

# Exploration for Development

## *Developing Leadership by Making Shared Sense of Complex Challenges*

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*The complexities of the challenges faced by organizations call for new approaches to leadership development. In this article, the authors offer an approach called exploration for development (ED), consisting of three main aspects: navigating complex challenges, supporting competent shared sensemaking, and practicing leadership based on relational principles. They examine the practical possibilities of artistry in the face of complexity, as focused on the making and remaking of shared meaning. Sensemaking competencies supportive of this practical artistry are identified as paying attention, personalizing, imaging, serious play, co-inquiry, and crafting. Examples showing tools and techniques are drawn from a series of leadership development programs at a telecommunications company. Impacts of the programs were assessed in context of a developmental curriculum that included feedback, mentoring, and coaching.*

The work of leadership in organizations is becoming increasingly complex. Mergers and acquisitions, rapidly evolving technologies, and globalization are among the forces causing this complexity, as well as causing a rethinking of what leadership is, where to find it, and how it can be practiced and developed.

In this article we present an approach to leadership development, which we call *exploration for development*, based on addressing complex challenges faced by organizations. First, we describe the basic principles of this approach. Then we describe a program using this approach, called *Facing and Solving Complex Challenges*, conducted in collaboration with Verizon. We review pro-

gram outcome data, limitations of the model and our practice of it, and implications for the field.

### **Exploration for Development: Conceptual Framework**

Exploration for development is an approach to leadership development that focuses on sensemaking and effective action in the face of one or more specific complex challenges, while simultaneously developing organizational sensemaking and action capacities to meet future challenges. The meta-

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phor of “exploration” refers to facing challenges in a way that inventories and mobilizes the community’s leadership resources, mindfully enters into and maps unknown territories, and thereby extends the community into new places and links it to other communities.

There are three basic components to this framework (see Figure 1). These are (a) navigating complex challenges, (b) supporting competent shared sensemaking, and (c) practicing and developing leadership based on relational principles.

### ***Navigating Complex Challenges***

Our working definition of *complex challenges* is as follows:

Complex challenges are situations or contexts that defy existing approaches or solutions. They are central in importance and demand decisive action. Yet because the organization, team, or individual does not know how to act, there is also a need to slow down and reflect.

Typically these challenges sprawl across the boundaries of function, expertise, geography, and role, and thus adequate frameworks for shared understanding have not yet

emerged. The modifier “complex” describes the typical appearance or manifestation of the challenge. Heifetz (1994) used the modifier “adaptive” to describe the most desirable category of response to such challenges, and convincingly argued that facing adaptive challenges is the most essential work of leadership. Adaptation—in the sense of transformation of outlooks and behaviors as compared with incremental technical responses—provides the opportunity of practicing leadership while at the same time fostering leadership development. We observe that our clients resonate with the notion of navigating complex challenges as a valuable endeavor. Addressing such challenges successfully can produce obvious payoffs, even to those skeptical about the value of leadership development. (We avoid the word *adaptive* in our language with clients because it can mean “merely adjusting.”)

### ***Supporting Shared Sensemaking***

*Sensemaking* can be regarded as the creation and use of sensory and experiential frameworks to comprehend and engage a flow of events (Weick, 1995). *Meaning-making* can be regarded as the creation and

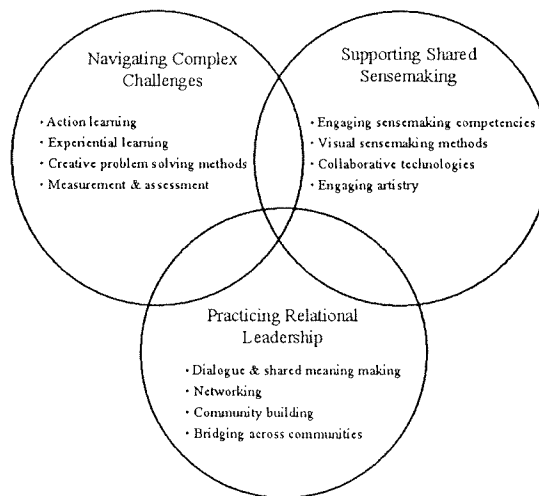


Figure 1. The exploration for development model for leadership development.

use of large-scale epistemological frameworks to define and locate the self in relation to the world (Kegan, 1994). Viewed in this way, small acts of making sense of shared work can lead to developmental movement in larger frames of shared meaning, because sense and meaning constantly inform one another—to a degree that ultimately confounds the distinction we have just made. Our interest is in this kind of shared sense and meaning making, as practically applied to the navigation of complex challenges in organizations.

In previous research we have identified six often-neglected sensemaking competencies—paying attention, personalizing, imaging, serious play, co-inquiry, and crafting—for making shared sense of complexity and chaos (Palus & Horth, 2002). We have integrated these into our practice of exploration for development. These competencies emphasize the synthetic, R-mode (“right brain”) aspects of sensemaking. These are complementary to analytical (L-mode or “left brain”) sensemaking competencies that emphasize definitions, routinized practice, and formal logics (Kolb, 1984; McCarthy, 1996; Mintzberg, 1989). *Paying attention* is the selective use of multiple modes of perception when taking in a situation, to discern the unfamiliar in the familiar and the familiar in the unfamiliar (Davenport & Beck, 2001; Perkins, 1994).

