

RESEARCH ARTICLE

Core Competencies for Natural Resource Negotiation

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Natural resource negotiation often involves multiple parties with overlapping interests and issues that can provide opportunities for mutually beneficial solutions. These opportunities can be missed, however, if negotiators are unable to comprehend the facts of a negotiation, understand the interests of other parties, or accurately evaluate the options that increase the size of the negotiation pie. Through structured personal interviews with more than 60 representatives from seven different hydropower negotiations, respondents identified core competencies that help negotiators succeed at accurately comprehending the facts of a negotiation, comprehending the interests of other parties, and fully understanding the available options and alternatives. We categorized those core competencies into three dimensions of negotiation—interpersonal, organizational, and operational.

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The complexity, length, and multi-party nature of most natural resource negotiations make them difficult to navigate for both novice and expert negotiators. Changes in staff, incomplete transfer and inadequate management of information, and fluctuations in the quality and quantity of available resources create an environment in which negotiators are expected to operate “on the fly” at all stages of a negotiation. In such a challenging environment, natural resource managers need guidance on selecting negotiators who can adapt to changing conditions and take advantage of opportunities to move a negotiation forward despite obstacles and constraints.

Current research describing core negotiator competencies is sparse. Recent negotiation literature has focused on the

effect that negotiator attributes have on negotiation processes and outcomes in laboratory or naturalistic settings (Tibon, 2000). Other studies have looked at the qualities of exceptional negotiators (Lieberfeld, 2003) and the characteristics of effective negotiating teams (Beersma and De Dreu, 1999; Brodt and Thompson, 2001). More commonly, studies have focused on effective processes and models (Ascher, 2001; McCreary et al., 2001).

Our research on hydropower negotiation (e.g., Lamb et al., 2002) provided us the opportunity to gain insight into the key competencies needed for negotiators to overcome obstacles and identify opportunities during multi-party natural resource negotiations that are lengthy and complex. We conducted in-depth interviews with 68 government agency negotiation participants; these included representatives from state and federal fish and wildlife agencies, power utilities (including lawyers and consultants), local interest groups, and tribes. We also interviewed five experts in the field of hydropower negotiation in the government and industry sectors.

As part of this research, we asked interview participants to identify qualities of a good negotiator—someone who could overcome obstacles and identify opportunities in a natural resource dispute. Through a qualitative analysis of interview transcripts, we identified three dimensions of core competencies: interpersonal, organizational, and operational.

The Nature of Hydropower Negotiations

With more than 130 hydropower licenses coming up for renewal in the next 15 years, the ability of negotiators to work toward satisfactory resolution in hydropower negotiations is especially important, because the resulting settlements will have an impact on watersheds for many years.

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In these circumstances, it becomes imperative that those who are selected possess competencies allowing them to bridge the distance between their experience and the exigencies of their roles as negotiator. Hydropower negotiations, like many natural resource disputes, present a challenging setting in which a negotiator needs to be competent in several different areas in order to overcome obstacles and identify opportunities. In our research, we were interested in examining how experts in the field define these competencies and determining whether these competencies could be categorized.

Although our interviews were with people involved in hydropower negotiations, we believe the results have a much broader applicability: we looked at participant perceptions of competency independent of actual outcomes, and the issues in hydropower negotiations present many of the same types of obstacles and opportunities encountered in other natural resource negotiations. We chose to study hydropower negotiations because they are illustrative of many natural resource negotiations in which there are multiple parties, multiple issues, numerous technical uncertainties, a lengthy negotiating process, and emerging interdependencies between parties in which environmental and economic interests and obligations overlap.

Multiple Parties

As with most natural resource negotiations, hydropower negotiations typically include five types of participants: government agencies, industry, nongovernmental organizations, the public, and the media. The parties in hydropower negotiations have similar goals and interests as the same types of participants in other natural resource negotiations: (1) resource agencies seek to achieve their mission of managing and protecting fish and wildlife resources, recreation, water quality, or other environmental values; (2) power utility applicants (whose ownership may be regional, national, or international) are interested in expediting the licensing process and minimizing the regulatory requirements, operating costs, and subsequently the cost of electricity delivery to customers; (3) nongovernmental organizations have local, regional, and national interests regarding recreation access, clean water, and the ecological integrity of the watershed; (4) local community groups, such as homeowners' associations, are interested in protecting interests such as property values, privacy, and lake levels; and (5) media coverage can be local, regional, national, and even international because many power utilities are now owned by multinational corporations that have headquarters and business holdings in other countries.

