so high that there is an urgent need for cooperative engagement with these problems over a wide range of inquiry ... There is no royal road to truth, no single perspective that offers overriding promise. Just as the sources and manifestations of human conflict are immensely varied, so too are there many useful approaches to understanding, preventing and resolving conflict.

David Hamburg New Risks of Prejudice, Ethnocentrism, and Violence Science, 23, 27 (February 7, 1986): 533.

These processes, social, cognitive and political, are moral. <u>How</u> we decide is subject to moral scrutiny just as <u>what</u> we decide. Participants will respond to a breach of process expectations with moral outrage, just as they will respond to a breach of outcome expectations. When participants are frustrated in their attempt to push a particular outcome, they will find fault with the process. They are concerned about the moral character of the facilitator, not just his or her process expertise. Does this place the process facilitator in a position of moral leadership in achieving the goals of fairness and competency (Webler 1994)?

Building on critical theory and communicative competency as developed by Jurgen Habermas, Webler (1994) has elaborated criteria for the evaluation of public participation processes. The criteria for effective discourse seek to ensure the validity of the <u>process</u>, which achieves the goal of <u>fairness</u>, and the validity of the <u>content</u> which achieves the goal of <u>competency</u>.

The beginning point for sociological -- and by extension organizational -- analysis is not the question of how or why people go about getting what they want to get but how it is that they know what they know about the empirical world. ... the rules and processes by which people come to agree upon as well as contest what is empirically real (i.e. social facts) are experienced in <u>moral</u> terms; cognition itself, that is to say, is a moral act.

Michael Harmon, "Decision" and "Action" as Contrasting Perspectives in Organization Theory. *Public Administration Review*, March/April 1989, p. 147.

To maintain the morality of the process, the facilitator cannot favor any participant. To believe in what a participant says might lead to casual acceptance of that individual's version of the truth, which would undermine the faith of the other participants in the fairness of the process. It might reduce the facilitator's ability to ensure the competency of the discussion, maintain a fair process, and raise valuable questions that examine the underlying values or assumptions held by "believers."

While not believing in the truth of any participants, it is nonetheless critical that the facilitator be respectful of the participants and cognizant of their sincerity. An interesting illustration is in an early recorded application of group decision making, the debates of the rabbis of the Talmudic era in which groups of scholars sifted through the merits of conflicting interpretations of the law. The discussion first establishes that group judgment is superior to individual judgment, and then confronts the problem of deciding between judgments made by two different groups. Which group's judgment is to be followed when both groups have had high quality discussions and both have arrived at reasonable but different conclusions? The decision of one group is favored because in rendering their decision they respectfully acknowledged the work of the other group and mentioned their findings first (Dorff 1977 p. 93).

In the field of community development a distinction is made between *felt* needs, *observed* needs, and *real* needs (Goodenough 1963). Although these needs typically are applied to community goals and activities, they can be applied in any collaborative process. The process needs perceived by participants are *felt* needs, whether they are realistic or not. The facilitator, who is not a participant, also makes an assessment of the collaborative's needs — *observed* needs — which might or might not be the same as the participants' *felt* needs. Neither should be presumed to recognize what are the *real* needs as they might be determined by some omniscient assessment. The facilitator, while listening to needs articulated by participants, independently observes and diagnoses the needs of the situation and takes responsibility for making process decisions. To do so while still respecting the participants' *felt* needs, and maintaining openness to new process directions, facilitators cannot presume that they have *observed* the *real* needs of the group. They cannot believe in the participants' *felt* needs, nor can they believe in the infallibility of their own *observed* needs.