*Personalizing* is tapping into life experiences, passions, and values to develop insights and new perspectives on complex challenges (Bateson, 1989). Competent personalizing also requires disengagement of such personal experiences and filters when appropriate. *Imaging* is the representation, evolution, and communication of ideas through the use of all kinds of images—pictures, stories, metaphors, shared displays, and visions (Morgan, 1986; Schwartz, 1991). *Serious play* is the generation of knowledge through free exploration, improvisation, experimentation, limit-testing, levity, and sport. Play becomes *serious* when it is contained

within the purposes of co-inquiry (Csikszentmihalyi, 1990; Schrage, 2000). *Co-inquiry* is sustained dialogue to address a challenge within and across the communities that have a stake in its reconciliation (Bray, Lee, Smith, & Yorks, 2000; Cooperrider, Sorenson, Whitney, & Yaeger, 2000; Dixon, 1998). *Crafting* is the synthesis of issues, objects, events, and actions into integrated, meaningful wholes. What is often missing in organizations is the recognition that artistry is a vital aspect of knowledge creation in the face of complexity (Nissley, 2002).

### ***Practicing Relational Leadership***

The basic relational idea is that individuals are constituted by their relations (Gergen, 1994). The notion of relational leadership can be summarized by asserting that “people sharing work create leadership by constructing the meaning of direction, commitment, and adaptive challenge” (Drath, 2001, p. 153). If we take “people sharing work” as the nexus of leadership, then leadership development must enlarge the capacities of individuals and collectives to make sense of their work together and to collaborate effectively. The relational approach requires that we view connections among individuals, collectives, and connections among collectives as targets for development. Trait, situational, and transformative theories of leadership have worked mainly on the individual side of this spectrum (Day, 2001). The relational framework leads us to ask: How do people working together in teams, groups, organizations, and communities bring leadership into being (Drath, 2001)? Our intent is to invite people in the organizations we work with to explore the possibilities for leadership at all levels of connection, building an integrated structure of leadership.

The ability to consistently apply a fully relational understanding of leadership may be associated with postformal stages of meaning-making such as Kegan (1994) described as *interindividual* or Wilbur (2000)

described as *integral*. However, most managers operate at earlier stages (Fisher, Rooke, & Torbert, 2000). Therefore it is important to affirm people in their present epistemologies while supporting development as appropriate to their challenges (Palus & Drath, 1995).

### Collaboration With Verizon

The Center for Creative Leadership (CCL) has a history of collaborating with Verizon and its predecessors (GTE, Bell Atlantic) in providing leadership development programs. These programs have typically been based in the CCL paradigm of *assessment for development*, using the ACS Model (Assessment, Challenge, Support; Browning & Van Velsor, 1999): that is, providing psychometric assessment and 360° feedback aligned with challenging developmental experiences in a supportive context. During the last 7 years or so, there has been increasing interest by Verizon regarding possible next-generation leadership development interventions.

There are several reasons for Verizon's interest in new models. Assessment for development has been so successful that many managers have become saturated in feedback. Although still a valuable management tool, 360° feedback no longer provides a novel or transformative experience. Open-enrollment programs and individual-leader programs are less appealing in a context of mergers and RIFs (reductions in force), in which there is a desire for experiences that build community. Shorter programs are needed in consideration of faster-paced work. There is demand for interventions that directly address urgent business challenges and link directly to bottom-line measures.

### Facing and Solving Complex Challenges

A series of experimental programs called Facing and Solving Complex Challenges

(FSCC) was conducted by CCL in collaboration with Verizon. Participants were director level or higher and identified as high potential. Class size (four programs to date) ranged from 13 to 24. Typical class composition has been managers who work within a single large division. One might expect these managers to know each other, but typically they do not because of recent mergers and functional and regional silos. Program length is 2 days, followed by an action learning phase lasting about 8 weeks. Objectives for Verizon were to (a) provide individual development for high potential leaders, (b) provide collective development among peer leaders (e.g., networking within and among functions), and (c) enact action learning projects with high potential for payoff.

As prework we ask each person to complete a worksheet describing a complex challenge they face as a leader, which they will then work on in the program. We also ask the senior management team of the division to articulate a complex challenge faced by the division, one that will be explored together by program participants. Thus a central device of the program is to engage the perspectives of both mid- and top-level managers and then to deal with the new patterns and insights that emerge.

### Dialogue

We understand dialogue as conversations that deliberately pursue deeper levels of shared sensemaking around difficult issues (Dixon, 1998; Isaacs, 1999). By "deeper," we are referring to something like Argyris's (1990) ladder of inference: the layers of assumptions, beliefs, reasoning, and data underneath professed statements. We use dialogue to bring more of these layers into conscious play, so that the challenge may be addressed in more of its entirety.

In our practice we like to move into dialogue without much fanfare in terms of theory or hard-and-fast rules. Typically we ask the group to move into a circle of chairs

without tables. We suggest a few simple ground rules such as: don't interrupt; balance the use of advocacy and inquiry (questions); explore differences constructively; and build shared meaning.

But dialogue can be difficult. Moving up and down the ladder and doing something productive with the result can seem at turns tedious, frustrating, or pointless. It is difficult for people to slow down. For this reason we have been developing a more focused and pragmatic approach, which we call mediated dialogue.

*Mediated dialogue.* Mediated dialogue refers to the technique of "putting something in the middle" of the dialogue circle (Palus & Drath, 2001). In the program we enlist objects and images that are literally or metaphorically connected to the challenge at hand. The objects serve to mediate the creation of metaphors and stories; they serve to mediate perspective taking and imagination. Most importantly for the purposes of dialogue, the objects help people make sense of deeper levels and new dimensions of their shared challenges. For example, we ask the following question in the program prework letter:

What are your own personal leadership principles or values? Where do they come from? Bring one or several personal photographs to the program that illustrate in any way where in your own life these values resonate, or where they come from. These might include snapshots of some recent experience, images from an old photo collection, etc.