As the number of parties increases, the process can slow down due to the large number of parties needing to reach consensus on many different issues. To speed up the process and reduce confusion, in hydropower negotiation (as with other multi-party negotiations), parties form coalitions to represent their interests. Even with coalitions, the process can still be slow, with additional complexity introduced by the addition of parties late in the process and the involvement of parties not even at the table (Lamb, Burkardt, and Taylor, 2001).

Multiple Issues

Multi-party negotiations regarding natural resource issues typically have many issues that need to be discussed and resolved during the course of a negotiation. Although the multiplicity of issues can contribute to the complexity of the negotiation, it can also contribute to successful outcomes. Different parties with various levels of economic and environmental interests regarding different issues can discuss trade-offs and arrive at solutions providing for joint gains. The technical complexity of many issues in natural resource negotiations—and in hydropower negotiations in particular—requires additional technical expertise in order to design studies that adequately answer the problem.

Hydropower negotiations are complex on the temporal and spatial scales. On the spatial scale, the impact of a hydropower project can be far-reaching, both upstream and downstream of the project itself (Langridge, 2002). Biological and social concerns involve management at the ecosystem level that affects watersheds, as well as riverine and riparian systems. On the temporal scale, forecasting the impact of decisions on a river and its associated riparian system 20 to 30 years into the future can be especially challenging because of the environmental, social, and political changes that will occur.

The complexity of forecasting social and ecological consequences from management decisions makes it difficult to design studies that can adequately answer questions by all parties. During the 1980s and early 1990s, the Federal Energy Regulatory Commission (FERC) often granted licenses (from one-year licenses that could be renewed, up to 50-year licenses) with the stipulation that further scientific studies be conducted and/or completed (Abrams, 1992; Kerwin, 1990; Lamb et al., 2005). Since the mid-1990s, FERC has encouraged increased coordination of scientific studies early on in the process.

Long-Term Negotiations

The changing structure of hydropower negotiations reflects broad changes in the field of negotiation, especially international negotiation. Kremenjuk (2002) describes changes in international negotiation as a transition from more formal negotiations to an increasing number of consultations and informal talks encouraging joint problem solving and cooperation. The once highly formal process of hydropower consultation between applicants and agencies has become a process that is more informal and requires a larger number of parties to reach consensus on multiple issues. As a result, the process is often slow and drawn out, requiring more time for resolution.

Applications for hydroelectric power licenses through FERC have historically followed a semi-structured process known as the “traditional license process,” which requires input from stakeholders but does not require collaboration. In recent years, an alternative licensing process has been developed by FERC, in part to help decrease the time required for relicensing. It encourages parties to collaborate on a mutually acceptable license application. This “integrated licensing process,” which is FERC’s default process, encourages more public participation during the pre-filing stage, calls for increased coordination between FERC and other agencies, and leads to the use of informal dispute resolution processes to resolve disagreements.

Whether using the traditional, the alternative, or the integrated process, most consultations are still expected to last at least five years. The long-term nature of negotiations makes it difficult to keep staff, maintain a consistent direction, and overcome obstacles and constraints established early on. Although other natural resource negotiations may not be as long, the serial nature of many natural resource disputes brings the same parties back to the table—parties who often have longstanding issues yet to be resolved, thus engendering many of the same obstacles and constraints present in long-term negotiations.

Methods

In 1992 and 1993, we conducted structured personal interviews with 42 representatives from six different hydropower negotiations that have been successfully resolved. These six cases were identified by US Fish and Wildlife Service Ecological Services field officers in the northwestern and northeastern United States. The seventh case—the 2001–2002 North Umpqua (southwestern Oregon) case—

was nominated by the USDA Forest Service National Hydropower Assistance Team. Delegates who had represented organizations in the cases were identified by examining official correspondence; they typically included representatives from state and federal fish and wildlife agencies, the utility (including lawyers or consultants), local interest groups, and tribes.

The study team assigned two interviewers to each 1992–1993 case. We recorded each interview and prepared a written transcript. Study team members who did not conduct interviews reviewed the transcripts and identified statements associated with the qualities of a good negotiator. Statements were not required to be those given in direct answer to the structured questions. The interviewers used the assembled statements from each case study’s respondents to select statements identifying core competencies of a good natural resource negotiator (see Table 1).