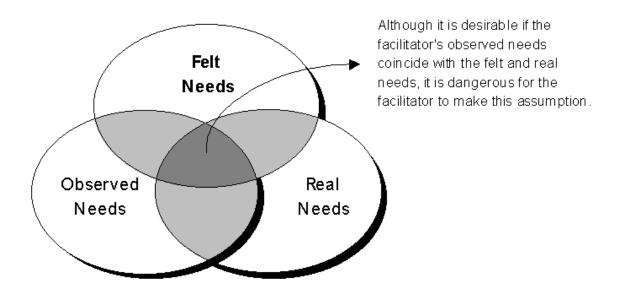


Figure 3. Facilitators cannot presume that their observed needs

So in what can the facilitator believe? A facilitator can believe in groups, particularly groups in which all legitimate perspectives are represented, allowing all perspectives to be taken into account, striving to gain the best contributions from each member and discerning the fairness and competency of processes,. But can a facilitator believe in an individual, or in a particular idea? Rather, the facilitator should believe in the participants', and their own ability, to doubt. Facilitation must "... reflect a tolerance for the ambiguity and uncertainty which are inherent in the social learning process" (Korten 1981). Other than reinforcing the idea of self existence, doubt reinforces the value of the group and their continuing search for solutions. Believing in a solution too soon (or believing in a "final" solution at all), whether believed by the facilitator or by the participants, is an immoral act that discredits the facilitator, the process, the group, and the complexity of the environment in which we live. Although sureness can be seductive, better that the facilitator should exercise doubt. With due respect, Karl Marx had it almost right: *Answers* are the opiate of the people.

References:

Barnard, Chester (1938). *The Functions of the Executive*. Cambridge, MA: Harvard University Press.

Benne, Kenneth and Sheats, Paul (1948). Functional roles of group members. *Journal of Social Issues*, 4: 41-49.

Broome, Benjamin and Keever, David (1989). Next generation group facilitation. *Management Communication Quarterly*, 3, 1 (August): 107-127.

Brower, Joseph and Doz, Yves (1979). Strategy formulation: A social and political process, in Hoper, C. W. and Schendel, D., (eds.), *Strategic Management: A New View of Business Policy and Planning*.

Cropper, Steve (1990). The Complexity of Decision Support Practice. In C. Eden and J. Radford, eds., *Tackling Strategic Problems: The Role of Group Decision Support*. London: Sage, 29-39.

Dorff, Elliot (1977). *Conservative Judaism: Our Ancestors to Our Descendants*. New York: United Synagogue Youth.

- Eden, Colin (1990). The unfolding nature of group decision support Two dimensions of skill. In C. Eden and J. Radford, eds., *Tackling Strategic Problems: The Role of Group Decision Support*. London: Sage, 48-52.
- Goodenough, Ward (1963). *Cooperation in Change*. New York: Russell Sage Foundation,
- Kayser, Thomas (1990). *Mining Group Gold: How to Cash In on the Collaborative Power of a Group*. El Segundo, CA: Serif Publishing.
- Korten, David (1981). The management of social transformation. *Public Administration Review*, 41, 6 (November/December) 609-618.
- McGrath, Joseph (1984). *Groups: Interaction and performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Morris, William (1972). *Management for Action: Psychotechnical Decision Making*. Reston, VA: Reston Publishing.
- Phillips, Lawrence, and Phillips, Maryann (1993). Facilitated work groups: Theory and practice. *Journal of the Operational Research Society*, 44, 6, pp. 533-549.
- Richardson, Tony (1992). Leading search Conferences: Reflections on managing the process. In Marvin Weisbord, ed., *Discovering Common Ground*. San Francisco: Berrett-Koehler, 317-324.
- Rohrbaugh, John (1992). Cognitive challenges and collective accomplishments, in Bostrom, R., Watson, R., and Kinney, S. (eds.) *Computer Augmented Teamwork*. New York: Van Nostrand Reinhold.
- Rohrbaugh, John and Eden, Colin (1990). Using the competing values approach to explore 'ways of working.' In C. Eden and J. Radford, eds., *Tackling strategic problems: The role of group decision support*. London: Sage, 29-39.
- Rohrbaugh, John. (1987). Assessing the effectiveness of expert systems. In J. Mumpower, L. Phillips, O. Renn, and V. R. R. Uppuluri (eds.), *Expert Judgment and Expert Systems*. Berlin: Springer-Verlag.
- Schein, Edgar (1969). *Process Consultation: Its role in organizational development*. Reading, MA: Addison-Wesley.
- Schein, Edgar (1987). *Process Consultation Volume II: Lessons for managers and consultants*. Reading, MA: Addison-Wesley.
- Smith, Gerald (1988). Towards a heuristic theory of problem structuring. *Management Science*, 34, 12 (December): 1489-1506.
- Steiner, Ivan (1972). Group process and productivity. New York: Academic Press.
- Tolman, Edward (1948). Cognitive Maps in Rats and Men. *Psychological Review*, Volume 55.
- Webler, Thomas (1994). "Right" discourse in citizen participation: An evaluative yardstick. In Renn, O., Webler, T., and Wiedemann, P., eds., *Fairness and Competence in Citizen Participation: Evaluating models for Environmental Discourse.* Boston: Kluwer Academic Press.