These photos become the basis for a non-threatening, introductory experience in the direction of dialogue (which we deepen considerably as the program proceeds). Near the start of the program participants introduce themselves in small groups of 5–6, taking turns putting their photos in the middle of the conversation. We give them no particular guidelines for dialogue at this point, asking only that they share their leadership values and creative sources and consider any

patterns that emerge in their group. We then make a place to display the photos for the duration of the program. Thus the photos remain at least implicitly in the middle for the remainder of the program, as reminders of values, often becoming a gathering place for conversation during breaks. Subsequent dialogues in the program address shared challenges using Compendium and Visual Explorer methodologies as described later.

*Practical lessons regarding dialogue.* We have learned some lessons about the practice of dialogue and how to make it more effective in the context of FSCC. An easy entry into dialogue, as in the previous example, seems helpful. Making the initial dialogue personally oriented seems to invite such an entry.

One practice, useful when the dialogue gets difficult, is to ask the group to alternate statements of opinion or fact with questions. Thus if one person states an opinion, the next comment offered by anyone should be in the form of a question; for example, "Has anyone else seen that?"

We noticed during the Compendium sessions (described below) that the direction of the dialogue regarding shared challenges sometimes shifts about halfway through the allotted period, roughly 45 min into a 90-min session. An initial "bandwagon" at some point will get challenged by a seemingly minority voice that proceeds to gather support. For example, one dialogue about companywide challenges started with a lot of pointing at senior management—what they were thinking, second-guessing them, and so on. Then one person said that she took it as her job to interpret the vision as best as she could and charge ahead. The dialogue then shifted from "them" to "us": What do we or can we take responsibility for? What is our path forward?

We know of at least three ways to help this shift in dialogue. One is simply to ask, "What are we missing in this conversation?" Another is to ask the voices that have been so far most quiet to move their chairs a bit

forward, and those that have been loudest (“You know who you are”) to move back and remain silent for 10 min. We also have had success with the question, “Do you have any favorite Visual Explorer images (described below) among those you previously discussed, which reflect any of the important issues in the present dialogue?”

### **Visual Sensemaking**

People are visual creatures living in a visual world. Yet organizations typically function in a narrowed range of the visual: text on screens or paper; talking heads in spare conference rooms. In our practice, we use various visual methods designed to help participants make sense of complex challenges, and that also point to expanded options back on the job. We refer to this in general as *visual sensemaking*—using methods and media in the visual realm to make shared sense of complex challenges.

*Visual Explorer.* Visual Explorer (VE) is a tool we created to facilitate visual sensemaking, based on our research on neglected sensemaking competencies (Palus & Horth, 2002). Most people have trouble spontaneously producing images in the same easy manner as language. VE provides a set of 203 images printed in color on standard-size paper. The images have been selected according to a number of criteria that may be summed up as ambiguous, provocative, and diverse, while lending themselves metaphorically to the complex challenges of business and life in general.

Early in the program we do an exercise in which we ask people to browse the images (all laid face up in the hallway) and select two: one that “stands for, literally, or metaphorically, or emotionally, or intuitively, the way your challenge is now,” and one that stands for “what the path forward with your challenge might be like.”

Participants then gather in groups of 4–5 to have a dialogue about their challenges, using the images as mediating objects. A

volunteer goes first and starts by describing his or her first image in detail: What is the image? What are the details? What is mysterious or surprising? and so on. Then that person describes the challenge (and not until then) and how it connects with the image. This same volunteer does the same for the second image. Then each person in the group responds to the images the volunteer has just described, first describing what they see in the image—especially if what they see is any different from what the volunteer has described. Then the respondent makes his or her own connections to the challenge the volunteer has described, using language roughly in the form, “If that were my image, I would connect it to your challenge like this. . . . What I notice in that image, and the associations I have are. . . .” Overt problem solving, advice, and criticism are not allowed. Finally, the originator of the image takes it back, sharing any new insights thus gained. The process proceeds by each person thus volunteering to place his or her images and challenges likewise in the middle of the dialogue.

The results of this exercise in FSCC have been rather positive, in the following ways. People often say something like, “I was doubtful about the pictures, but we were able to talk about our challenges in depth.” One kind of comment gets at this idea of visual sensemaking: “People in our group tended to see very different things in the same image—and that was okay.” For us this indicates perspective taking, which in typical discourse is a metaphor for what literally happens in the visual field. Another set of comments is along the lines of, “It was fun. We laughed. The connections we made led to a lot of puns and jokes.” Also common is this set of ideas: “We came up with some metaphors we otherwise would not have. It seemed easy to tell stories to go with the images.”

For example, consider this initial challenge statement and how it was then processed within the VE dialogue: “How do we

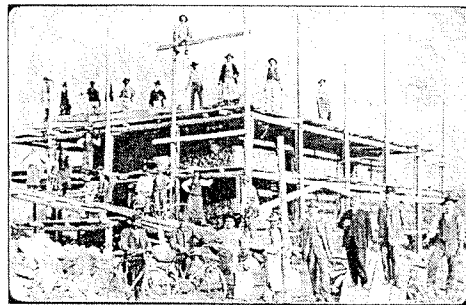
restructure to increase penetration of our largest customers in terms of becoming a true ICP?" Figure 2 shows the two images selected by this participant with her interpretation of each.