We followed the same general research design during the summer of 2001 regarding the North Umpqua hydropower negotiation case study (Lamb et al., 2002). This case assessment focused on the role of the USDA Forest Service and the perception of the Forest Service by participants from other government agencies, and included interviews with 20 Forest Service respondents and 6 respondents from other state and federal government agencies. Power company participants were not interviewed in the study, nor were participants from nongovernmental organizations.

Table 1. Interview questions generating the majority of core competency descriptions (hydropower negotiations, northeastern and northwestern United States, years 1992–1993)

Question number	Question wording
D-1	Do you feel a satisfactory agreement was reached before the application was submitted to FERC [Federal Energy Regulatory Commission]?
D-6	Would you go back to the negotiation table with these same parties again? What would be your incentive?
At the end of each section of the interview script (divided into the different phases of a negotiation)	Looking back at this phase of the consultation, did something significant happen that we haven’t talked about yet; is there something that stands out in your memory?

In the North Umpqua case, we consulted with members of the Forest Service's National Hydropower Assistance Team to develop a list of interviewees. Interviewees were limited to only those who had direct, substantive involvement in the consultation process, such as those who attended negotiation sessions, represented the agency at the bargaining table, developed studies and technical information used by the negotiators, or helped plan the Forest Service's negotiation strategy.

Drawing from experience gained in the first six case studies, interviews were designed for a two-hour period and conducted by two-member teams. Although the question format in all the case studies was open-ended, interviewers followed a structured protocol. All the interviews were tape-recorded and transcribed. Researchers who did not interview respondents checked the tape recordings against the transcripts to ensure accuracy.

Once the transcripts were accepted as accurate, we used two techniques for qualitative evaluation. First, qualitative analysis software (Nvivo™) was used to ascertain the presence of statements related to the qualities of a good negotiator. Second, we individually reviewed every interview transcript and collectively discussed the characteristics identified by each interviewee. Although several interview questions resulted in answers that provided insight into defining core competencies (Table 2), the question in the Umpqua case study, "Could you describe for us three or four characteristics of a good negotiator?" resulted in the most material for the qualitative study.

In addition to the case studies, in the fall of 2001 we conducted interviews with experts in the field of hydro-

power negotiation (from both the government and industry) who had been involved in several hydropower negotiations over a span of years. The breadth of experience of these professionals provided insight into the findings from the participant interviews. During these five open-ended interviews, experts were asked to describe the characteristics of a good natural resource negotiator. Each interview was transcribed and checked for accuracy. We analyzed the transcripts using Nvivo™.

Findings

Through a qualitative analysis of the findings, we found that the core competencies could be grouped into three dimensions of negotiation: interpersonal, organizational, and operational.

Interpersonal Dimension

The psychological study of negotiation in recent years has looked at how negotiator rationality is bounded by social relations and affective states (i.e., mood and emotion) that can have an impact on negotiation outcomes (Bazerman et al., 2000). Research in simulated negotiation settings has found that emotions can affect team performance (Garcia-Prieto, Bellard, and Schneider, 2003), cooperative behavior (Boone and Buck, 2003), and online mediation (Friedman et al., 2004); relational factors can affect strategy choice (Pavitt and Kemp, 1999), and cohesive relationships can encourage information sharing (Greenhalgh and Chapman, 1998). The importance of affective states in naturalistic negotiation is even more pronounced (Bazerman, Tenbrunsel, and Wade-Benzoni, 1998). Negative emotions

Table 2. Interview questions generating the majority of core competency descriptions (hydropower negotiations, North Umpqua, southwestern Oregon, years 2001–2002)

Question number	Question wording
Question 6	When you started work on the North Umpqua consultation process, did you already have some type of previous experience with negotiation? d. If yes, what type of experience was it? e. How would you describe the Forest Service's preference in bargaining style? f. How was the Forest Service's bargaining style in this FERC [Federal Energy Regulatory Commission] consultation similar to and/or different from the style that you are familiar with?
Question 14	What three changes in the Forest Service bargaining style would make the FERC process smoother?
Question 15	What are three examples of what the Forest Service did right in the consultation?
Question 17	Could you describe for us three or four characteristics of a good negotiator?
Question 18	What recommendations would you have for a negotiating workshop for Forest Service personnel?
Question 19	Is there anything else we should know about the N. Umpqua project?

can lead to poor strategic choices and affect future negotiating behavior, making negotiators less willing to share information and cooperate (O'Connor and Arnold, 2001).