*Collage.* Collage is a mindful collision of images. Near the end of the program we ask participants to make a collage representing the topic, "How might I (or we) address this challenge in the weeks and months to come?" We provide a table full of images along with glue sticks, markers, and rolls of paper. The images are ones we have torn from all kinds of magazines, and we also provide stacks of trade and business magazines from which to clip images. All the VE images are still available including the ones they chose during the initial session. We ask that this be done rather quickly, 30 min or so, working intuitively with the totality of insights gathered during the program or from anywhere.

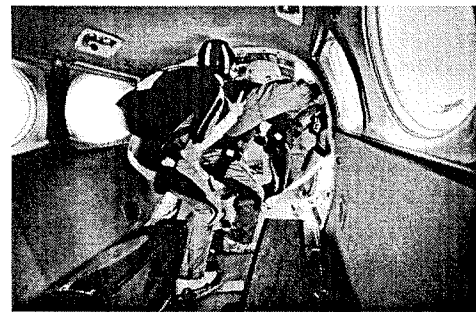
The collages then become the something-in-the-middle for small-group dialogue. What the collages mean, even to the makers of them, then becomes clearer. A challenge for the facilitators has been having enough time left, late in a short program, to have a proper dialogue session and roll up the insights. By this time in the program, partici-

pants have become somewhat adept at responding to visual images intuitively and on the fly.

*Compendium.* We have integrated into FSCC a sensemaking support system developed and used at Verizon, called Compendium. Formally understood as a type of hypertext augmented collaborative modeling (HACM; Selvin, 1999), Compendium is a way to visually map and connect ideas and then store, recycle, and reuse such knowledge. Ideas are shown as text-filled icons on a screen. Conversations are mapped as they unfold (a process known in the HACM field as *dialogue mapping*), producing a much richer record than normal minutes. Because it is done on a computer, the ideas can be connected in many ways: by just being clustered together, by graphical lines that join ideas, and by sharing keywords. Compendium enables groups of people to construct knowledge on the fly. It allows teams to combine informal, exploratory discussion with formal problem-solving frameworks. Compendium makes the resultant knowledge available for ongoing reuse and expansion by means of a robust database and a variety of display and reporting formats (e.g., hyperlinked HTML pages; MS Word; a vi-



*This shows the building of a traditional brick structure—not flexible; people working at individual tasks; no collaboration. It has a static feel, with little or no movement. This represents our current environment—traditional products presented in “product centric” way, a standardized approach.*



*“Taking flight” into the air, with freedom, and a strong sense of movement. Physical touching represents a collaborative approach. There is a feeling of excitement and apprehension—and tension. This represents a nonstandard approach to our largest customers—a requirement for flexibility, but based on strong training, skills, and expertise. We need to build these skills in the organization.*

Figure 2. Images of a challenge and a possible path forward.

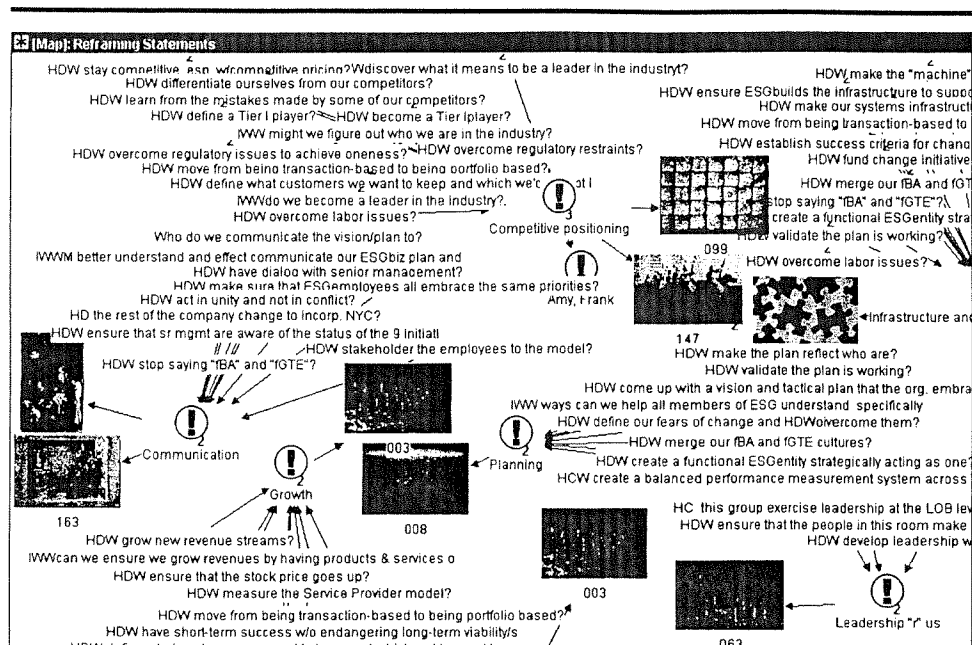


Figure 3. Compendium dialogue map.

sual map of nodes and links). Originally developed as a methodology for cross-functional business process redesign, and for addressing “wicked problems” (Rittel & Webber, 1973) pertaining to telephone operations (e.g., Y2K planning among diverse stakeholders), Compendium has been applied on more than 70 projects in a variety of organizations.

We use Compendium in FSCC to facilitate and map the plenary dialogues. Figure 3 is an example of one such map. This map shows the results of participants first brainstorming reframed statements of the complex challenges facing their division as a whole, then clustering those into themes. The group selected one or two VE images (as used in earlier small-group dialogues) to represent the theme. A version of the map was printed as a Word document and used as a shared set of talking points the next morning during a 2-hr visit from the president of the division.