Although emotions can escalate conflict and impede negotiation processes, they also serve functional and strategic roles (Thompson, Nadler, and Kim, 1999). Morris and Keltner (2000) have conceptualized the functional role of emotions in negotiations as "interpersonal communication systems" that can facilitate relationship building and resolve relational problems in the transition between different phases of a negotiation. For negotiators involved in multi-party negotiations, the ability to understand and navigate these "interpersonal communication systems" is particularly important. The presence of multiple parties in a negotiation increases the volume and frequency of communication. The inability to interpret the multitude of statements or signals that are being sent can quickly create misunderstandings and lead to distrust and eventual impasse (Touval, 1991).

In our study, respondents noted that good negotiators were competent in maintaining relationships and managing their emotions, competencies we categorized as the interpersonal dimension of negotiation, a dimension defined by verbal and nonverbal exchanges among individuals and the impact of affective states on those exchanges.

Managing Emotions

As discussed by Ogilvie and Carsky (2002), emotionally intelligent negotiators have a greater awareness and understanding of the role of emotions in negotiation and are better able to manage their emotions while negotiating. Respondents described the importance of managing emotions during a negotiation by being open and calm and demonstrating empathy and respect.

Respondents noted that if a negotiator is open and calm, it can help break an impasse when strong emotions and narrow perspectives stall the process. According to one respondent,

People who represent agencies should be creative and open—find a way to not hide behind agency responsibility. It is important to not get so immersed that you can't step away and see how the problem may be solved by looking at how similar problems are solved in arenas totally different from natural resources.

When anger, fear, or other emotions are strong at the negotiating table, it is even more important, respondents

noted, for a negotiator to maintain a positive space for collaboration. By being calm and directed, experienced negotiators can "deflect anger or darts that are being thrown." A good sense of humor is productive to the extent that it helps break up tension and allows for more constructive dialog.

Good negotiators were described as demonstrating openness at the negotiating table by listening, asking questions, sharing information, and understanding other interests. Respondents described an experienced negotiator as one who was willing to "ask questions and get to principles and values that go beyond issues."

An experienced negotiator was also described as a good listener:

You know someone is a good listener if they are able to feedback what others have said . . . they have the ability to listen to other interests and integrate those interests into the discussion . . . they are willing to listen and look for areas of compromise.

Openness also means making an effort to understand other interests, ". . . not only looking at our interests, but understanding the other party's interests and trying to find intersections of those interests."

The demonstration of empathy and respect was cited as a quality that aided good negotiators in understanding the positions of others: "You have to know people in order to be able to forecast the direction of negotiation." There is a tendency toward "us versus them" if time is not set aside for small talk, respondents noted: "Face-to-face contact needs to develop, those five-minute breaks and small-talk are important to cohesion."

Building Relationships

In tandem with emotion management, respondents mentioned negotiator qualities that helped negotiators identify, form, and maintain constructive relationships during emotionally charged phases of the negotiation. Some of the qualities mentioned were fairness, honesty, trust, toughness, and persistence.

Fairness, honesty, and trust were cited as important qualities for a good negotiator. As one respondent noted about a friend whom he called an excellent negotiator,

. . . he tries to find out everything he can about who he's dealing with and he tries to be very honest and tell them exactly what it is he needs and why he needs it and in doing

that he does not try to waver from that at all . . . he's straightforward.

Being transparent, however, does not mean giving everything away. Respondents noted that it does mean being on point, on message, consistent, and expressing simple, straightforward objectives. Respondents mentioned that experienced negotiators allow up-front time to develop trust. Good negotiators were also cited as not taking personally the actions of other parties and as being willing to abandon past baggage and suspicion in favor of a more productive approach. If necessary, good negotiators were described as willing to swallow their pride and recognize that sometimes a settlement was bigger than one issue:

. . . you need to be willing to let subcommittees make decisions, if [an issue] is not your main concern and doesn't impact what you want, you need to be willing to consider recommendations and try to accept them.

Toughness and persistence, respondents noted, can help negotiators ensure that their main concerns in a negotiation are addressed while maintaining important relationships. These were cited as important skills in a collaborative or competitive environment:

Resolve, keep your eyes on the prize, don't become over politicized, don't let just the press of some adverse legislation move you off of the very strong resource protection mandate and the strong support we have to exercise that mandate, and ante up.

Respondents explained that good negotiators had the ability to build and maintain relationships while protecting their interests. Persistent negotiators were cited as working through difficult issues while making their interests clear. One respondent described how experienced negotiators asserted their positions and protected what they valued while respecting the interests of other parties:

We [experienced negotiators] can go back to the goals or go back to the [agency] plan, explaining why we need these things done to meet our management direction. . . so it's kind of like going back and explaining the basis for why we want this and they can explain the basis for why they want and what they want.

Organizational Dimension

Organizational theory has made important contributions to the study of negotiation. Kahn (2002) discusses how theoretical concepts such as *organizational embeddedness* and *boundary roles* have contributed to a better understanding of the organizational dimension of a negotiation. Negotiators, as members of their organizations, are embedded within that organization's structure and operate, in

part, on the expectations and preferences of that organization. At the same time, negotiators occupy a "boundary role" between their organizational membership and how they represent their organization to others. This boundary role has become increasingly complex as the culture of many organizations has shifted toward an open systems approach in which organizational boundaries such as hierarchy, turf, and geography are less well-defined (Ashkenas et al., 1995) and organizations are more interdependent. Lewicki, Dineen, and Tomlinson (2002) discuss how these changes have direct implications for negotiation, creating more demand for negotiators who can create value for multiple parties, provide for joint gain, and build long-term relationships.

As organizational form and processes continue to change, negotiators face the challenge of understanding what McPhee and Zaig (2000) describe as the "communicative constitution" of organizations in which organizations define and are defined by their interactions. Those interactions can be described by four organization-constituting processes: (1) membership negotiation, (2) organizational self-structuring, (3) activity coordination, and (4) institutional positioning.

In membership negotiation, organizations and their members negotiate the role and responsibility of the organization to its members and vice versa. Members also negotiate the limits of their individual agency and their relationship with other members. In a negotiation, this may be on the negotiating team or within the larger organization. Organizational self-structuring refers to the procedures and processes that provide structure to an organization; they help steer the organization through procedures, policies, charters, and other decision-making and planning forums. Activity coordination is a less formal process than self-structuring, in which adjustments are made to the formal procedures and policies in order to solve immediate practical problems. Institutional positioning describes the external processes involved in inter-organizational interactions. This requires that negotiators not only understand their organization, but also how it is positioned in relation to other organizations and their "organization-constituting processes."

In our study, respondents described good negotiators as skillful in navigating the organizational dimension of a negotiation consisting of organizational culture, communication, administration, and decision making. The qualities that respondents cited could be categorized under two main competencies within the organizational dimension:

(1) providing structure and protocol, and (2) working within the rules and regulations.

Providing Structure and Protocol

Natural resource agency personnel often have a limited time in which to develop the skills of an experienced negotiator. Organization, consistency, and an insistence on nailing down specifics by providing structure and protocol for inter-organization interactions were cited as qualities of a good negotiator that could often free up time for more conceptual, strategic thinking. Respondents noted that successful negotiators recognized the importance of productivity and avoided revisiting issues that had already been resolved. As one respondent described, major issues were noted and a date was put on the board for when issues would be resolved. Attention was given to how the negotiation schedule could be coordinated with the internal organizational schedules and constraints of the negotiating parties.

Working within Rules and Regulations

In addition to structuring meeting protocol, respondents described experienced negotiators as knowledgeable of the appropriate and up-to-date rules and regulations. In complex negotiations such as hydropower relicensing consultations, a respondent noted that negotiators need to be able to structure their time in concordance with the process:

[Hydropower] law and regulations are pretty much an unknown to a lot of people unless they spend a lot of time playing in that arena, and they have to be able to understand what they can do . . . what they can't do . . . what the time frames mean . . . what they don't mean . . . the better you understand that, at least on the agency and tribal side, the better they are going to participate in the negotiations.

Operational Dimension

As with many types of natural resource negotiations, hydropower consultations entail a level of problem solving that requires knowledge of complex scientific and technical issues. A good negotiator needs to have the ability to process information from these different areas quickly and integrate them into creative collaborative solutions that can move the consultation forward (Ascher, 2001).