Compendium provides participants a robust database in support of their action learn-

ing projects. This database can be easily searched, built upon, and formatted in a number of ways for their own use as well as presentation to others. This advantage first became apparent during the division president’s visit. Participants were able to use the features of Compendium to prepare for this somewhat tricky encounter, in which they would be surfacing difficult issues to discuss with top management. At the same time, they were able to invite the president into the middle of the dialogue, by displaying the texture of their deliberations from the previous day. Likewise, this database, when combined with similar ones from other programs, has much to contribute to a broader understanding of this organization’s complex challenges.

Compendium has been useful in changing the rhythms of the dialogue: slowing it down at times, speeding it up by introducing focal questions, drawing attention to parts and possible connections. It has also helped by making the content of the dialogues tangible, durable, and reusable in ways that ea-



sel sheets and Post It Notes do not. Integration of the VE images into the Compendium maps (Figure 3) has been a positive move in the integration of our visual sensemaking and dialogue methodologies. At its best, this all combines to offer a kind of creative leverage that can be understood as *knowledge art* (Selvin & Palus, in press).

Compendium helps invite the business context into the room and to maintain attention to it in an engaging way. This attention to the context makes it easier for the developmental work to flow without it seeming unnatural or forced.

*Practical lessons regarding visual sensemaking.* New technologies are allowing new modes of visually based collaboration (Kirschner, Shum, & Carr, 2002)—but do not overlook “hand tools” such as glue and scissors. All these varieties of shared display (Conklin, 2002), from paper-based VE to the computer-based Compendium methodology, provide welcome surfaces on which to project, share, manipulate, combine, store, and revisit ideas.

Participants often say something like, “How could I ever do anything like this back on the job?” One answer is that we expect most of our participants will not change behavior much in this way, as the result of a short program. It is good enough that they obtained fresh insights on their complex challenge from their colleagues in 2 intense days of work. It is good enough that they practiced some skills of dialogue such as perspective taking. A scientist with an entrepreneurial bent offered another kind of response: “It’s up to us to invent our own ways of working better using visuals and images. Working this way gives me some ideas. Nobody saw anything like PowerPoint 10 years ago, now we all use it.” One participant told us after the program that he has developed a key presentation that he draws each time, chart by chart in front of his audience, adapting it as he sees fit. He says, “It’s fresher and more personalized

this way, and more compelling for the audience. I get more of their attention this way.”

## Reframing

After the complex challenges have been articulated and subject to dialogue, we offer an exercise called *reframing*. Reframing means asking, “Have we drawn the right boundary (frame) around this challenge or problem? Are we solving the right problem? What if we looked at it from another perspective?” Reframing comes from the tradition of creative problem solving, expressed in the Osborne–Parnes Creative Problem Solving Model, in which having the right problem statement makes all the difference (Osborne, 1953; Parnes, 1992).

First we give a short tutorial on how to brainstorm. Next we have small groups brainstorm alternative challenge statements for each person’s complex challenge. These take the form of “How to . . . [create more customers/fire bad customers/etc.]?” or “In what ways might we . . . [redefine our business/make our product obsolete/etc.]?” Then we do an activity called “walk and talk” in which participants pair up and go on a walk around the grounds for about 20 min, describing some of the alternative challenge statements to each other, and settling on the one they wish to carry further and work on.

Let’s go back to our prior example (per Figure 2). Here is how the same participant reframed her challenge: *How do we create a structure that enables us to become an ICP to meet our customer’s business requirements?* And here is how she described the significance of the reframing: *The change from “restructure” to “create a structure” changes the focus from tweaking what is already in place to building something new, perhaps from the ground up.*

*Practical lessons regarding reframing.* It still seems quite true that people often spend enormous energy solving the wrong problem. Facing complexity requires

a variety of frames: zooming in, zooming out, seeing this aspect or that aspect, and tying smaller views into larger ones. Some participants have told us that the problematic part of their challenge “disappeared” upon shifting frames—what seemed to be an intractable problem was rendered either insignificant or temporary with a different frame.

### Story Making

Human cognition, emotion, and action are fundamentally narrative or “storied” in nature (Bruner, 1969). So too is leadership (Tichey, 1997). Stories are an important part of sensemaking, not only the telling of the story but also the making.

Tichey (1997) described the key types of leadership stories as addressing the questions “Who am I?” “Who are we?” and “Where are we going?” In FSCC we focus on the first of these, partly because of time constraints and the fact that the program cohort is not a well defined “we.” “Who I am” is central to personal identity (McAdams, 1997), and personal identity—both forming it and locating it as constituted within a web of relationships—is essential to human development (Kegan, 1994). One of the ways we work with such *identity stories* is dialogue around personal photos as described earlier.

Another method we use for story making and telling is *character stories*. We have seen that one can quite rapidly create a powerful self-revealing story by telling the story through the eyes of another character in the situation. This writing “trick” allows a bit of distance from oneself, thus obtaining self-perspective. The imaginative aspect frees the writing and utilizes the skill we call *serious play*. The instructions are something like this:

Write a story about some important learning event in your life. You might be inspired in this by something in the photo you brought with you. But write it from the first-person point of view of some person or character in the story *other than yourself*. Write it as if it is happening *now*—present tense. Above all, try

to capture the source of courage, strength, significance, and meaning as you relive these moments through the eyes of something or someone who is not you. You only have 30 minutes for the writing! It may seem impossible—but an event and the character have already popped into your head. If you can’t think of anything, just keep writing, “I can’t think of anything” until you think of anything else to write and then write it, even if it’s nonsense [a technique called free writing (Goldberg, 1986)]. Then just keep just the bits that tell the story.

Participants then tell their stories in their small groups. They are free to opt out of the telling for any reason. One story began this way, told through the eyes of one of many people this manager helped to safety at the World Trade Center:

It is just before 9 a.m. on a crystal clear day and I am organizing my tasks for the day ahead. I suddenly hear a loud boom and the building moves under my feet. I know in my heart that something very bad has just happened. . . .

#### *Practical lessons regarding story making.*

One of the main benefits of story making is the interpersonal connections made within the cohort. Putting something tangible and personal in the middle of a conversation is a way to foster such connections quickly and in surprising depth. The issue of vulnerability as a leadership attribute (Bunker, 1997) comes up, in a good way, as we get into the telling of the character stories. For some people, the ease with which the character stories come pouring out is a positive shock: “I never thought I could write like that.” Or, “I’m astounded at the creativity of my peers.”

But for some people the task seems to fall flat; they do not readily make the connections between this activity and leadership development. Our dilemma, as with much of this work, is how much to declare the supposed lessons and takeaways of the activity, and how much to let the participants make sense of the lessons within and among themselves. With developmentally more mature people (as these groups have mostly been),

we opt for the latter as producing more powerful learning.

### **Networking Fair**

Near the end of the program, participants each create an easel sheet listing their name, current (reframed) challenge statement, a list of what capabilities and resources they could offer their peers in the program, and a list of capabilities and resources they might like to borrow from their peers. These go up on the wall, and about an hour is spent in networking amidst this shared display—offering help, soliciting advice, writing their names as resources next to needs they might be able to fill, and generally building on the relationships started in the prior 2 days.

*Practical lessons regarding the networking fair.* This is a great thing to do over morning coffee. Often this activity precipitates intense business conversations that last longer than the allotted time—and we let them finish, because networking is a primary goal of the program. The personalized dialogues and storytelling of the day before, along with the luxury of having enough time to linger over networking, create a context for forming deep interpersonal connections. Facilitators photograph each networking sheet with a digital camera; the images are transcribed for use after the program as a networking resource for participants and as a summary of the developmental strengths and needs of this cohort.

### **Action Learning Teams**

Exploration is not complete until one returns with something of value. Action learning is our way of projecting the efforts begun in the program back into the workplace. Action learning methodologies are well documented in theory and practice (Dotlich & Noel, 1998; Revans, 1982) and were already in use at Verizon when we began our work. Action learning in FSCC is derived from Verizon practices.

Action learning in FSCC typically consists of the following steps:

- exploring collective challenges in the program
- naming and framing a specific challenge for each team of 6–8 people to carry forward
- working with an executive team sponsor to refine the challenge definition and forming a plan of attack
- team meetings on task, with optional facilitation by CCL or Verizon leadership development faculty, interspersed with efforts at fact-finding, action steps, and so on
- teams report to, and dialogue with, the senior executive team for review and determination of further steps (6–8 weeks postprogram)

*Practical lessons regarding action learning.* The intensive relational nature of the 2-day program seems a good preparation for action learning. There is excitement about having ongoing access to the senior team while tackling important work with high visibility. However, there is also a sense that the participants are already stretched thin, and now there is additional work to be done.

It has been difficult to keep momentum on the projects after the dialogue with the senior team. Ongoing follow-up and support are intended, but funding and time for such activity have been limited. It is clear that there is a need for at least networking meetings (social and work) to keep the expanding program cohort in touch with each other.

### **FSCC Outcomes**

In collaboration with Verizon, we conduct various assessments of program outcomes, including course-end feedback, postcourse e-mail and online surveys, and monitoring of action learning projects. An internal Web-based survey (conducted entirely by Verizon) was administered to all participants in two programs, each conducted entirely within the same division. Of 30 such participants, 17

responded (57%). The mean postcourse survey response interval was approximately 3 months for the first cohort (7 responses) and 1 month for the second cohort (10 responses). The survey covered all aspects of a Verizon leadership development initiative, which also included 360° feedback plus coaching, a developmental planning process, and mentoring, as well as FSCC. Participants were asked to rate these aspects and were presented with open-ended questions regarding suggestions for improvements (see Table 1).

Responses to the open-ended survey questions indicate some ambivalence about the action-learning component. On the plus side there is enthusiasm for working on important challenges under direct guidance from the senior leadership team. The negatives include competing time pressures, the difficulty of finding a suitable topic, and negotiating the political dimensions. The difficulties of sustaining follow-through are frustrating for many.

## Discussion

Questions guiding our practice include, What's working? What could be improved? What's the impact? And of course, Why does any of this work or not?

**Table 1**  
*Responses to Scaled Survey Items*

Leadership development element	Mean response
FSCC program	3.9
Action learning	3.6
360° feedback process	4.4
Coaching session	3.9
Developmental planning	3.2
Mentor process	3.6

*Note.* Rating labels are 5 = extremely valuable, 4 = very valuable, 3 = valuable, 2 = somewhat valuable, 1 = not valuable. "Action learning" was given a separate item from Facing and Solving Complex Challenges (FSCC) in the survey, hence the responses for FSCC are likely to focus on the initial 2-day program experience. Only the one cohort who had already completed the action-learning component was shown this item, resulting in seven responses.