The highly technical nature of many issues in a negotiation requires negotiators to understand the scientific and technical aspects of a problem. If negotiators lack the ability to obtain the scientific and technical expertise needed to prop-

erly interpret the problem, the result can be an outcome that is defined by politics and does not reach adequate resolution (Chasek, 2001).

Natural resource negotiation requires negotiators to have knowledge and experience in the operational dimension of negotiation, a dimension that we define as being both technical and scientific. While it is important for participants in a hydropower negotiation, for example, to understand how utilities operate to generate power, it is equally important for negotiators to understand the merits of different types of scientific studies.

In our study, respondents cited core competencies in knowledge, experience, creativity, and expertise as essential for understanding the operational dimensions of a negotiation. These four competencies were cited as important for providing the negotiator with a predictive capacity to respond to changing and complex operations, both technical and scientific. As one respondent indicated, baseline knowledge of the issues and process is essential—"The more you have the better off you are." With that baseline knowledge, a negotiator can arrive at more creative solutions because, as another respondent noted, it is clearer "what the potential decision space really is." As one respondent explained, an experienced negotiator can integrate the big picture of process, science, and policy and generate scenarios that can untangle a stalled process:

A good negotiator can create an environment in which the group as a whole wants to self-educate and can build a much bigger team whose interests are not to spoil what they have created as a productive process. . . .

In addition to recognizing and taking advantages of opportunities in complex consultation processes, experienced negotiators were cited as having the ability to avoid the initial blunders of novice negotiators and instead build respect and trust for their agencies. The natural resource agency practice of staffing the early stages of a consultation with novice negotiators was cited as being detrimental:

. . . you're going to have a very uneven process if you do it that way because it's like learning to ride a bicycle for the first time; you're going to run into a few walls and a few curbs and stuff, while you are learning to operate. And that's not what we want. We can't afford to have people falling off and running into things in these negotiations. We've got to put the best person right up front and set the precedent that we are somebody to be dealt with, and gain some respect.

The knowledge that a negotiator gains while at the bargaining table was considered to be as valuable as the base-

line knowledge and expertise that negotiators bring to the table. Good negotiators were described as willing to wade through the data; yet they knew when to bring in outside resources to add to the knowledge base. As one respondent remarked, "... it is almost a handicap for negotiators to have come from a specialized technical discipline," because they tend to interpret the technical, policy, and regulatory issues from a narrow perspective. Negotiators with a broader, more general orientation are more likely to access additional resources to interpret study results and are more aware that often "disagreement comes about in the interpretation of the results and not in the results themselves."

Discussion: Core Competencies in the Three Dimensions of Negotiation

In many ways, changes in hydropower negotiation over the past ten years have reflected overall changes in negotiation, especially at the international level. Formal, highly structured processes have given way to an increasingly mixed approach encompassing more alternative forums, such as the use of informal dispute resolution processes. As a result, more parties participate in all phases of the negotiation, increasing the number and complexity of interests and issues that need to be addressed. Globalization and the emerging worldwide economy have created new interconnections and interdependencies resulting in shifts in organizational culture and structure to a more open, network-oriented systems approach. These trends have affected hydropower negotiations and other natural resource negotiations at all levels, introducing new possibilities for joint gains, but also increased complexity and uncertainty.

In this increasingly complex environment, negotiators need to possess competencies that will aid them in identifying joint gains and building long-term relationships. In our study, we were able to categorize the core competencies of negotiators into three dimensions. The three dimensions of negotiation as presented in Figure 1 represent three areas that structure, define, and determine the success of negotiation outcomes. The core competencies within these dimensions provide negotiators with some of the necessary navigation skills to be successful. While we were able to identify some core competencies in our study, it is by no means an exhaustive list. More field research is needed on expert negotiators, in general, and in the natural resource negotiation field, in particular.