Almost all participants rated this program as valuable after a 1-month or more period postprogram. They rated it at least on a par with other developmental activities recently offered them at Verizon, exceeded on average only by 360° feedback. Most took away usable insights about their own leadership challenges, and most seemed to have enhanced their network. We look to the action learning teams as a source of tangible evidence of such gains, but the teams for the most part have not (yet) driven their projects fully to conclusion. We recommend a more systematic approach providing structured support for cross-functional teaming and networking.

The high rating of the 360°-feedback activity indicates perhaps two points. First, even as it is being pushed to its limits, assessment for development is still an important paradigm for manager and leader development. Second, Verizon has been experiencing so much velocity and change that most managers have lately not experienced the same ongoing level of 360° feedback as they might have a few years ago.

Participants tell us that "what works" in this program is taking time (but not too much time) for deep reflection about critical issues in the company of peers. Most seem to appreciate the attention given to their own neglected competencies for sensemaking; likewise, the attention given to their creativity and artistry as made relevant to leadership.

An area for improvement is making leadership development more systemic (Fulmer & Wagner, 1999; O'Connor & Day, 2002). Although Verizon is attempting to do that, the most immediate objective is one of enhancing the capacities of high-potential individuals. A more relational approach would also seek to enhance systemic capacities for shared sensemaking (Weick & Meader, 1993) within the organization.

One way of making this work more systemic is to use Web-based e-learning techniques. When we applied the exploration for development model at Xerox, Web-based

learning (a facilitated, collaborative Web site for action team members) was rated by participants and facilitators as being quite useful (Pulley, Sessa, & Malloy, 2002).

Why was this program rated as less valuable than their 360°-feedback process? We do not know all the reasons of course, but in broad terms 360° feedback is a "tidy" managerial process sharply focused on self-improvement. Exploration, in contrast, is more than a bit messy and open-ended. Its rewards are less punctuated and predictable. In doing this kind of work, one had best be prepared for participant discomfort in the form of "Where are we going? Let's dictate a solution to this challenge and move on to the next." We take this as an imperative to be thoughtful and clear in our own design, and then at a higher level to integrate assessment and exploration into a systemic approach to development. We believe that thorough assessment for development provides strong support for exploration for development.

An important issue of our time is the struggle for attention. Every one of our participants is moving at an extremely fast pace, attending to many things at once. Many of them in fact have framed their leadership challenges as how to move even faster, and how to be better at multitasking. Two quotations we offer in the program resonate quite strongly with participants. The first is a paraphrase of poet David Whyte: "The tragedy of answering complexity only with velocity is that after awhile you can't see anybody or anything moving slower than you." The second is about what Microsoft researcher Linda Stone calls *continuous partial attention*. According to editorialist Thomas Friedman (2001, p. A27),

It means that while you are answering your e-mail and talking to your kid, your cell phone rings and you have a conversation. You are now involved in a continuous flow of interactions in which you can only partially concentrate on each. . . . [Stone observes:] That has become incredibly spiritually depleting.

In the words of one participant: "Multitasking is a great skill for operations. At the same time, it can be an impediment to insight."

The focus of attention in this program moves participants from looking at their problems as *complicated*—having myriad parts requiring operational efficiency and analysis—to exploring them as *complex*—slowing down for a long moment, looking afresh, seeing patterns and connections, discerning the greater wholes, and seeking synthesis.

Attention is collective as well as individual. In our view, an important reason why this methodology hangs together is the emphasis on dialogue. The traditional focus of leadership development is the efficacy of the leader. In exploration for development, sensemaking is a relational affair, and dialogue is a method for sharing, shifting, and sustaining attention, making connections, and building communities. One participant commented: "The big shift took place when we realized our complex problems had commonality."

### Implications for the Field of Leadership Development

Good leadership and management are infused with artistry. An understanding of this has recently moved beyond simple truism to yield robust insights, applications (Mintzberg, 1989; Vaill, 1989), and theoretical frameworks (Nissley, 1999). We understand leadership as making sense of complexity and chaos, and shared sensemaking as aesthetic in nature (Palus & Horth, 1996). The aesthetics of sensemaking are of great practical importance. It pays to use robust tools and inviting media that "handle" well. One of the most important insights here is that "art" does not necessarily mean "the arts" as commonly understood (Dissanayake, 1995). Practically everyone has some advanced capacity for shared sensemaking, but it tends to be what we have called *knowledge art*, or

what Booth (1997) called *everyday art*, rather than fine art or "genius art." Such capacity needs fresh eyes to notice and nurture it: Leadership for complex challenges starts with a renewal of perception.

## References

- Argyris, C. (1990). *Overcoming organizational defenses: Facilitating organizational learning*. Upper Saddle River, NJ: Prentice Hall.
- Bateson, M. C. (1989). *Composing a life*. New York: Atlantic Press.
- Booth, E. (1997). *The everyday work of art: How artistic experience can transform your life*. Naperville, IL: Sourcebooks.
- Bray, J. N., Lee, J., Smith, L. L., & Yorks, L. (2000). *Collaborative inquiry in practice: Action, reflection, and meaning making*. Thousand Oaks, CA: Sage.
- Browning, H., & Van Velsor, E. (1999). *Three keys to development: Using assessment, challenge and support to drive your leadership*. Greensboro, NC: Center for Creative Leadership.
- Bruner, J. S. (1969). *On knowing: Essays for the left hand*. New York: Atheneum.
- Bunker, K. A. (1997). The power of vulnerability in contemporary leadership. *Consulting Psychology Journal: Practice and Research*, 49, 122-136.
- Conklin, J. (2002). *Wicked problems and fragmentation: White paper series*. Edgewater, MD: CogNexus Institute. Retrieved September 12, 2002, from <http://cognexus.org/id29.htm>
- Cooperrider, D. L., Sorensen, P. F., Whitney, D., & Yaeger, T. F. (2000). *Appreciative inquiry: Rethinking human organization toward a positive theory of change*. Champaign, IL: Stipes.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.
- Davenport, T. H., & Beck, J. C. (2001). *The attention economy: Understanding the new currency of business*. Boston: Harvard Business School Press.
- Day, D. V. (2001). Leadership development: A review in context. *Leadership Quarterly*, 11, 581-613.
- Dissanayake, E. (1995). *Homo aestheticus: Where art comes from and why*. Seattle: University of Washington Press.
- Dixon, N. M. (1998). *Dialogue at work: Making talk developmental for people and organizations*. London: Lemos & Crane.
- Dotlich, D. L., & Noel, J. L. (1998). *Action learning*. San Francisco: Jossey-Bass.
- Drath, W. H. (2001). *The deep blue sea: Rethinking the source of leadership*. San Francisco: Jossey-Bass.
- Fisher, D., Rooke, D., & Torbert W. (2000). *Personal and organizational transformations through action inquiry*. Berkeley, CA: EdgeWork Press.
- Friedman, T. L. (2001, January 30). Cyber-serfdom. *New York Times*, p. A27.
- Fulmer, R. M., & Wagner, S. (1999, March). Leadership: Lessons from the best. *Training and Development*, 53, 29-32.
- Gergen, K. J. (1994). *Realities and relationships*. Cambridge, MA: Harvard University Press.
- Goldberg, N. (1986). *Writing down the bones: Freeing the writer within*. Boston: Shambhala.
- Heifetz, R. A. (1994). *Leadership without easy answers*. Cambridge, MA: Harvard University Press.
- Isaacs, W. (1999). *Dialogue and the art of thinking together*. New York: Random House.
- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.
- Kirschner, P. A., Shum, S. J. B., & Carr, C. S. (Eds.). (2002). *Visualizing argumentation: Software tools for collaborative and educational sense-making*. London: Springer-Verlag.
- Kolb, D. A. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice Hall.
- McAdams, D. P. (1997). *The stories we live by*. New York: Guilford Press.
- McCarthy, B. (1996). *About learning*. Old Barrington, IL: Excel.
- Mintzberg, H. (1989). *Mintzberg on management: Inside our strange world of organizations*. New York: Free Press.
- Morgan, G. (1986). *Images of organizations*. Thousand Oaks, CA: Sage.
- Nissley, N. (1999). Aesthetic epistemology: A proposed framework for research in human resource development. In *Proceedings of the George Washington University Center for the Study of Learning Conference on Human Organizational Studies*. Washington, DC: George Washington University, Center for the Study of Learning.
- Nissley, N. (2002). Art-based learning in management education. In B. DeFillippi & C. Wankel (Eds.), *Rethinking management education in the 21st century*. Greenwich, CT: Information Age Press.
- O'Connor, P.M.G., & Day, D.V. (2002). Tapping your organization's leadership reserve. *Leadership in Action*, 22(1).
- Osborne, A. F. (1953). *Applied imagination*. New

- York: Scribner.
- Palus, C. J., & Drath, W. H. (1995). *Evolving leaders: A model for promoting leadership development in programs*. Greensboro, NC: Center for Creative Leadership.
- Palus, C. J., & Drath, W. H. (2001). Putting something in the middle: An approach to dialogue. *Reflections*, 3(2), 28–39.
- Palus, C. J., & Horth, D. M. (1996). Leading creatively: The art of making sense. *Journal of Aesthetic Education*, 30(4), 53–68.
- Palus, C. J., & Horth, D. M. (2002). *The leader's edge: Six creative competencies for navigating complex challenges*. San Francisco: Jossey-Bass.
- Parnes, S. J. (Ed.). (1992). *Source book for creative problem solving*. Buffalo, NY: Creative Education Foundation Press.
- Perkins, D. (1994). *The intelligent eye*. Santa Monica, CA: Getty Center for Education in the Arts.
- Pulley, M. L., Sessa, V. I., & Malloy, M. (2002). E-leadership: A two-pronged idea. *Training & Development*, 56(3), 35–47.
- Revans, R. (1982). *The origins and growth of action learning*. London: Chartwell-Bratt.
- Rittel, H., & Webber, M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4, 155–159.
- Schrage, M. (2000). *Serious play: How the world's best companies simulate to innovate*. Boston: Harvard Business School Press.
- Schwartz, P. (1991). *The art of the long view*. New York: Doubleday/Currency.
- Selvin, A. M. (1999). Supporting collaborative analysis and design with hypertext functionality. *Journal of Digital Information*, 1(4).
- Selvin, A. M., & Palus, C. J. (in press). Compendium sensemaking techniques in support of leadership development. *Knowledge Management*.
- Tichey, N. M. (1997). *The leadership engine: How winning companies build leaders at every level*. New York: Harper Business.
- Vaill, P. B. (1989). *Managing as a performing art: New ideas for a world of chaotic change*. San Francisco: Jossey-Bass.
- Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.
- Weick, K. E., & Meader, D. K. (1993). Sensemaking and group support systems. In L. M. Jessup & J. S. Valacich (Eds.), *Group support systems: New perspectives* (pp. 230–252). New York: Macmillan.
- Wilbur, K. (2000). *Integral psychology*. Boston: Shambhala.