More information also is needed to provide support for the recruitment and training of negotiators. The multi-

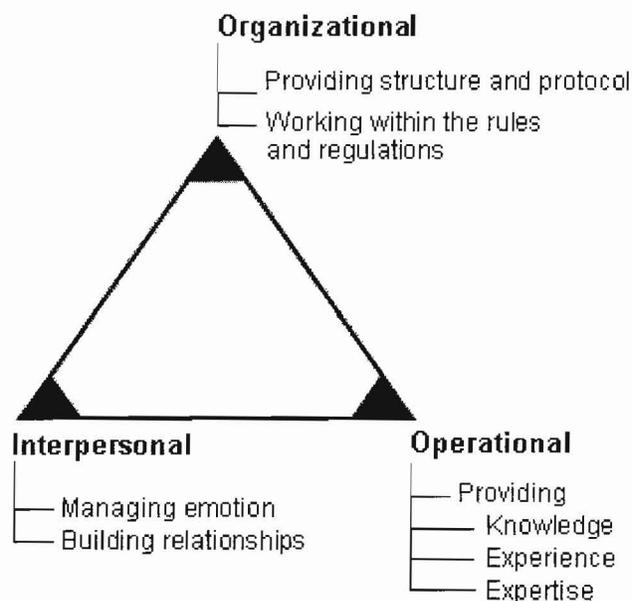


Figure 1. The three dimensions of negotiation and the corresponding core competencies.

party, complex, and long-term nature of many natural resource negotiations make them difficult for senior administrators to staff. It is difficult to retain and develop staff negotiating expertise over the long term because of staff turnover, the incomplete transfer of information, and fluctuations in the quality and quantity of available resources. In such a management environment, a senior administrator needs to understand how to select staff from a pool of people who may have little or no previous experience in negotiation.

It is difficult to find people who have competency in all three core areas—interpersonal, organizational, and operational—because these competencies are often in tension, requiring different aptitudes and evoking different social and cultural interactions. Negotiators demonstrating core competencies in all three dimensions understand the complex interplay between the different dimensions of a negotiation. They move fluidly through different phases of a negotiation, using their core set of competencies from the different dimensions in a complementary manner to achieve desired outcomes. As respondents noted in our study, this fluidity is intuitive but it also evolves over time from experience. Training can help build core competencies, and careful team selection can help construct a negotiation team that is strong in all three dimensions.

Encouraging Self-Assessment and Training

In teams and with individual negotiators, people who can accurately self-assess their competencies are more likely to improve their skills as negotiators over the long term. For novice negotiators who may have difficulty assessing their own skills, instruments exist to help people gauge their negotiation competencies; instruments have been developed to assess communication skills (McKinney, Kelly, and Duran, 1997), relational effects (Hample and Dallinger, 1995), and integrative complexity (Tibon, 2000).

Once people are prepared to self-assess and receive feedback, training can help enhance their core negotiating competencies in all three areas. Gist and Stevens (1998) discuss the utility of two-stage negotiation training in building core competencies; initial training develops negotiation skills and post-training facilitates skill maintenance. At the Negotiation Workshop at Harvard Law School, Bordone (2000) outlines how role playing and scenario building have helped participants develop interpersonal skills. In the basic and advanced negotiation training that we conduct for natural resource professionals, we find that shared experience among students is an important factor in facilitating learning. Through social interaction in class, students learn to understand and better appreciate competencies that they do not share. Through role-playing, scenario building, and other structured exercises, they start to understand the complex interaction between the interpersonal, organizational, and operational components of a negotiation and are more willing to work on raising their levels of competency in all three dimensions.

Building Negotiation Teams

While many potential staff may not have high levels of competency in all three core areas, the complex interplay of all three dimensions makes it possible to build a negotiating team from people with diverse competencies who can complement one another and augment group effectiveness. A negotiator skilled in the interpersonal dimension, for example, can help create the right environment for the acceptance of contributions from a negotiator with extensive technical expertise. Recent research on small group work processes has found that if the diverse traits of work group members are identified when a work group forms, group outcomes can benefit in the long term (Polzer, Milton, and Swann, 2002).

In the future, the concept of a negotiating team may be extended to further accommodate the nature of network-

oriented organizations and their increasing interdependencies. The growth and success of “value-chain” enterprises in the new global economy may indicate the type of team structure that will evolve in future negotiations. Greenhalgh (2001) describes value-chain enterprises as a set of companies contributing value with a distinct group of competencies. A value-chain negotiating team could be defined as a set of subteams or individual team members contributing the value of a core set of competencies distinct from those of the other team members or subteams. This expanded version of a negotiating team could include groups or individuals from coalition partners or alliances, contributing flexibility and strength to the negotiation of future outcomes.

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